LNHS BASEBALL & SOFTBALL UPGRADES

Liberty Public Schools 53

1000 NE 104th Street

Liberty, MO 64068

CONSTRUCTION DOCUMENT SET

INDEX OF DRAWINGS

SCOPE OF WORK - SUMMARY

THE SCOPE OF THIS PROJECT IS TO CONVERT EXISTING BASEBALL AND SOFTBALL PLAYING FIELDS FROM NATURAL GRASS TO SYNTHETIC TURF. RELATED TO THE CONVERSION WILL BE NEW PERIMETER FENCING AND BACKSTOP NETTING. NO VERTICAL CONSTRUCTION IN THE TRADITIONAL SENSE WILL TAKE PLACE WITH THIS WORK. THERE ARE A FEW VERTICAL ELEMENTS (POLES) WHICH WILL BE SET AS PART OF THIS WORK.

NO SPECTATOR SEATING CAPACITY WILL BE AFFECTED AS PART OF THIS WORK.

ALTERNATES

ALTERNATE No. 1 (23023.00 LHS) - ADD COVERED SCORER'S BOX AT SOUTH END OF HOME DUGOUT
ALTERNATE No. 2 (23047.00 LNHS) - RETROFIT SCORER'S BOX INTO VISITING BASEBALL AND SOFTBALL DUGOUT
ALTERNATE No. 3 (23047.00 LNHS) - CONVERT MULTI-PURPOSE FIELD'S INFIELD TO SYNTHETIC TURF AND INSTALL BACKSTOP NETTING AND ASSOCIATED FOOTINGS
ALTERNATE No. 4 (23047.00 LNHS) - ADD CHAMPIONWALL AND ASSOCIATED FOOTINGS AT BASEBALL FIELD IN LIEU OF 8'-0" BLACK PVC FENCE
ALTERNATE No. 5 (23023.00 LHS) - CONVERT MULTI-PURPOSE FIELD'S INFIELD TO SYNTHETIC TURF AND INSTALL BACKSTOP NETTING DUGOUTS AND ASSOCIATED FOOTINGS

VICINITY MAP

DESIGN TEAM

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CONSTRUCTION DOCUMENTS

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1000 NE 104th Street
Liberty, MO 64068

REVISIONS:

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KEVIN E. NELSON
A-2019015618
ARCHITECT
JULY 12, 2023

JOB NO: 23047
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COVER SHEET

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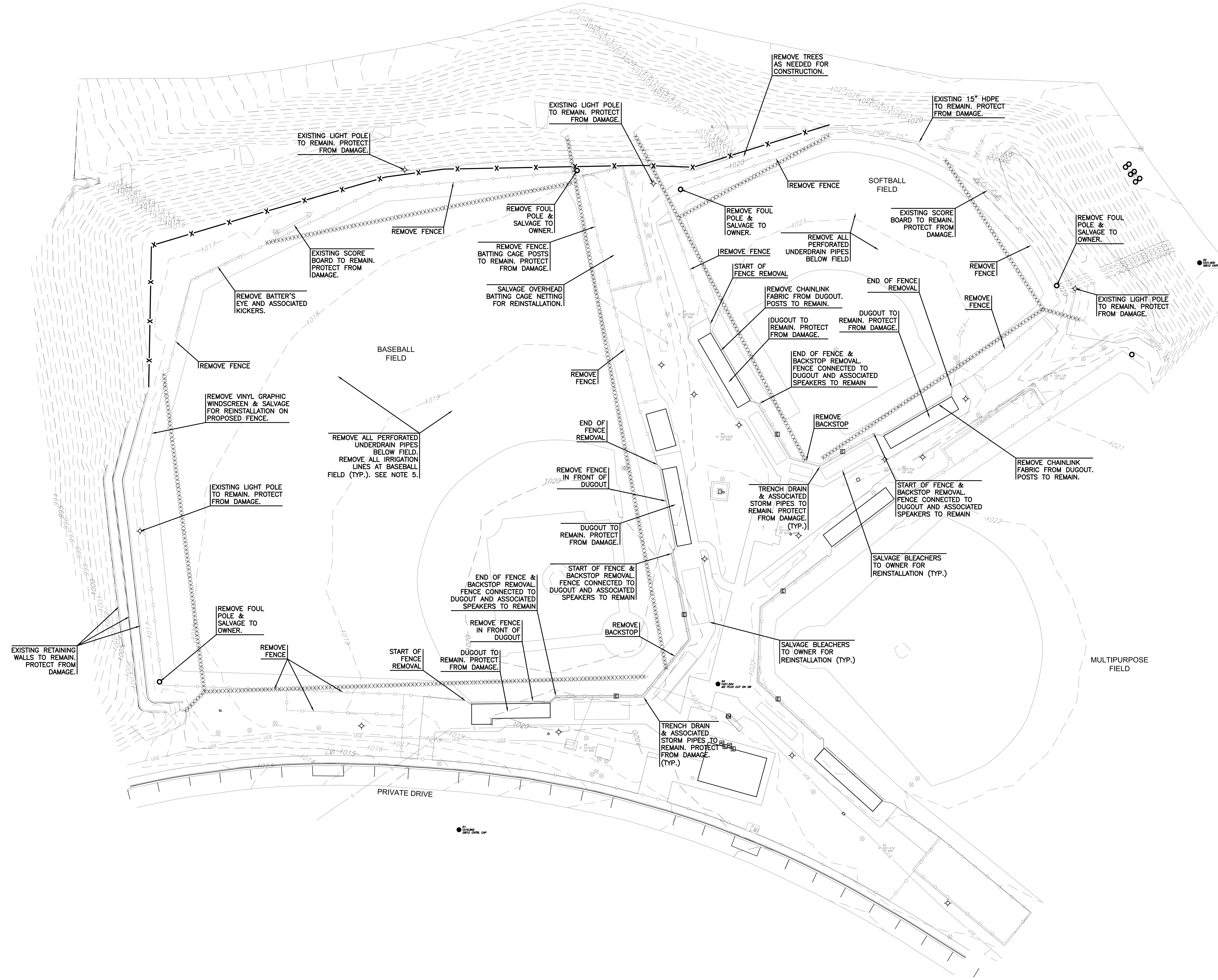

DEMOLITION NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR AND REPLACE EXISTING CONCRETE SIDEWALKS, CURB & GUTTER, AND ANY EXISTING PAVEMENT DAMAGED DURING CONSTRUCTION.
2. EXCAVATED MATERIAL THAT IS NOT IMMEDIATELY LOADED AND HAULED OFF SITE SHALL BE STOCKPILED ON SITE. CONTRACTOR SHALL PROVIDE AND MAINTAIN THE APPROPRIATE BMP (COMPOST SOCK, GRAVEL FILTER BAGS, WADDLES, SILT FENCE, ETC.) AROUND STOCKPILE AREA TO PROTECT ADJACENT INLETS OR AREAS, ETC., UNTIL SUCH TIME THAT STOCKPILE IS REMOVED.
3. CONTRACTOR SHALL OBTAIN ALL PERMITS NECESSARY PRIOR TO THE START OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO, RIGHT-OF-WAY, HAULING, AND LAND DISTURBANCE PERMITS WITH THE APPROPRIATE LOCAL JURISDICTION.
4. CONTRACTOR SHALL DISPOSE OF ALL DEMOLITION ITEMS APPROPRIATELY PER LOCAL AND STATE REQUIREMENTS.
5. CONTRACTOR TO LOCATE ALL EXISTING IRRIGATION HEADS, VALVES, PIPING, BOXES, ETC. IDENTIFY IRRIGATION COMPONENTS TO BE IMPACTED FOR PROPOSED IMPROVEMENTS. CONTRACTOR SHALL RELOCATE ALL EXISTING IRRIGATION COMPONENTS AS NECESSARY IN CONFLICT WITH PROPOSED IMPROVEMENTS. CONTRACTOR SHALL VERIFY INSTALL AND SYSTEM IN WORKING ORDER PRIOR TO INSTALLATION OF ANY PROPOSED PAVEMENT OR ARTIFICIAL TURF SURFACING.
6. EXISTING BLEACHERS IMPACTED BY PROPOSED IMPROVEMENTS SHALL BE SALVAGED AND RETURNED TO THE OWNER FOR PROPOSED LOCATION.

DEMOLITION LEGEND

- PAVEMENT REMOVAL
- TREE REMOVAL
- XXXXXXXXXXXXX – UTILITY REMOVAL
- ——X—— – TREE PROTECTION

N

SCALE: 1"=30'
0 30 60

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NUMBER PE-2021001896
7.12.23
PROFESSIONAL ENGINEER

BRADEN L. TAYLOR
LIC# 2021001896

JOB NO: 23047
DRAWN BY:
CHECKED BY:
DATE: 07-12-23

DC101

DEMOLITION PLAN

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LEGEND

- 6IN – TREE AND DIAMETER
- 3IN – TREE AND DIAMETER
- 18" – TREE STUMP AND DIAMETER
- SN – SIGN
- – BUSH
- – MAIL BOX
- – POLE
- – GATE
- – POST / BOLLARD
- – FLAG POLE
- – FENCE
- – EDGE OF TREES
- – TELEPHONE RISER
- – UNDERGROUND TELEPHONE LINE
- – OVERHEAD TELEPHONE LINE
- – CABLE TV RISER
- FO – FIBER OPTICS INDICATOR SIGN
- – UNDERGROUND CABLE TV LINE
- – UNDERGROUND FIBER OPTIC CABLE
- – POWER POLE AND DEADMAN
- – LIGHT POLE
- – ELECTRIC TRANSFORMER
- – SCHOOL ZONE SIGNAL LIGHT
- – TRAFFIC CONTROL BOX
- – TRAFFIC SIGNAL LIGHT POLE
- – UNDERGROUND ELECTRIC LINE
- – OVERHEAD ELECTRIC LINE
- – GAS METER
- GV – GAS VALVE
- – GAS LINE
- – SANITARY SEWER MANHOLE
- – CLEANOUT
- – SANITARY SEWER LINE
- – INLET
- – STORM WATER MANHOLE
- – ROOF DRAIN
- – GRATE INLET
- – EXISTING STORM SEWER PIPE
- – PROPOSED STORM SEWER PIPE
- – ROOF DRAIN LINE
- – PERFORATE DRAIN PIPE
- – FIRE HYDRANT
- WV – WATER VALVE
- – WATER METER
- – MONITORING WELL
- – WATER METER VAULT
- – WATER SPIGOT
- – WATER LINE
- – FIRE PROTECTION LINE
- – IRRIGATION CONTROL VALVE
- 100 – EXISTING MAJOR CONTOUR
- 101 – EXISTING MINOR CONTOUR

GENERAL NOTES:

1. THE CONTRACTOR, **PRIOR TO** ANY EXCAVATION OR NEW CONSTRUCTION, SHALL HAVE UTILITIES FIELD LOCATED BY THE APPROPRIATE UTILITY COMPANY AND/OR CITY/COUNTY DEPARTMENT.
2. EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THESE PLANS, REPRESENTS THE BEST INFORMATION AVAILABLE TO THE ENGINEER. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS UTILITY COMPANIES AND IS EITHER FROM COMPANY RECORD DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. HOWEVER, ALL UTILITIES ACTUALLY EXISTING MAY NOT BE SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING ALL UTILITIES WHETHER THESE UTILITIES ARE SHOWN ON THE PLANS, NOT SHOWN ON THE PLANS, OR SHOWN INCORRECTLY. UTILITIES DAMAGED THROUGH THE FAILURE OF THE CONTRACTOR TO OBTAIN THE LOCATION OF THOSE UTILITIES SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE. THE CONTRACTOR SHALL, PRIOR TO ANY EXCAVATION OR NEW CONSTRUCTION, HAVE ALL UTILITIES FIELD LOCATED BY THE APPROPRIATE UTILITY COMPANY, CITY OR COUNTY DEPARTMENT, OR ONE–CALL SERVICE.
3. THE SITE PLAN IS BASED ON A SURVEY OF THE SITE. CONDITIONS OF THE SITE AT THE TIME OF CONSTRUCTION MAY VARY FROM THE SURVEYED CONDITIONS. CONTRACTOR TO VERIFY EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION.
4. ALL MANHOLES, CATCH BASINS, UTILITY VALVES AND METER PITS SHALL BE ADJUSTED OR REBUILT TO GRADE AS REQUIRED.
5. NO CHANGES TO THE APPROVED CONSTRUCTION PLANS WILL BE PERMITTED WITHOUT PRIOR APPROVAL OF THE DESIGN ENGINEER.
6. IF BLASTING IS REQUIRED DURING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE APPROPRIATE AGENCIES TO OBTAIN THE REQUIRED PERMITS. IF BLASTING IS ALLOWED, THE CONTRACTOR SHALL PERFORM BLASTING OPERATIONS ACCORDING TO STATE REGULATIONS AND LOCAL ORDINANCES.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY PINS. THE CONTRACTOR WILL BE REQUIRED TO RE–ESTABLISH ANY PROPERTY PINS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH PINS SHALL BE RE–ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.
8. CONTRACTOR TO HAVE REGISTERED LAND SURVEYOR RESET SECTION CORNER MONUMENT IF DISTURBED DURING CONSTRUCTION.
9. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES, DIMENSIONS, AND PLAN SCALES AND SHALL IMMEDIATELY NOTIFY THE OWNER/ENGINEER/ARCHITECT OF ANY SUCH DISCREPANCIES. ALL QUANTITIES, DIMENSIONS, AND PLAN SCALES PROVIDED ARE FOR GENERAL INFORMATION PURPOSES ONLY. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING ALL QUANTITIES NECESSARY FOR THE COMPLETION OF THE WORK AS DESCRIBED IN THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE THE WORK DESCRIBED IN THE CONSTRUCTION DOCUMENTS IRRESPECTIVE OF THE QUANTITIES, DIMENSIONS, AND PLAN SCALES NOTED, NOT NOTED, OR NOTED INCORRECTLY.
10. ANY CURB, GUTTER, SIDEWALKS, AND PAVING THAT IS DAMAGED IN EXCESS OF THE CONSTRUCTION SHOWN IN THIS PLAN SET SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.
11. ALL REMOVALS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF PER APPLICABLE STANDARDS (UNLESS OTHERWISE NOTED).
12. THE PAVEMENT SECTIONS SHOWN IN THESE PLANS ARE PROVIDED IN ACCORDANCE WITH THE RECOMMENDATIONS PRESENTED IN THE GEOTECHNICAL REPORT PREPARED FOR THE PROJECT UNDER THE TITLE "GEOTECHNICAL ENGINEERING REPORT – XXXXXXXXXX" PREPARED BY XXXXXXXXXXXX DATED XXXXXXXXX. CONSEQUENTLY, THE ENGINEER WHOSE SEAL APPEARS ON THESE PLANS IS NOT RESPONSIBLE FOR THE DURABILITY OR SUITABILITY OF THE PAVEMENT SECTIONS SHOWN.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TRAFFIC CONTROL WHEN WORKING WITHIN THE PUBLIC RIGHT–OF–WAY. ALL SUCH TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL" AND/OR LOCAL JURISDICTION SPECIFICATIONS. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL TRAFFIC CONTROL DEVICES. THE CONTRACTOR SHALL ENSURE ALL TRAFFIC CONTROL DEVICES ARE CLEAN, PROPERLY VISIBLE, OPERATING CORRECTLY, AND LOCATED PROPERLY. THE CONTRACTOR SHALL IMMEDIATELY REPLACE ANY DAMAGED, DEFACED, OR INOPERABLE, OR MISSING TRAFFIC CONTROL DEVICES.
14. THE CONTRACTOR IS TO PROVIDE PERMANENT SEEDING, FERTILIZING, MULCHING OR SODDING OF ALL DISTURBED AREAS. THIS WORK TO BE DONE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
15. ALL SITE WORK FOR THIS PROJECT IS CONSIDERED "UNCLASSIFIED." THE TERM "UNCLASSIFIED" EXCAVATION SHALL BE DEFINED AS MEANING THE SITE CONTRACTOR BEARS THE ENTIRE RISK OF THE SOIL QUANTITIES AND/OR TYPES (E.G. ROCK, CLAY, PEAT, SILT, SHALE, ETC.) ENCOUNTERED ABOVE THE BOTTOM OF REQUIRED EXCAVATIONS AND OVER–EXCAVATED / TREATED SOILS AREAS. ABOVE THE BOTTOM OF REQUIRED EXCAVATIONS, THE SITE CONTRACTOR SHALL BEAR THE ENTIRE COST OF SUCH ADDITIONAL WORK IN THE EVENT IT BECOMES NECESSARY FOR UNSUITABLE SOILS TO BE HANDLED, REMOVED FROM THE SITE, OR FOR SUITABLE FILL MATERIAL TO BE IMPORTED TO THE SITE. THIS DEFINITION OF "UNCLASSIFIED" SUPERSEDES ANY CONTRARY DEFINITIONS OR STATEMENTS WHICH MAY BE CONTAINED IN THE SPECIFICATIONS, PLANS, OR OTHER CONTRACT DOCUMENTS. THE UNCLASSIFIED SITE SHALL INCLUDE ALL WORK ABOVE THE BOTTOM OF REQUIRED EXCAVATIONS AND/OR REQUIRED SOIL REMEDIATION/REPLACEMENT.
16. RETAINING WALLS SHOWN ON THE PLANS SHALL BE MODULAR BLOCK UNLESS OTHERWISE NOTED. THE ENGINEER WHOSE SEAL APPEARS ON THESE PLANS IS NOT RESPONSIBLE FOR THE DESIGN, STRUCTURAL INTEGRITY, OR SUITABILITY OF ANY RETAINING WALLS. THE BOTTOM OF WALL ELEVATIONS LISTED ON THESE PLANS ARE FINISHED GRADES AT THE WALL. ANY AMOUNT OF WALL AND FOOTINGS BELOW FINISHED GRADE REQUIRED BY THE RETAINING WALL DESIGN SHALL BE INSTALLED. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF ALL RETAINING WALLS AND SHALL SUBMIT CONSTRUCTION PLANS, SHOP DRAWINGS, AND DETAILS TO THE ARCHITECT/OWNER FOR REVIEW AND APPROVAL. THE WALL DESIGN SHALL INCLUDE A GLOBAL STABILITY ANALYSIS. WALL LOADING SHALL INCLUDE A MINIMUM SURCHARGE LOAD OF TWICE THE SOIL UNIT WEIGHT PER SQUARE FOOT OR APPLICABLE AASHTO VEHICLE LOADING, WHICH EVER IS APPLICABLE OR GREATER.
17. REFER TO ARCHITECTURAL PLANS FOR ALL BUILDING DIMENSIONS AND LAYOUT. BUILDING SHALL NOT BE STAKED FROM CIVIL DRAWINGS.
18. PROPOSED CONTOURS SHOWN ON THESE PLANS ARE FINAL SURFACE CONTOURS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ADJUSTMENTS FOR PAVEMENT THICKNESS, SUBGRADE THICKNESS, TOPSOIL, REMOVALS, ETC.

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CONSTRUCTION DOCUMENTS

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PROFESSIONAL ENGINEER

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JOB NO: 23047
DRAWN BY:
CHECKED BY:
DATE: 07-12-23

C100

CIVIL INFORMATION SHEET

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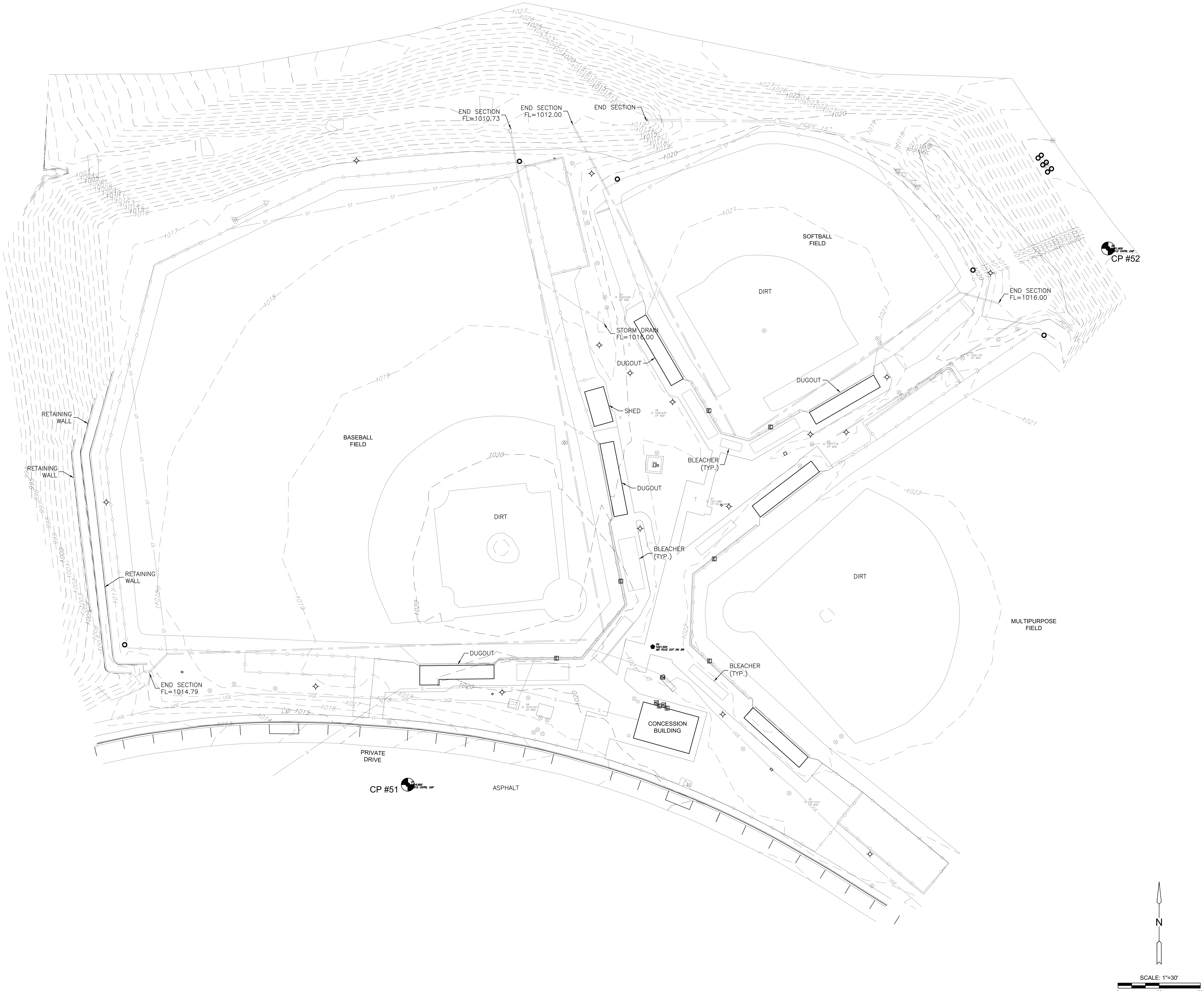

CONTROL POINTS

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ELEV.=1020.11

CP #51 SIB12 CNTRL CAP
N=1135916.74, E=2808104.75,
ELEV.=1016.89

CP #52 SIB12 CNTRL CAP
N=1136307.21, E=2808614.63,
ELEV.=1031.90

CP #53 MS PLUS CUT NORTH COR ADA
N=1135861.82, E=2807670.86,
ELEV.=1014.13

SEE PLAN FOR LOCATIONS.

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BRADEN L. TAYLOR
LICS# 2021001896

The Professional Engineers seal affixed to this sheet applies only to the material and items shown on this sheet. All drawings, instruments or other documents not exhibiting this seal shall not be considered prepared by this engineer, and this engineer expressly disclaims any and all responsibility for such plan, drawings, or documents not exhibiting this seal.

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EXISTING CONDITIONS PLAN

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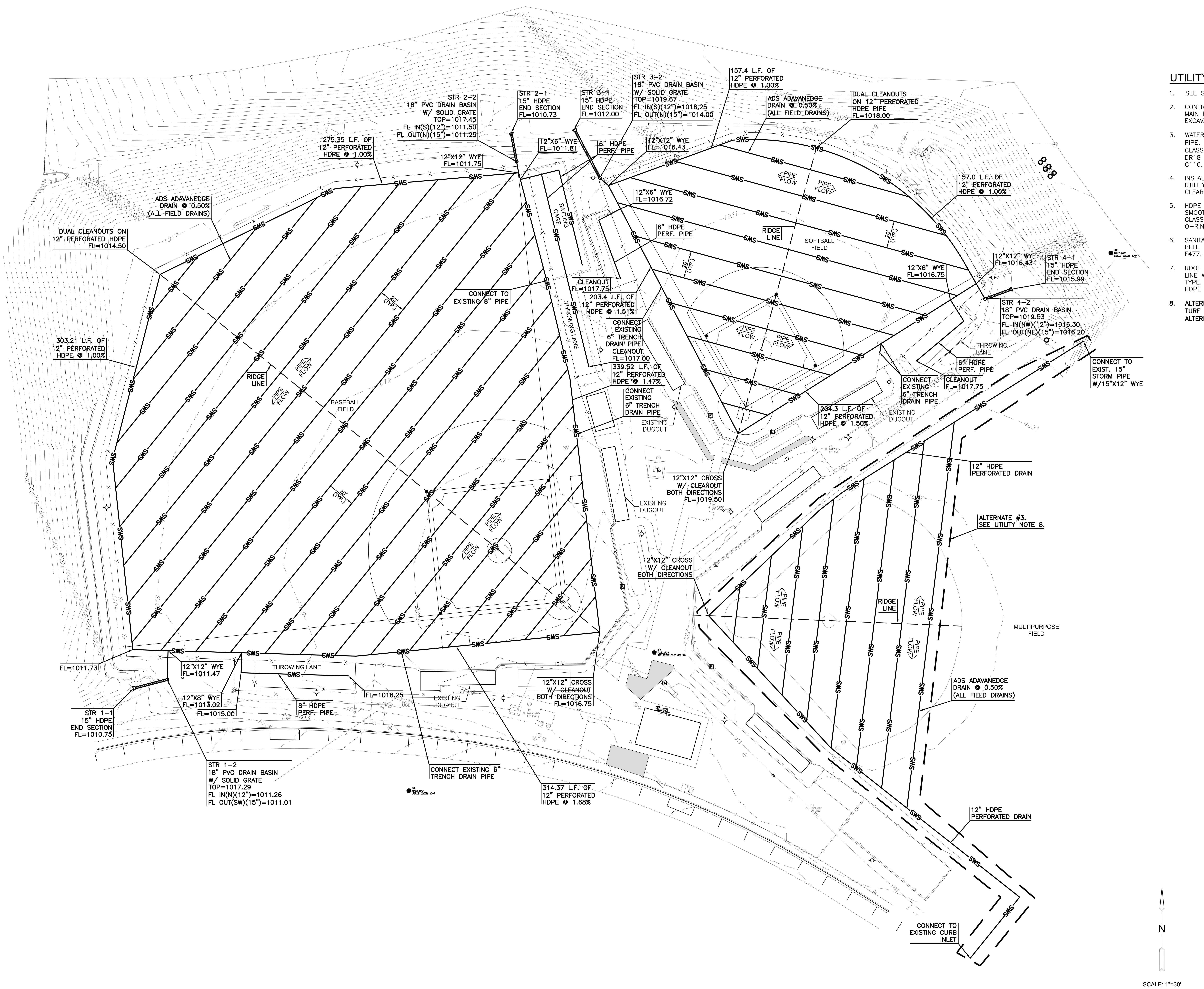

UTILITY NOTES:

1. SEE SHEET C200 FOR UTILITY DETAILS.
2. CONTRACTOR TO VERIFY THE LOCATION AND SIZE OF EXISTING WATER MAIN PRIOR TO CONSTRUCTION. COORDINATE WITH THE CITY PRIOR TO EXCAVATION AND TAP FOR TAP REQUIREMENTS AND INSPECTIONS.
3. WATER LINES SHALL HAVE A MINIMUM OF 42" OF COVER TO TOP OF PIPE. WATER LINES SMALLER THAN 4" SHALL BE PVC–ASTM D2241, IPS CLASS 160 (SDR 26). WATER LINES 4" AND LARGER SHALL BE C900, DR18 PVC. FITTINGS SHALL BE MECHANICAL JOINT, DUCTILE IRON, AWWA C110. BOLTS SHALL COMPLY WITH AWWA C111.
4. INSTALL VERTICAL BENDS AS NECESSARY ON PROPOSED WATER MAINS AT UTILITY CROSSINGS TO MAINTAIN A MINIMUM OF TWO FEET OF VERTICAL CLEARANCE BETWEEN THE WATER MAIN AND OTHER UTILITIES.
5. HDPE STORM PIPE SHALL BE CORRUGATED DUAL WALL HDPE WITH SMOOTH INTERIOR AND SOIL–TIGHT JOINTS. RCP STORM PIPE SHALL BE CLASS III, WALL B WITH GASKETED JOINTS CONFORMING TO ASTM C76. O–RING GASKETS SHALL CONFORM TO ASTM C361 AND ASTM C443.
6. SANITARY SEWER PIPE SHALL BE ASTM D3034, SDR 26 PVC PIPE WITH BELL ENDS AND GASKETED JOINTS. GASKETS SHALL COMPLY WITH ASTM F477.
7. ROOF DRAINS/DOWNSPOUTS SHALL BE CONNECTED TO STORM TRUNK LINE WITH PRE–MANUFACTURED WYE MATCHING PIPE MATERIAL AND JOINT TYPE. IN LIEU OF WYE, AN INSERTA–TEE CONNECTION CAN BE USED WITH HDPE PIPE.
8. **ALTERNATE #3: CONVERT MULTI–PURPOSE FIELD'S INFIELD TO SYNTHETIC TURF WITH UNDERDRAINS, AND INSTALL BACK STOP NETTING (ADD ALTERNATE).**

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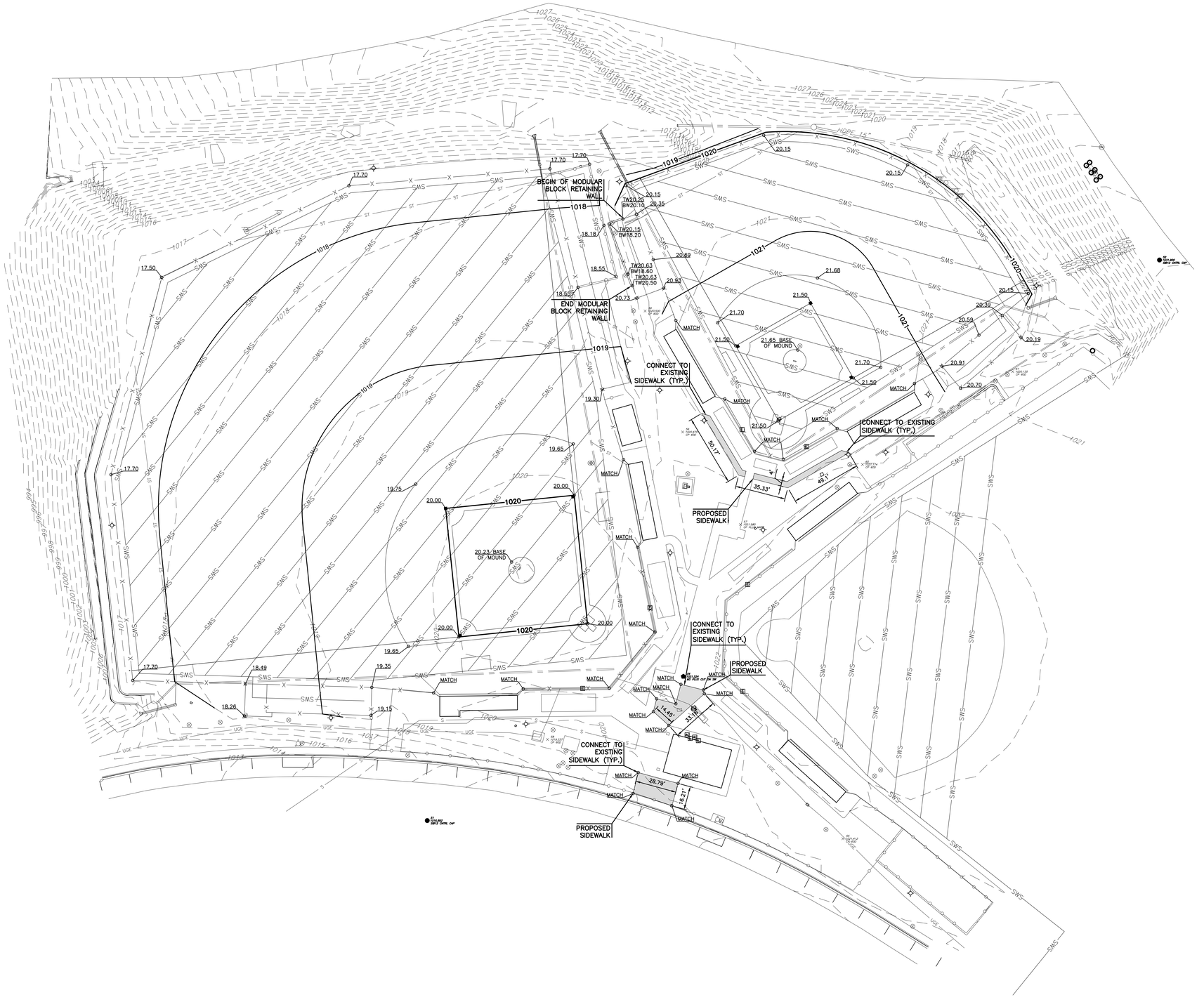
UTILITY PLAN



GRADING NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FINISHED GRADE.
2. ALL CURB SPOT ELEVATIONS ARE TOP OF CURB UNLESS OTHERWISE NOTED.
3. SATISFACTORY SOIL AND FILL MATERIAL SHALL BE PROVIDED PER THE SPECIFICATIONS. SEE SPECIFICATIONS FOR MAXIMUM FILL LIFT THICKNESS.
4. CLEAR AND GRUB IMPROVEMENT AREA. REMOVE ALL ORGANIC AND TOPSOIL MATERIAL REGARDLESS OF SIZE AND DEPTH. ALL CLEARED AND EXCESS MATERIAL SHALL BECOME CONTRACTORS PROPERTY AND SHALL BE REMOVED FROM THE PROJECT SITE.
5. THE CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINE EARTHWORK QUANTITIES. ALL IMPORT AND EXPORT OF SOIL MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT HIS EXPENSE.
6. NOTIFY TESTING AGENCY WHEN EXCAVATIONS HAVE REACHED REQUIRED SUBGRADE. SUBGRADE SHALL BE PREPARED AND COMPACTED PER THE SPECIFICATIONS.
7. IF GEOTECHNICAL ENGINEER DETERMINES THAT UNSATISFACTORY SOIL IS PRESENT, CONTINUE EXCAVATION AND REPLACE WITH COMPACTED BACKFILL OR FILL MATERIAL AS DIRECTED.
8. SEE EARTH WORK SPECIFICATIONS FOR COMPACTION & PROOF-ROLLING REQUIREMENTS.
9. RECONSTRUCT SUBGRADES DAMAGED BY FREEZING TEMPERATURE, FROST, RAIN, ACCUMULATED WATER, OR CONSTRUCTION ACTIVITIES, WITHOUT ADDITIONAL COMPENSATION.
10. COMPACTED SUBGRADE AND AGGREGATE BASE UNDER PAVEMENTS SHALL EXTEND A MINIMUM OF 2' BEYOND THE EDGE OF PAVEMENT OR BACK OF CURB, WHICHEVER IS APPLICABLE.
11. ALL EXCESS SOIL AND WASTE MATERIAL SHALL BECOME THE CONTRACTORS PROPERTY AND SHALL BE REMOVED FROM THE SITE.

PAVING NOTES:

1. SEE SHEET C200 FOR PAVEMENT DETAILS.
2. ALL DIMENSIONS ARE TO BACK OF CURB.
3. PORTLAND CEMENT CONCRETE SHALL CONFORM WITH THE KANSAS CITY METRO MATERIALS BOARD MINIMUM 4000 PSI GRANITE MIX (KCMMB 4K).
4. ALL SIDEWALKS SHALL BE 4" UN-REINFORCED CONCRETE.
5. SIDEWALK RAMPS ON PRIVATE PROPERTY DO NOT REQUIRE 2' WIDE DETECTABLE WARNING STRIPS (TRUNCATED DOMES).
6. COMPACTED SUBGRADE AND AGGREGATE BASE UNDER PAVEMENTS SHALL EXTEND A MINIMUM OF 2' BEYOND THE EDGE OF PAVEMENT OR BACK OF CURB, WHICHEVER IS APPLICABLE.
7. ALL CURBS SHALL BE CG-1 UNLESS OTHERWISE NOTED.
8. 5' WIDE SIDEWALKS SHALL HAVE A MAXIMUM OF 5' CONTRACTION JOINT SPACING. 6' WIDE SIDEWALKS SHALL HAVE A MAXIMUM CONTRACTION JOINT SPACING OF 6'. 8' WIDE SIDEWALKS SHALL HAVE A MAXIMUM 4' CONTRACTION JOINT SPACING WITH A LONGITUDINAL CONTRACTION JOINT DOWN THE MIDDLE OF THE SIDEWALK.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR REQUIRED TRAFFIC CONTROL NECESSARY ON SURROUNDING STREETS FOR CONSTRUCTION. TRAFFIC CONTROL SHALL COMPLY WITH THE LATEST EDITION OF MUTCD AND CITY SPECIFICATIONS.
10. COORDINATE INSTALLATION OF PVC SLEEVES AND GRANULAR TRENCH BACKFILL FOR IRRIGATION PRIOR TO PAVEMENT INSTALLATION.

GRADING LEGEND

- 100 — PROPOSED MAJOR CONTOUR
- 101 — PROPOSED MINOR CONTOUR
- 00.00 — FINISH GRADE

PAVING LEGEND

- — 4" CONCRETE SIDEWALK

N

SCALE: 1"=30'
0 30 60

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Surveying No. 2006027138

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1000 NE 104th Street
Liberty, MO 64068

REVISIONS:

#	Description	Date

STATE OF MISSOURI
BRADEN M TAYLOR
NUMBER PE-2021001896
7.12.23
PROFESSIONAL ENGINEER

BRADEN L. TAYLOR
LICS# 2021001896

JOB NO: 23047
DRAWN BY: MKB
CHECKED BY: BLT
DATE: 07-12-23

C103

GRADING & PAVING PLAN

P:\PROJECTS\2023\23020\0291_LIBERTY NORTH HS ATHLETICS\00 23029I CAD\SHTS\05 CIVIL\C05\C23029I-05-1200-GD.DWG

EROSION CONTROL LEGEND

- INLET PROTECTION
- SF — SILT FENCE

N

SCALE: 1"=30'

0 30 60

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Surveying No. 2006027138

FESCUE TURF NOTES:

1. INSTALL FESCUE TURF SOD PER NOTES BELOW.
2. SUBMITTALS SHALL INCLUDE: PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED, CERTIFICATION OF SOD AS KANSAS STATE FESCUE TRIAL MIX, PRODUCT CERTIFICATES: FOR SOIL AMENDMENTS AND FERTILIZERS, SIGNED BY PRODUCT MANUFACTURER, MATERIAL TEST REPORTS: FOR EXISTING SURFACE SOIL AND IMPORTED TOPSOIL, AND PLANTING SCHEDULE: INDICATING ANTICIPATED PLANTING DATES FOR SOD INSTALLATION.
3. INSTALLER QUALIFICATIONS: A QUALIFIED LANDSCAPE INSTALLER WHOSE WORK HAS RESULTED IN SUCCESSFUL LAWN ESTABLISHMENT.
4. INSTALLER'S FIELD SUPERVISION: REQUIRE INSTALLER TO MAINTAIN AN EXPERIENCED FULL-TIME SUPERVISOR ON PROJECT SITE WHEN PLANTING IS IN PROGRESS.
5. REPORT SUITABILITY OF TOPSOIL FOR LAWN GROWTH. STATE RECOMMENDED QUANTITIES OF NITROGEN, PHOSPHORUS, AND POTASH NUTRIENTS AND SOIL AMENDMENTS TO BE ADDED TO PRODUCE SATISFACTORY TOPSOIL.
6. DELIVERY, STORAGE, AND HANDLING FOR SOD: HARVEST, DELIVER, STORE, AND HANDLE SOD ACCORDING TO REQUIREMENTS IN TPI'S "SPECIFICATIONS FOR TURFGRASS SOD MATERIALS" AND "SPECIFICATIONS FOR TURFGRASS SOD TRANSPLANTING AND INSTALLATION" IN ITS "GUIDELINE SPECIFICATIONS TO TURFGRASS SODDING."
7. LAWN MAINTENANCE: BEGIN MAINTENANCE IMMEDIATELY AFTER EACH AREA IS PLANTED AND CONTINUE UNTIL ACCEPTABLE LAWN IS ESTABLISHED, BUT FOR NOT LESS THAN 60 DAYS FROM DATE OF SUBSTANTIAL COMPLETION. MAINTAIN AND ESTABLISH LAWN BY WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING, REPLANTING, AND OTHER OPERATIONS. ROLL, REGRADE, AND REPLANT BARE OR ERODED AREAS TO PRODUCE A UNIFORMLY SMOOTH LAWN. WATERING: PROVIDE AND MAINTAIN TEMPORARY IRRIGATION SYSTEM TO CONVEY WATER FROM SOURCES AND TO KEEP LAWN UNIFORMLY MOIST TO A DEPTH OF 4 INCHES.
8. WATER LAWN AT A MINIMUM RATE OF 1 INCH PER WEEK OR AS NECESSARY TO PROVIDE A HEALTHY GREEN APPEARANCE. A DEEP ROOT SYSTEM IS DESIRED THEREFORE DO NOT WATER LAWNS AFTER ESTABLISHMENT MORE THAN EVERY OTHER DAY.
9. MOW LAWN AS SOON AS TOP GROWTH IS TALL ENOUGH TO CUT. REPEAT MOWING TO MAINTAIN SPECIFIED HEIGHT WITHOUT CUTTING MORE THAN 33 PERCENT OF GRASS HEIGHT. REMOVE NO MORE THAN 33 PERCENT OF GRASS-LEAF GROWTH IN INITIAL OR SUBSEQUENT MOWINGS. DO NOT DELAY MOWING UNTIL GRASS BLADES BEND OVER AND BECOME MATTED. DO NOT MOW WHEN GRASS IS WET. SCHEDULE INITIAL AND SUBSEQUENT MOWINGS TO MAINTAIN THE FOLLOWING GRASS HEIGHT: MOW GRASS 2 INCHES HIGH IN SPRING AND FALL AND 2 ½ INCHES HIGH IN THE SUMMER. TRIM AND EDGE ALONG WALKS, WALLS, ETC.
10. LAWN POSTFERTILIZATION: APPLY FERTILIZER AFTER INITIAL MOWING AND WHEN GRASS IS DRY.
11. APPLY FERTILIZER 5 TIMES PER SEASON, SPRING: FERTILIZER PLUS WEED CONTROL FOR CRABGRASS, LATE SPRING: FERTILIZER PLUS WEED CONTROL FOR BROADLEAF WEEDS, SUMMER: FERTILIZER, EARLY FALL: FERTILIZER PLUS WEED CONTROL, LATE FALL: WINTERIZER.
12. AERATE LAWN A MINIMUM OF ONCE PER YEAR.
13. TURFGRASS SPECIES: GRASS SPECIES, BOTH SOD AND SEED, AS FOLLOWS, WITH NOT LESS THAN 95 PERCENT GERMINATION, NOT LESS THAN 85 PERCENT PURE SEED, AND NOT MORE THAN 0.5 PERCENT WEED SEED: MOST CURRENT AVAILABLE KANSAS STATE FESCUE TRIAL MIX, RATED IN TOP 1/3 OF VARIETIES TESTED FOR VISUAL APPEARANCE AVERAGE THROUGHOUT THE YEAR OR APPROVED EQUAL.
14. TOPSOIL: ASTM D 5268, PH RANGE OF 5.5 TO 7, A MINIMUM OF 4 PERCENT ORGANIC MATERIAL CONTENT; FREE OF STONES 1 INCH OR LARGER IN ANY DIMENSION AND OTHER EXTRANEOUS MATERIALS HARMFUL TO PLANT GROWTH.
15. TOPSOIL SOURCE: REUSE SURFACE SOIL STOCKPILED ON-SITE. VERIFY SUITABILITY OF STOCKPILED SURFACE SOIL TO PRODUCE TOPSOIL. CLEAN SURFACE SOIL OF ROOTS, PLANTS, SOD, STONES, CLAY LUMPS, AND OTHER EXTRANEOUS MATERIALS HARMFUL TO PLANT GROWTH. SUPPLEMENT WITH IMPORTED OR MANUFACTURED TOPSOIL FROM OFF-SITE SOURCES WHEN QUANTITIES ARE INSUFFICIENT. OBTAIN TOPSOIL DISPLACED FROM NATURALLY WELL-DRAINED CONSTRUCTION OR MINING SITES WHERE TOPSOIL OCCURS AT LEAST 4 INCHES DEEP; DO NOT OBTAIN FROM BOGS OR MARSHES. TOPSOIL TO BE PLACED IN AN 8" LIFT IN ALL PLANTING BED AREAS.
16. AMEND SOIL AS NECESSARY TO MEET TOPSOIL REQUIREMENTS OF ASTM D 5268.
17. EXAMINE AREAS TO RECEIVE LAWNS AND GRASS FOR COMPLIANCE WITH REQUIREMENTS AND OTHER CONDITIONS AFFECTING PERFORMANCE. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.
18. PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES, TREES, SHRUBS, AND PLANTINGS FROM DAMAGE CAUSED BY PLANTING OPERATIONS. PROVIDE EROSION-CONTROL MEASURES TO PREVENT EROSION OR DISPLACEMENT OF SOILS AND DISCHARGE OF SOIL-BEARING WATER RUNOFF OR AIRBORNE DUST TO ADJACENT PROPERTIES AND WALKWAYS. ELIMINATE COMPETING GRASS VEGETATION IN ALL AREAS TO BE IMPROVED WITH "ROUNDUP" OR AN APPROVED EQUAL ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. SEVERAL APPLICATIONS MAY BE NECESSARY. WORK TO REMOVE COMPETING VEGETATION, SHALL BEGIN SEVERAL MONTHS BEFORE SODDING OPERATIONS COMMENCE.
19. LIMIT SOD SUBGRADE PREPARATION TO AREAS TO BE PLANTED THE SAME OR FOLLOWING DAY. NEWLY GRADED AREAS: LOOSEN SUBGRADE TO A MINIMUM DEPTH OF 6 INCHES. REMOVE STONES LARGER THAN 1 INCH IN ANY DIMENSION AND STICKS, ROOTS, RUBBISH, AND OTHER EXTRANEOUS MATTER AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY.APPLY FERTILIZER DIRECTLY TO SUBGRADE BEFORE LOOSENING. SPREAD TOPSOIL IF NECESSARY, APPLY SOIL AMENDMENTS AND FERTILIZER ON SURFACE, AND THOROUGHLY BLEND.
20. LEGALLY DISPOSE OF WASTE MATERIAL, INCLUDING GRASS, VEGETATION AND TURF OFF OWNER'S PROPERTY.
21. PRIOR TO LAYING SOD THE CONTRACTOR SHALL DEMONSTRATE TO THE OWNER AND OWNER'S REPRESENTATIVE THAT WATER IS AVAILABLE AND IN A WORKING ORDER TO ADEQUATELY COVER ALL SODDED AREAS. THE LANDSCAPE CONTRACTOR MUST COORDINATE WITH THE GENERAL CONTRACTOR AND OWNER, TO CONNECT TO BUILDING HOSE BIBS OR OTHER MEANS PRIOR TO SOD INSTALLATION. LAY SOD WITHIN 24 HOURS OF HARVESTING. DO NOT LAY SOD IF DORMANT OR IF GROUND IS FROZEN OR MUDDY.
22. LAY SOD TO FORM A SOLID MASS WITH TIGHTLY FITTED JOINTS. BUTT ENDS AND SIDES OF SOD; DO NOT STRETCH OR OVERLAP. STAGGER SOD STRIPS OR PADS TO OFFSET JOINTS IN ADJACENT COURSES. AVOID DAMAGE TO SUBGRADE OR SOD DURING INSTALLATION. TAMP AND ROLL LIGHTLY TO ENSURE CONTACT WITH SUBGRADE, ELIMINATE AIR POCKETS, AND FORM A SMOOTH SURFACE. WORK SIFTED SOIL OR FINE SAND INTO MINOR CRACKS BETWEEN PIECES OF SOD; REMOVE EXCESS TO AVOID SMOTHERING SOD AND ADJACENT GRASS. DO NOT ALLOW EDGES OF SOD TO TURN UP WHEN INSTALLING.LAY SOD ACROSS ANGLE OF SLOPES EXCEEDING 1:3. ANCHOR SOD ON SLOPES EXCEEDING 1:6 WITH WOOD PEGS OR STEEL STAPLES SPACED AS RECOMMENDED BY SOD MANUFACTURER BUT NOT LESS THAN 2 ANCHORS PER SOD STRIP TO PREVENT SLIPPAGE.SATURATE SOD WITH FINE WATER SPRAY WITHIN TWO HOURS OF PLANTING. DURING FIRST WEEK, WATER DAILY OR MORE FREQUENTLY AS NECESSARY TO MAINTAIN MOIST SOIL TO A MINIMUM DEPTH OF 1-1/2 INCHES BELOW SOD. SATISFACTORY SODDED LAWN: WITHIN 60 DAYS AND AT END OF MAINTENANCE PERIOD, A HEALTHY, WELL-ROOTED, EVEN-COLORED, VIABLE LAWN HAS BEEN ESTABLISHED, FREE OF WEEDS, OPEN JOINTS, BARE AREAS, AND SURFACE IRREGULARITIES.
23. REESTABLISH LAWNS THAT DO NOT COMPLY WITH REQUIREMENTS AND CONTINUE MAINTENANCE UNTIL LAWNS ARE SATISFACTORY. SATISFACTORY SODDED OR SEEDED LAWN: WITHIN 60 DAYS AND AT END OF MAINTENANCE PERIOD, A HEALTHY, UNIFORM, CLOSE STAND OF GRASS HAS BEEN ESTABLISHED, FREE OF WEEDS AND SURFACE IRREGULARITIES, WITH COVERAGE EXCEEDING (90 PERCENT OVER ANY 10 SQ. FT. AND BARE SPOTS NOT EXCEEDING 5 BY 5 INCHES). CONTRACTOR SHALL BE RESPONSIBLE FOR IRRIGATION AND ESTABLISHMENT OF TURF GRASS UNTIL WRITTEN ACCEPTANCE IS RECEIVED FOLLOWING APPROVAL BY THE SCHOOL DISTRICT.
24. PROMPTLY REMOVE SOIL AND DEBRIS CREATED BY LAWN WORK FROM PAVED AREAS. CLEAN WHEELS OF VEHICLES BEFORE LEAVING SITE TO AVOID TRACKING SOIL ONTO ROADS, WALKS, OR OTHER PAVED AREAS. ERECT BARRICADES AND WARNING SIGNS AS REQUIRED TO PROTECT NEWLY PLANTED AREAS FROM TRAFFIC. MAINTAIN BARRICADES THROUGHOUT MAINTENANCE PERIOD AND REMOVE AFTER LAWN IS ESTABLISHED. REMOVE EROSION CONTROL MEASURES AFTER GRASS ESTABLISHMENT PERIOD.

EROSION CONTROL NOTES:

1. THE CONTRACTOR SHALL SEED, MULCH, OR OTHERWISE STABILIZE ANY DISTURBED AREA WHERE THE LAND DISTURBANCE ACTIVITY HAS CEASED FOR MORE THAN 14 DAYS. INITIAL STABILIZATION ACTIVITIES SHALL BE COMPLETED WITHIN 14 DAYS AFTER SOIL DISTURBING ACTIVITIES HAVE CEASED. ALL SEEDING ACTIVITY SHALL INCLUDE MULCHING OR EQUIVALENT SOIL STABILIZING BMP MEASURE OF THE DISTURBED AREA. THE CONTRACTOR SHALL PERFORM INSPECTIONS OF EROSION AND SEDIMENT CONTROL MEASURES AT LEAST ONCE PER WEEK AND WHENEVER A RAINFALL TOTAL OF 0.5 INCHES OR GREATER IS OBSERVED BASED ON A SINGLE MONITORING EVENT; OR BASED ON THE CUMULATIVE TOTAL OF TWO CONSECUTIVE MONITORING EVENTS WHEN THE RAINFALL TOTAL OF THE FIRST MONITORING EVENT IS LESS THAN 0.5 INCHES. THE CONTRACTOR SHALL MAINTAIN AN INSPECTION LOG INCLUDING THE INSPECTOR'S NAME, DATE OF INSPECTION, OBSERVATIONS AS TO THE EFFECTIVENESS OF THE EROSION AND SEDIMENT CONTROL MEASURES, ACTIONS NECESSARY TO CORRECT DEFICIENCIES, WHEN DEFICIENCIES ARE CORRECTED, AND THE SIGNATURE OF THE PERSON PERFORMING THE INSPECTION. CONTRACTOR SHALL ADD EROSION CONTROL MEASURES AS NECESSARY TO CONTROL SEDIMENT RUNOFF FROM THE SITE, ADDITIONAL MEASURES SHALL BE AT THE CONTRACTORS EXPENSE.
2. CONTRACTOR TO HAVE A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) ON SITE AT ALL TIMES. INSPECTION LOGS AND ANY CHANGES TO EROSION CONTROL MEASURES SHALL BE ADDED TO THE SWPPP.
3. CONCRETE WASH OR RINSE WATER FROM CONCRETE MIXING EQUIPMENT, TOOLS AND/OR READY-MIX TRUCKS, TOOLS, ETC. MAY NOT BE DISCHARGED INTO OR BE ALLOWED TO RUN DIRECTLY INTO ANY EXISTING WATER BODY OR STORM INLET. ONE OR MORE LOCATIONS FOR CONCRETE WASH OUT WILL BE DESIGNATED ON SITE, SUCH THAT DISCHARGES DURING CONCRETE WASHOUT WILL BE CONTAINED IN A SMALL AREA WHERE WASTE CONCRETE CAN SOLIDIFY IN PLACE AND EXCESS WATER EVAPORATED OR INFILTRATED INTO THE GROUND.
4. CHEMICALS OR MATERIALS CAPABLE OF CAUSING POLLUTION MAY ONLY BE STORED ONSITE IN THEIR ORIGINAL CONTAINER. MATERIALS STORED OUTSIDE MUST BE IN CLOSED AND SEALED WATER-PROOF CONTAINERS AND LOCATED OUTSIDE OF DRAINAGE WAYS OR AREAS SUBJECT TO FLOODING. LOCKS AND OTHER MEANS TO PREVENT OR REDUCE VANDALISM SHALL BE USED. SPILLS WILL BE REPORTED AS REQUIRED BY LAW AND IMMEDIATE ACTIONS TAKEN TO CONTAIN THEM.
5. SEE SHEET C200 FOR EROSION CONTROL DETAILS.
6. CONTRACTOR TO KEEP ALL SEDIMENT FROM EXISTING OR PROPOSED PAVEMENT.
7. CONTRACTOR TO COMPLY WITH ALL APPLICABLE REQUIREMENTS OF CITY, STATE, AND FEDERAL REGULATIONS FOR EROSION CONTROL.
8. ALL DISTURBED AREAS SHALL BE PERMANENTLY SOD UPON COMPLETION OF PROJECT. REFER TO FESCUE TURF SOD NOTES FOR INSTALLATION INSTRUCTIONS.
9. REMOVE SEDIMENT AND DEBRIS FROM ALL STORM SEWER SYSTEM STRUCTURES AND PIPES ON-SITE, INCLUDING PERFORATED UNDERDRAINS PRIOR TO FINAL COMPLETION.

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CONSTRUCTION DOCUMENTS

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Liberty Public Schools 53

1000 NE 104th Street
Liberty, MO 64068

REVISIONS:

#	Description	Date

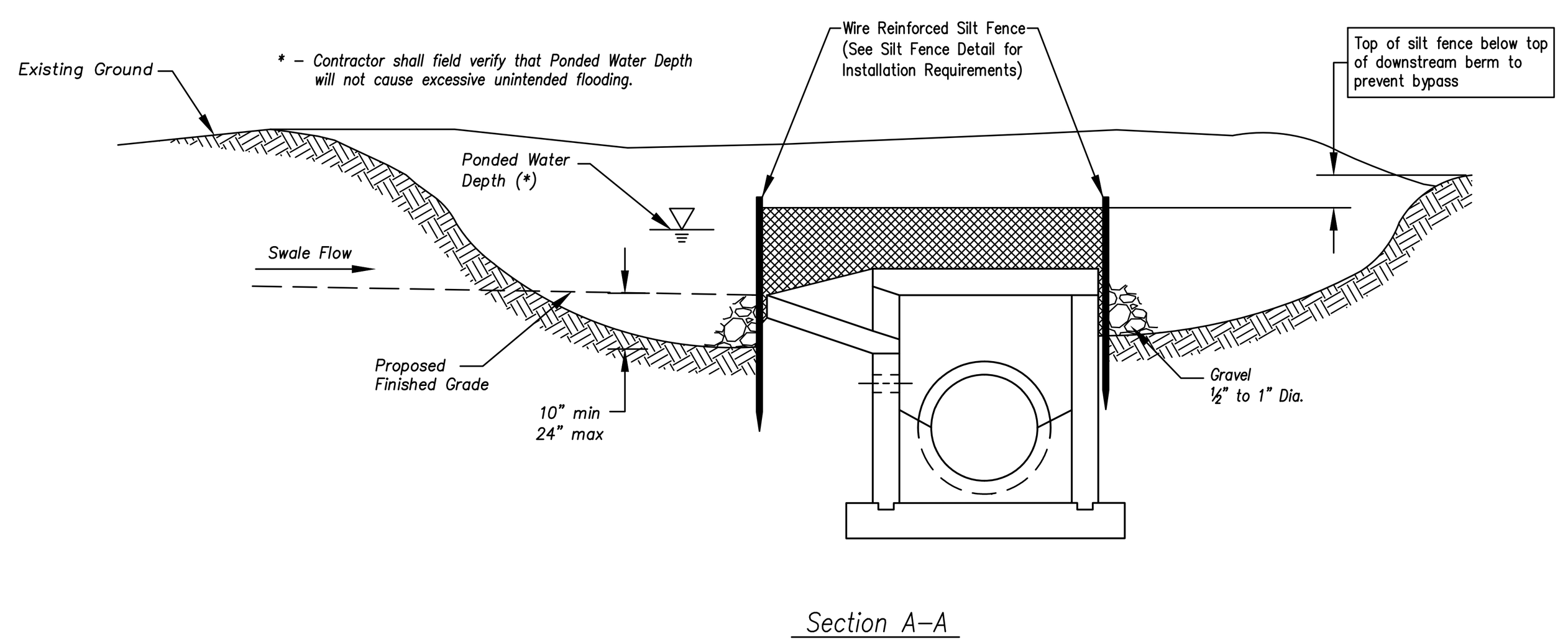
STATE OF MISSOURI
BRADEN L. TAYLOR
NUMBER
PE-2021001896
7.12.23
PROFESSIONAL ENGINEER

BRADEN L. TAYLOR
LICS# 2021001896

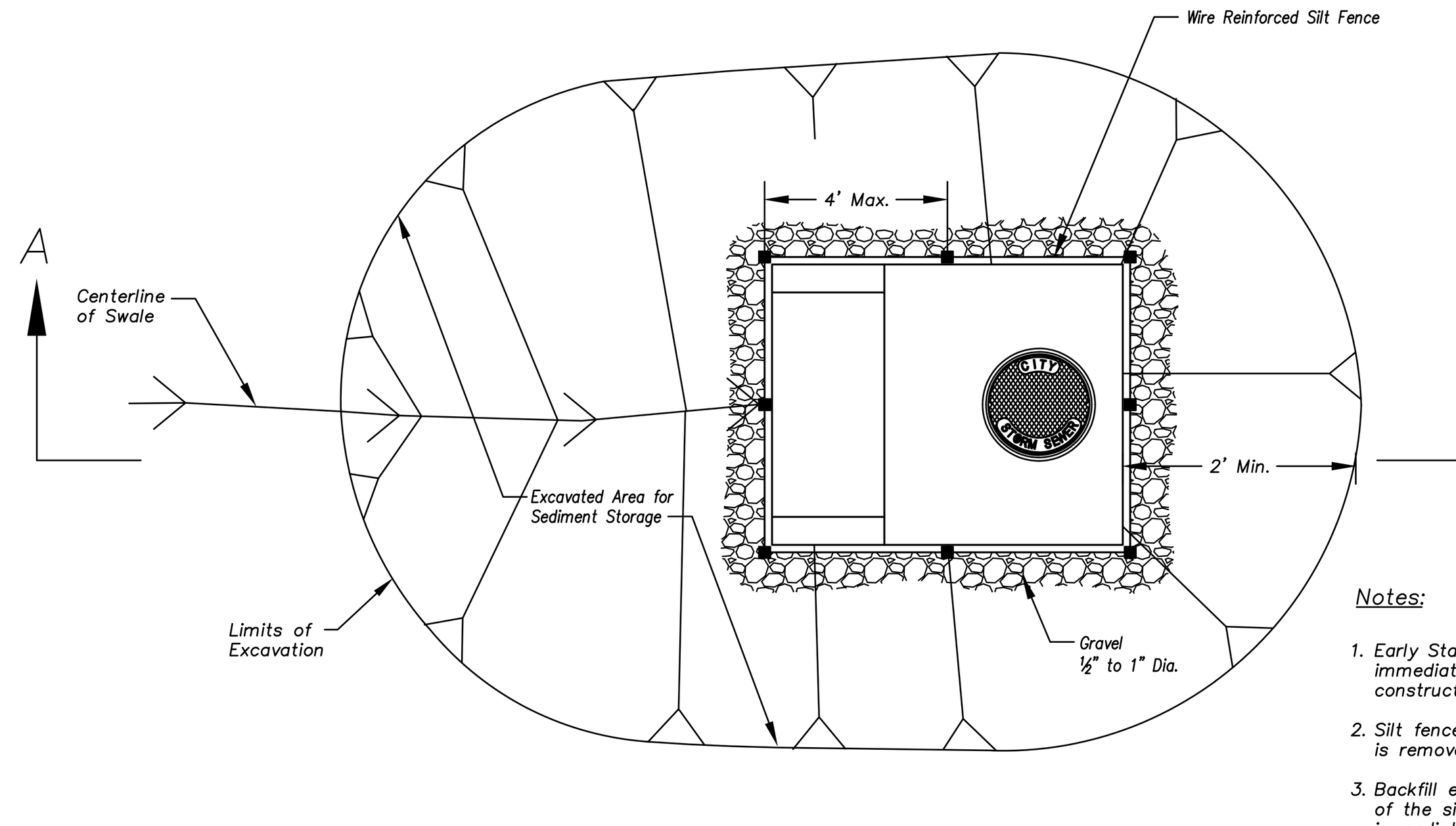
JOB NO: 23047
DRAWN BY:
CHECKED BY:
DATE: 07-12-23

C104

EROSION CONTROL PLAN

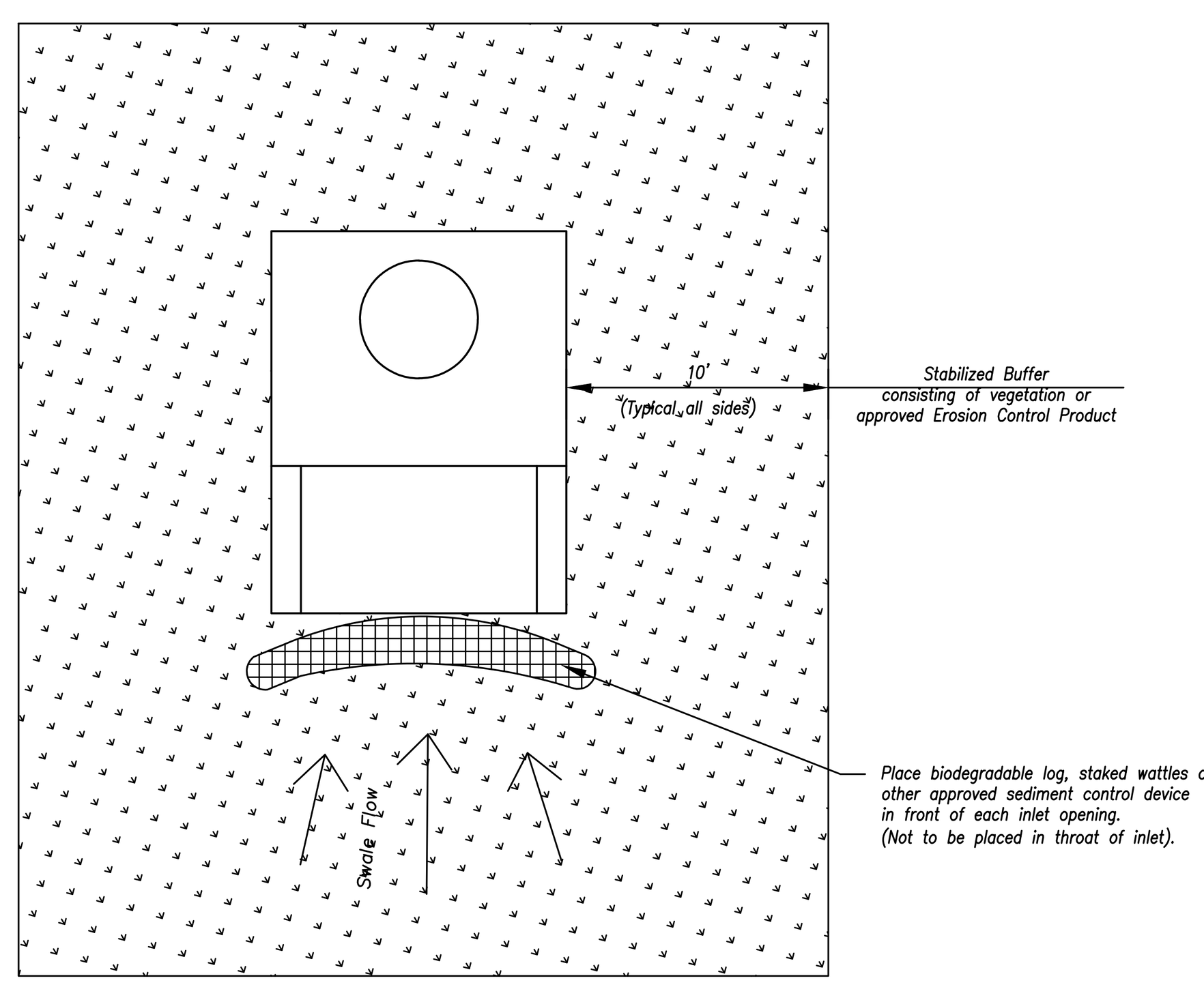


Section A–A
Not to Scale



Plan
Not to Scale

EARLY STAGE AREA INLET
(All open boxes and inlets not at final grade)



Plan
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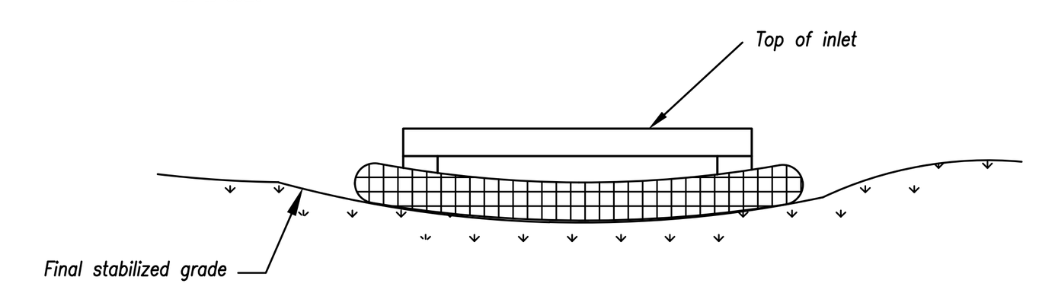


Front View

LATE STAGE AREA INLET
(Area inlets at final grade and existing inlets)

Notes:

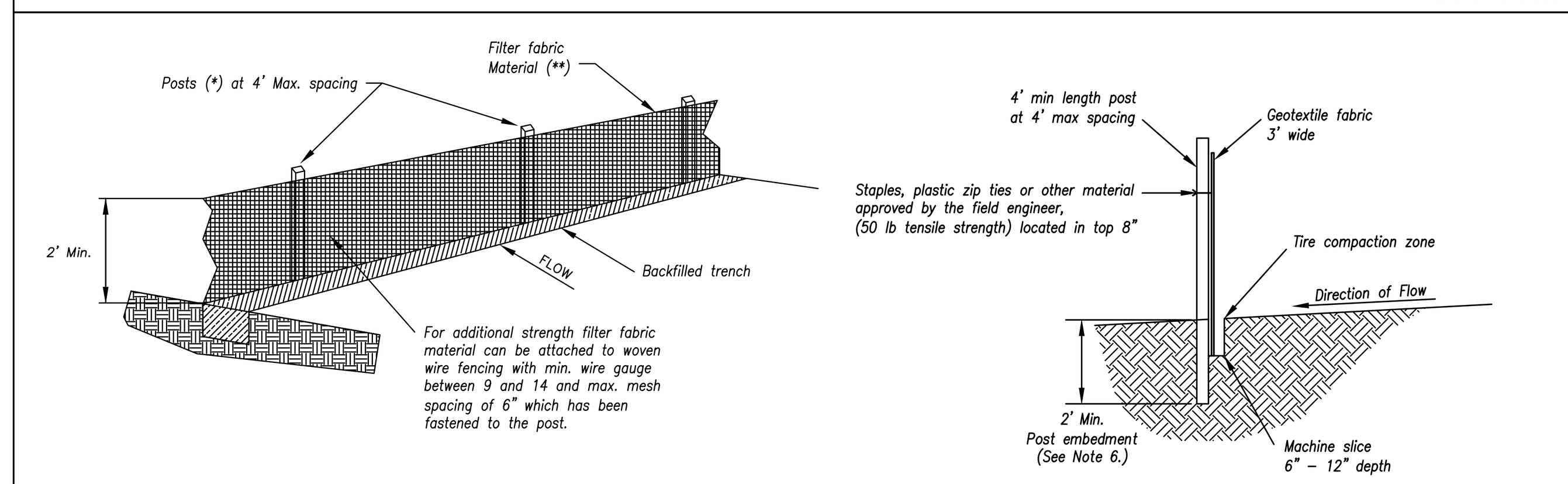
1. Early Stage Area Inlet Sediment Barrier to be installed immediately after inlet or junction box is constructed.
2. Silt fence shall remain in place until excavated area is removed and Late Stage Area Inlet is being installed.
3. Backfill excavated area ONLY after final grading of the site. Stabilization of the site is to immediately follow.
4. Wire reinforced silt fence may be used in place of silt fence attached to wood frame.

Maintenance:

1. Remove deposited sediment from excavated storage areas when available storage has been reduced by 20%.
2. Remove deposited sediment from filter socks or similar when any accumulation of sediment is visible.
3. Repair or replace as necessary to maintain function and integrity of installation.

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

AMERICAN PUBLIC WORKS ASSOCIATION	
Kansas City Metro Chapter APWA AMERICAN PUBLIC WORKS ASSOCIATION	KANSAS CITY METRO CHAPTER
AREA INLET AND JUNCTION BOX PROTECTION	STANDARD DRAWING NUMBER ESC-07 ADOPTED: 10/24/2016



(*) POSTS
– MIN. LENGTH 4'
– HARDWOOD 1 ⅛" x 1 ⅛"
– NO.2 SOUTHERN PINE 2 ⅝" x 2 ⅝"
– STEEL 1.33 LB/FT

(**) – Geotextile Fabric shall meet the requirements of AASHTO M288

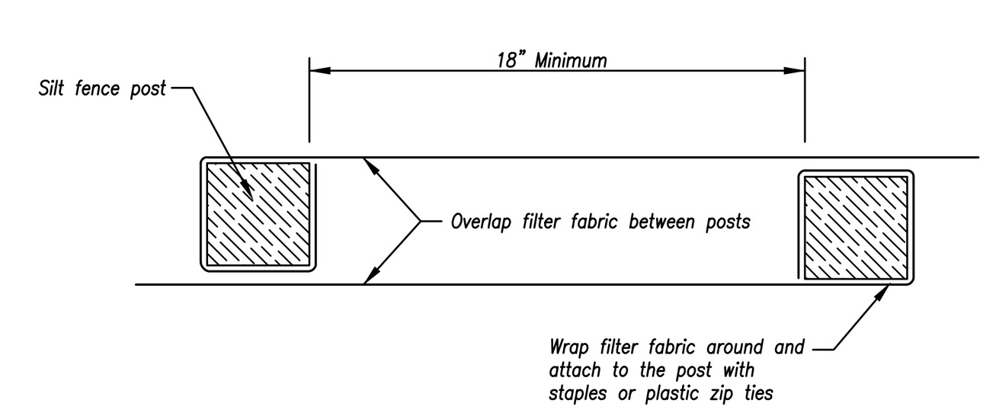
SILT FENCE DETAILS
Not to Scale

Notes:

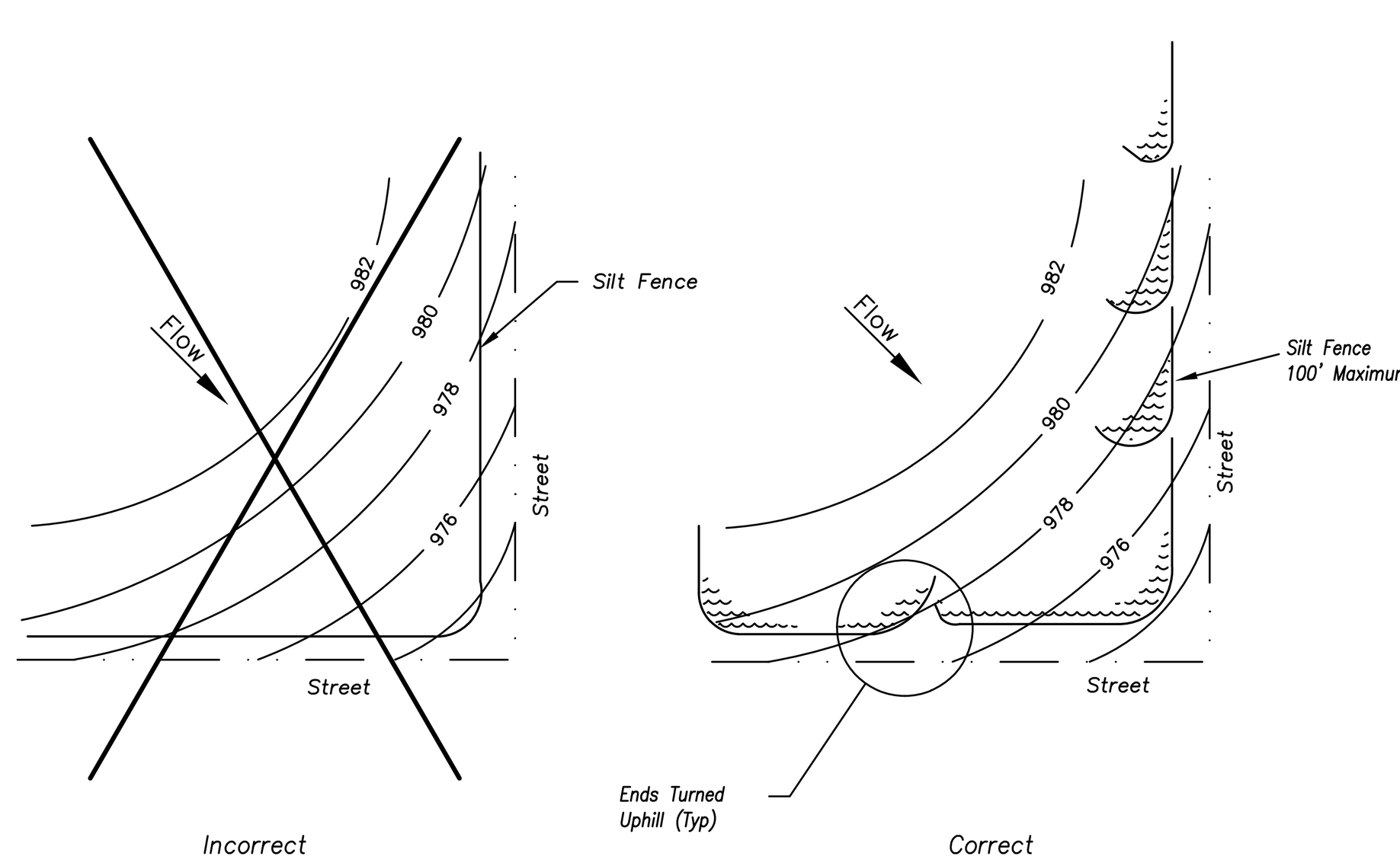
1. In order to contain water, the ends of the silt fence must be turned uphill (Figure A).
2. Long perimeter runs of silt fence must be limited to 100'. Runs should be broken up into several smaller segments to minimize water concentrations (Figure A).
3. Long slopes should be broken up with intermediate rows of silt fence to slow runoff velocities.
4. Attach fabric to upstream side of post.
5. Install posts a minimum of 2' into the ground.
6. Trenching will only be allowed for small or difficult installation, where slicing machine cannot be reasonably used.

Maintenance:

1. Remove and dispose of sediment deposits when the deposit approaches ⅓ the height of silt fence.
2. Repair as necessary to maintain function and structure.

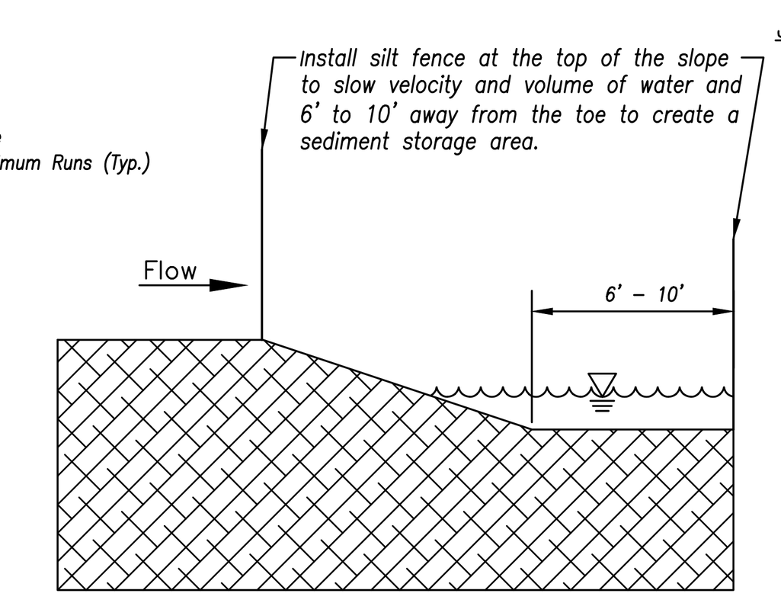


JOINING FENCE SECTIONS
Not to Scale



Incorrect Correct

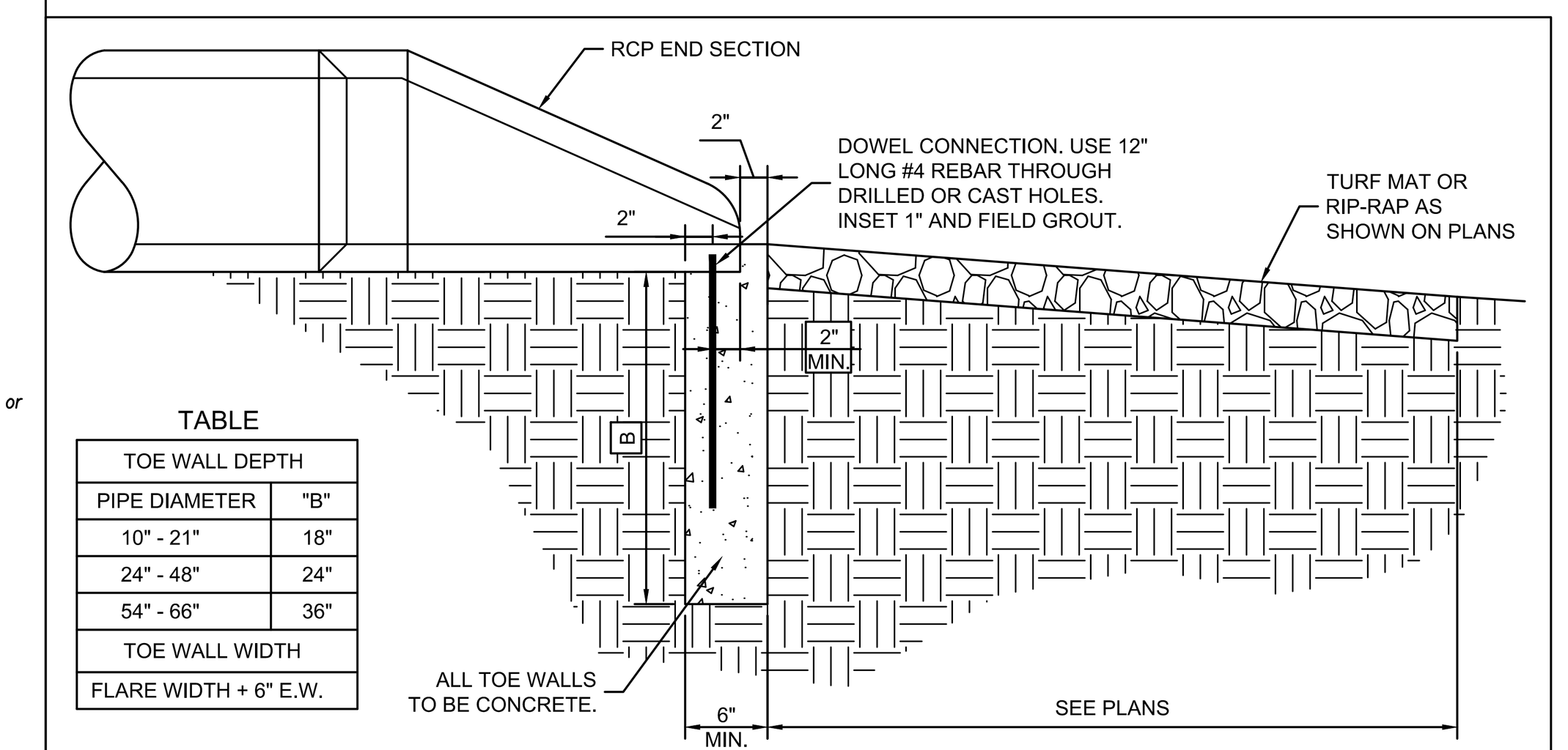
Figure A



SILT FENCE LAYOUT
Not to Scale

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

AMERICAN PUBLIC WORKS ASSOCIATION	
Kansas City Metro Chapter APWA AMERICAN PUBLIC WORKS ASSOCIATION	KANSAS CITY METRO CHAPTER
SILT FENCE	STANDARD DRAWING NUMBER ESC-03 ADOPTED: 10/24/2016

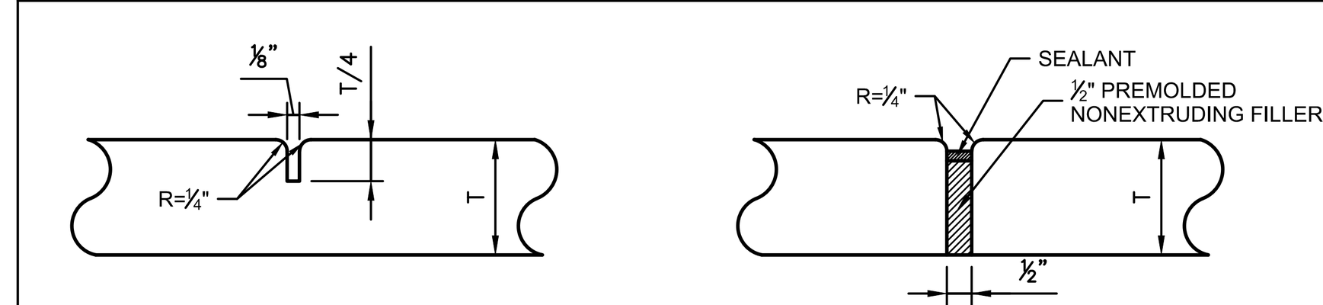


TABLE

TOE WALL DEPTH	
PIPE DIAMETER	"B"
10" - 21"	18"
24" - 48"	24"
54" - 66"	36"
TOE WALL WIDTH	
FLARE WIDTH + 6" E.W.	

RCP TOEWALL DETAIL

SCALE: NTS



CONTRACTION JOINT

ISOLATION JOINT

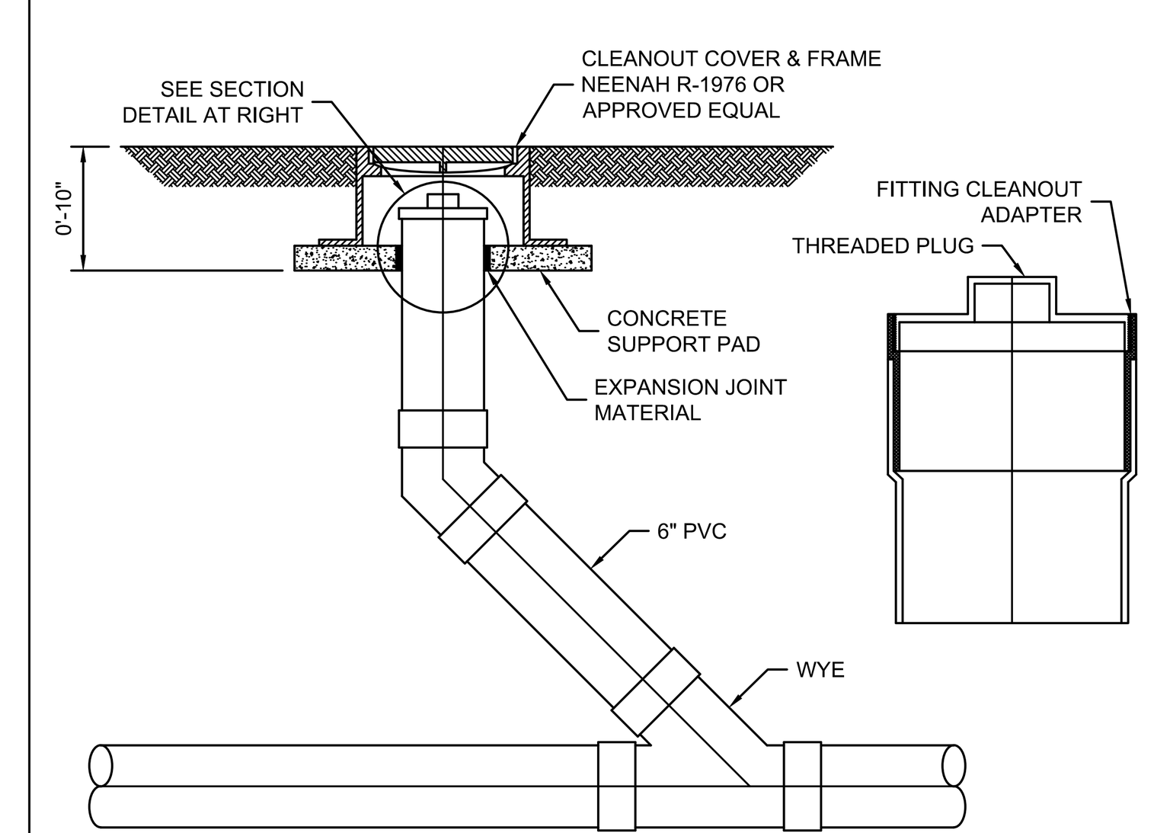
NOTES:
1. CONTRACTION JOINTS SHALL BE CONSTRUCTED WITH A GROOVING TOOL (HAND TOOLED).

NOTE:
1. ISOLATION JOINTS JOINTS SHALL BE PLACED WHERE NEW CONCRETE ABUTS EXISTING CONCRETE AND IN AREAS WHERE CONCRETE ABUTS BUILDINGS.

JOINT DETAILS

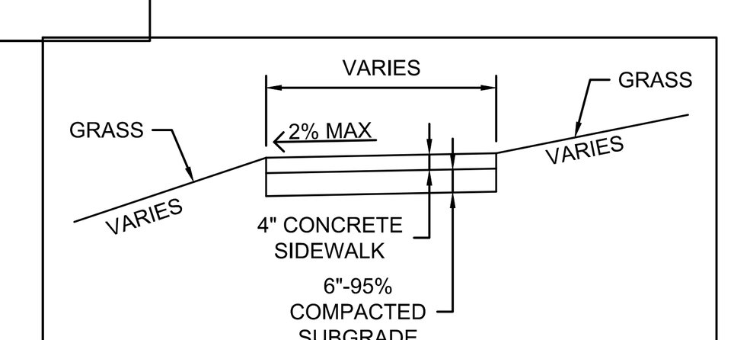
SCALE: NTS

NOTES:
1. SET CLEANOUT FRAMES AND COVERS IN PAVEMENT AREAS IN A CAST-IN-PLACE-CONCRETE BLOCK, 18 BY 18 BY 12 INCHES DEEP WITH 12 INCHES OF TREATED 95% COMPACTED SUBGRADE BELOW CONCRETE. SET WITH TOP FLUSH WITH SURROUNDING PAVEMENT.



CLEANOUT DETAIL

SCALE: NTS

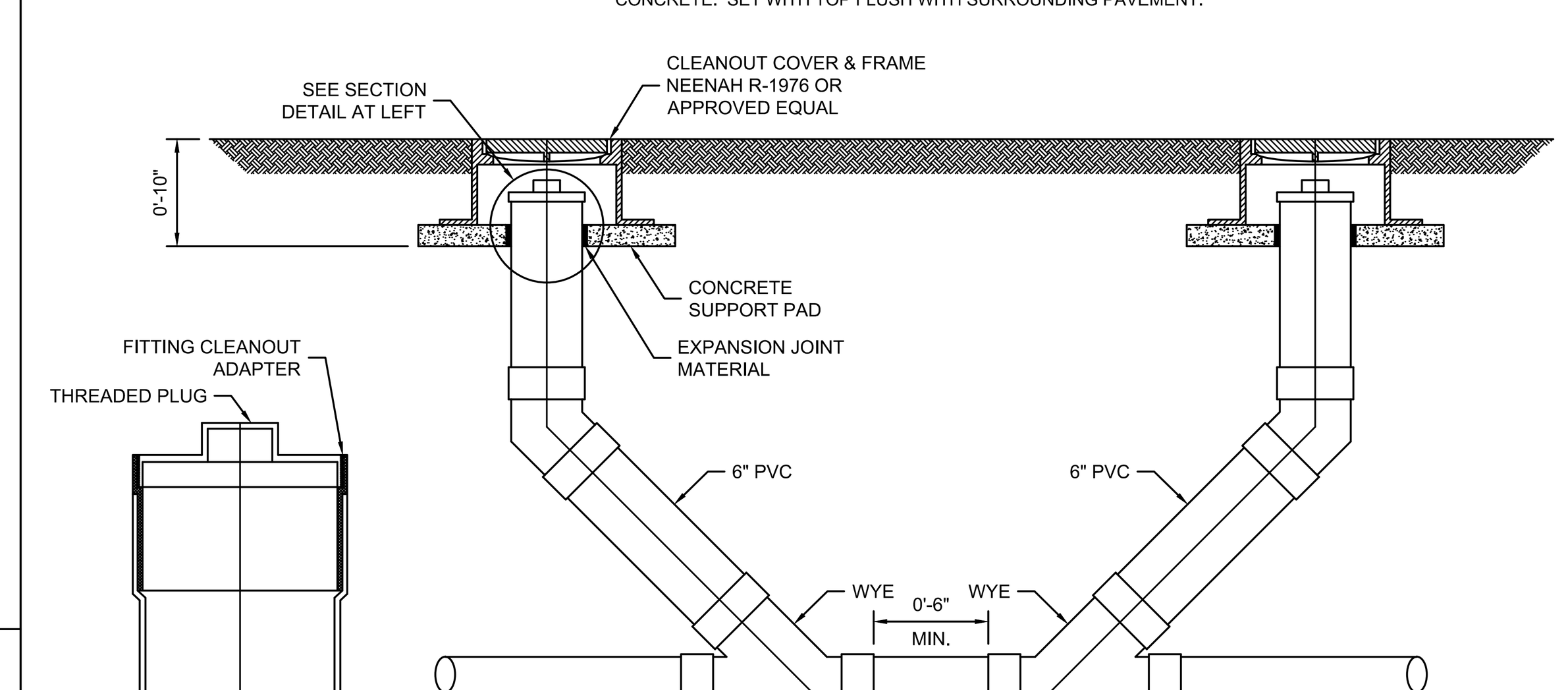


NOTES:
1. ½" PREMOLDED EXPANSION JOINT MATERIAL SHALL BE PLACED AT POINTS OF CURVATURE, CURB RETURNS, CURB INLETS, AND AT 250' CENTERS.

SIDEWALK DETAIL

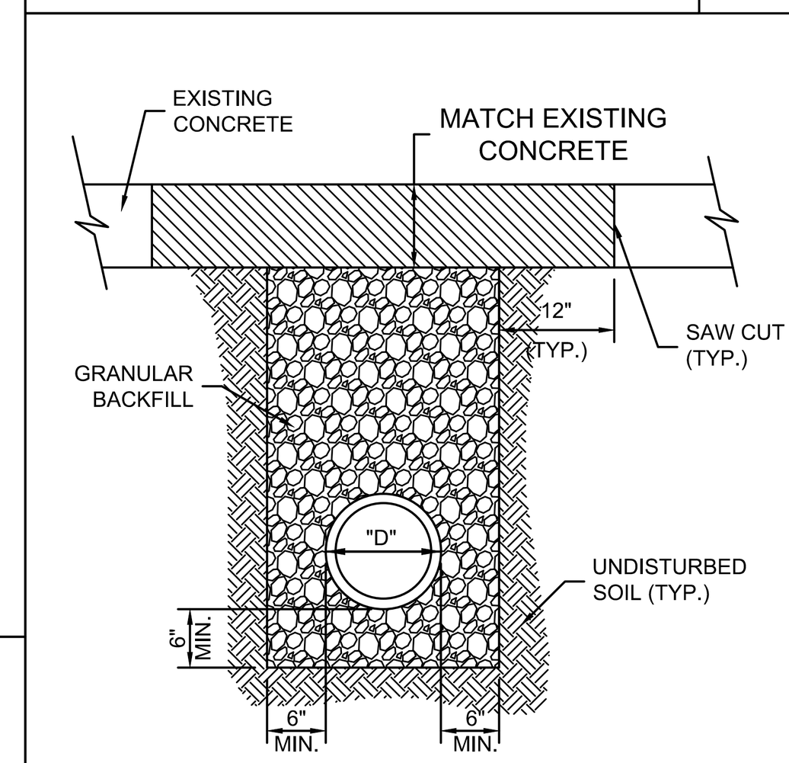
SCALE: NTS

NOTES:
1. SET CLEANOUT FRAMES AND COVERS IN PAVEMENT AREAS IN A CAST-IN-PLACE-CONCRETE BLOCK, 18 BY 18 BY 12 INCHES DEEP WITH 12 INCHES OF TREATED 95% COMPACTED SUBGRADE BELOW CONCRETE. SET WITH TOP FLUSH WITH SURROUNDING PAVEMENT.

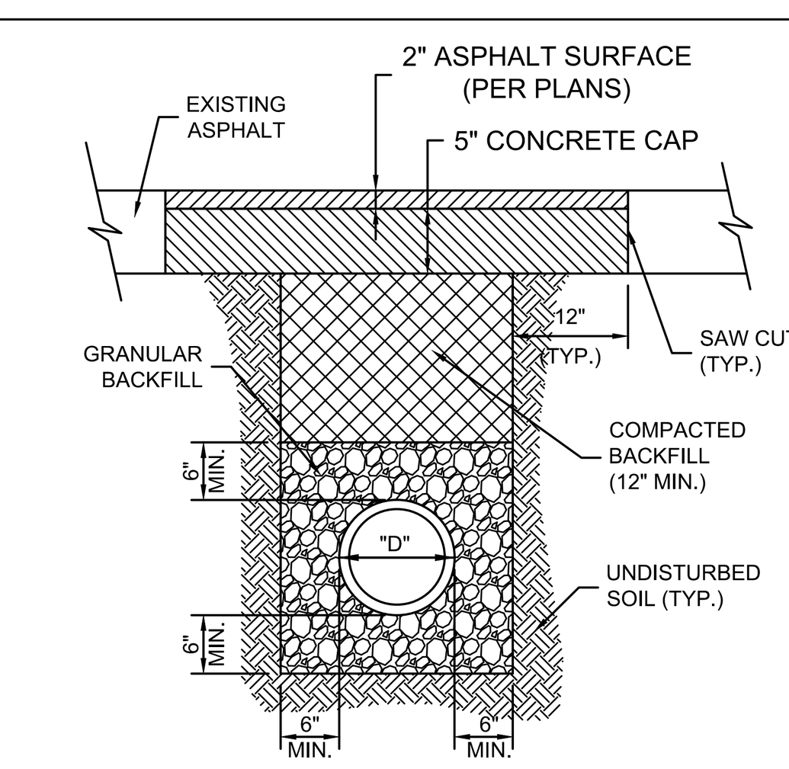


DUAL CLEANOUTS DETAIL

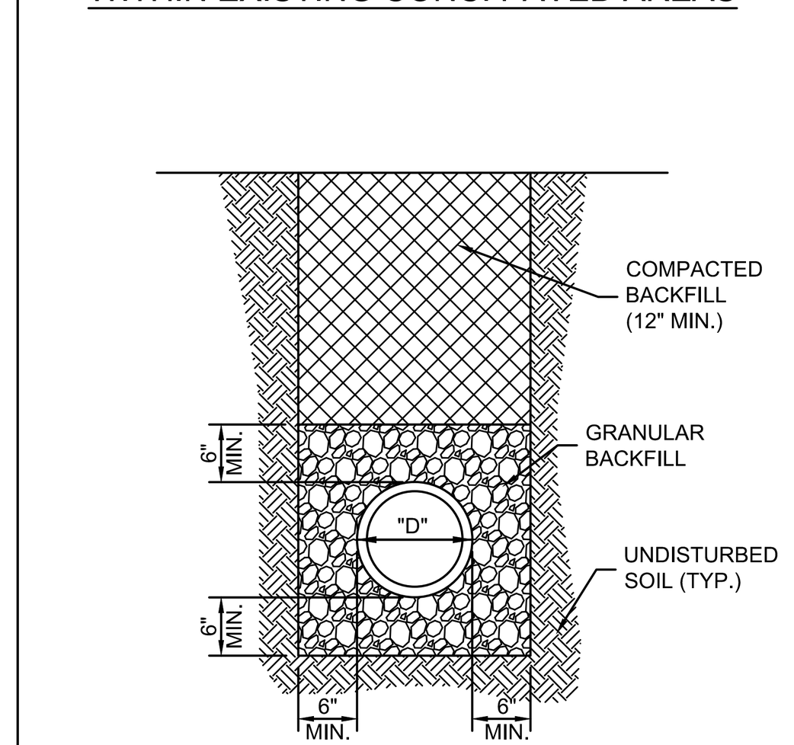
SCALE: NTS



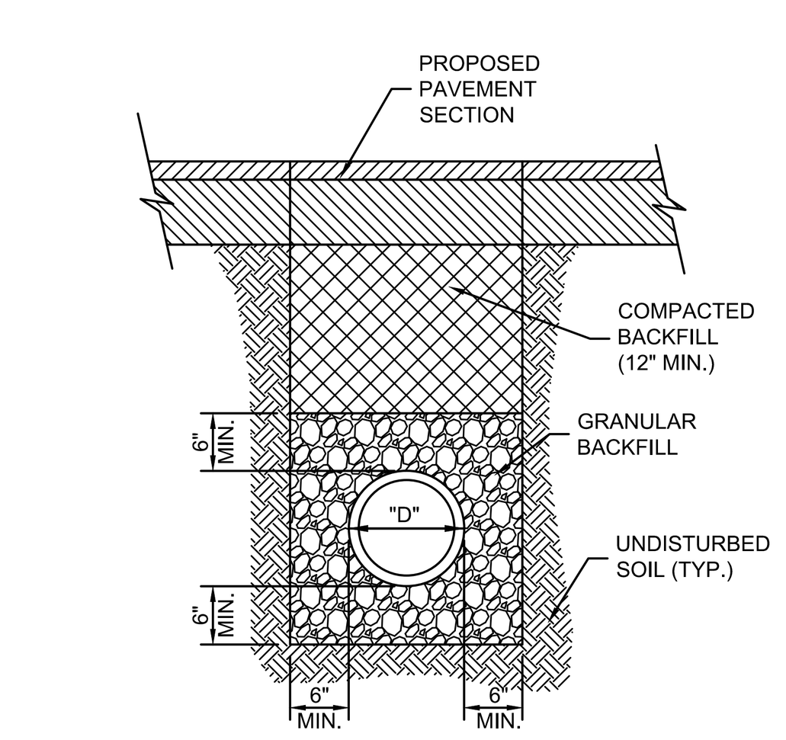
WITHIN EXISTING CONC. PAVED AREAS



WITHIN EXISTING ASPH. PAVED AREAS



OUTSIDE OF PAVED AREAS



WITHIN PROPOSED PAVED AREAS

NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION.
2. GRANULAR FILL SHALL BE 1/2" CLEAN ROCK, PLACED IN 6" LIFTS AND COMPACTED BY SLICING WITH A SHOVEL.
3. FILL SHALL BE FINELY DIVIDED, JOB EXCAVATED MATERIAL FREE OF DEBRIS, ORGANIC MATERIAL, AND STONES, AND COMPACTED.
4. BACKFILL TO BE COMPACTED TO 90% OF STANDARD DENSITY OUTSIDE OF PAVED AREAS.

TRENCHING DETAILS

SCALE: NTS

MKEC
11827 W. 112th Street, Suite 200
Overland Park, KS 66210
913 317 9390
Engineering No. 2001009364
Landscape No. 2006027139
Surveying No. 2006027138

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Architecture # 0000161
Structure # 2006031333

MKEC Engineering, Inc.
Civil Engineering / Landscape Architecture
State Certificate of Authority #:
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Landscaping: 2006027139
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Smith & Boucher Engineers
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913.345.2127 phone

CONSTRUCTION DOCUMENTS

LNHS Baseball & Softball Upgrades
Liberty Public Schools 53
1000 NE 104th Street
Liberty, MO 64068

REVISIONS:

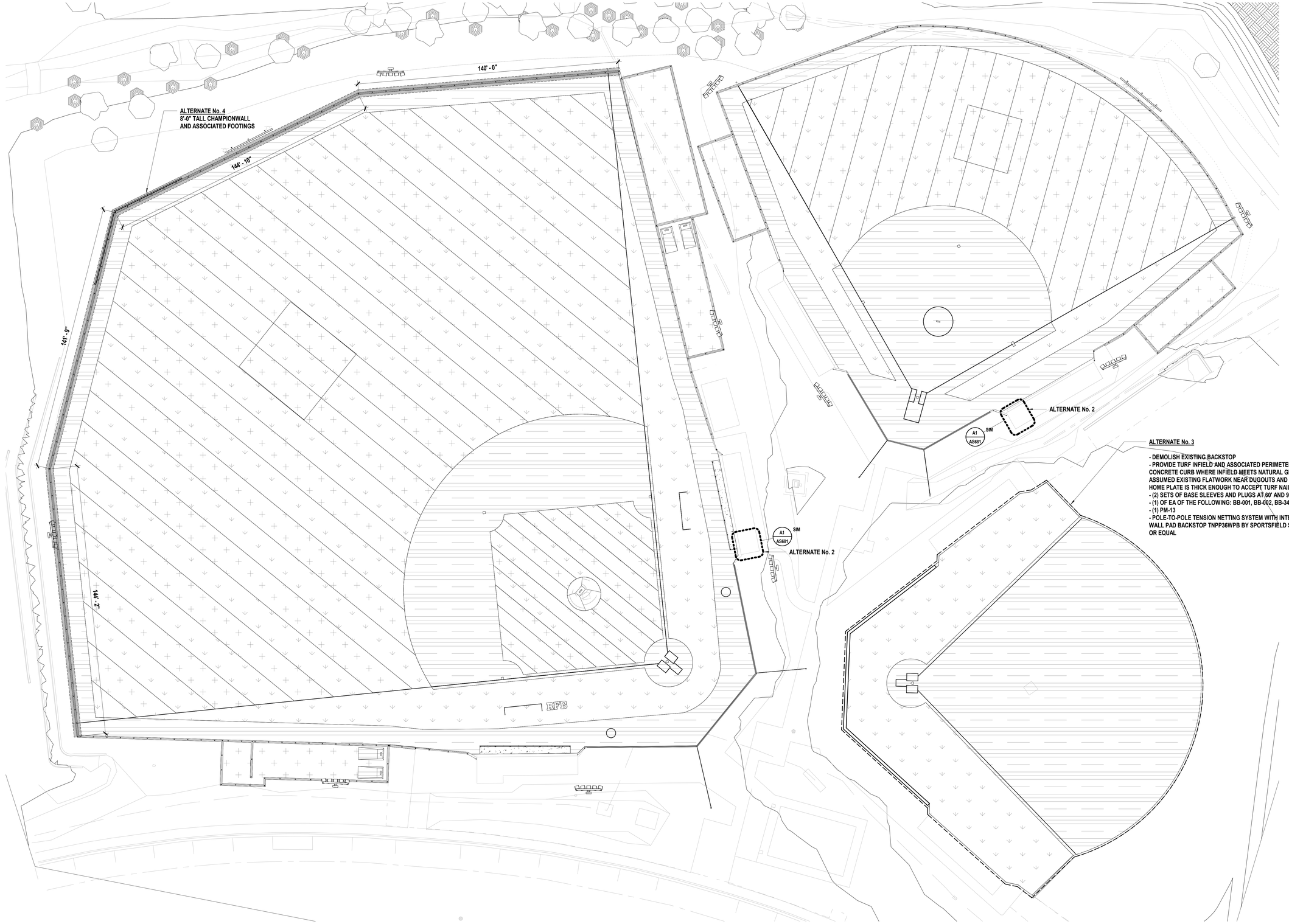
#	Description	Date

BRADEN L. TAYLOR
LIC# 2021001896

JOB NO: 23047
DRAWN BY:
CHECKED BY:
DATE: 07-12-23

C200

DETAILS



A1 | Scale 1" = 20'-0" | Overall Site

7/12/2023 8:24:18 AM

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CONSTRUCTION DOCUMENTS

LNHS Baseball & Softball Upgrades

Liberty Public Schools 53

1000 NE 104th Street
Liberty, MO 64068

REVISIONS:

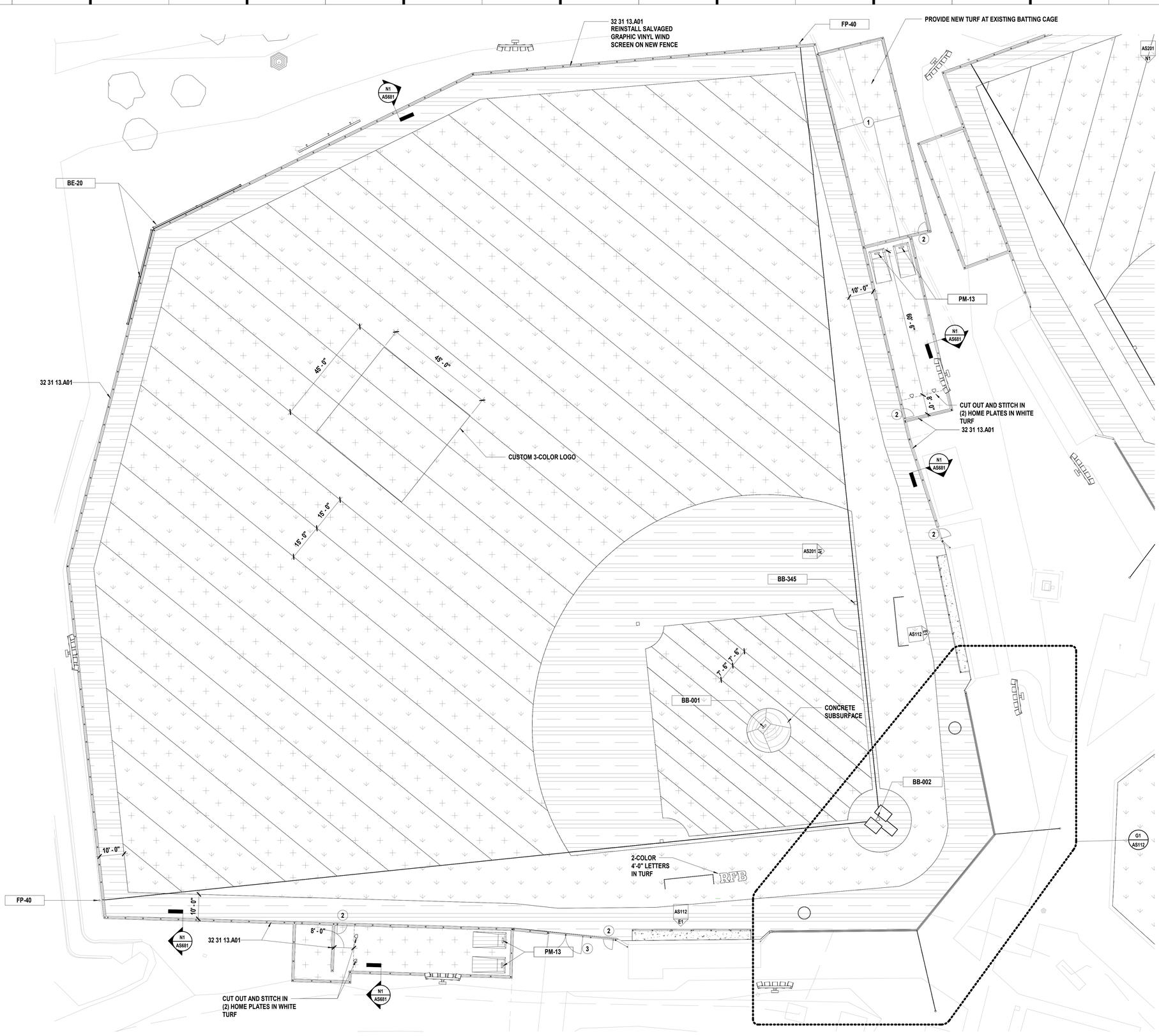
#	Description	Date

STATE OF MISSOURI
KEVIN E. NELSON
A-2019015618
ARCHITECT
JULY 12, 2023

JOB NO: 23047
DRAWN BY: GT
CHECKED BY: Checker
DATE: 07.12.23

AS101

ARCHITECTURAL SITE PLAN - OVERALL



A1 | Scale 1/16" = 1'-0" | Field Level - Baseball

SHEET KEYNOTE LEGEND

SITE - GENERAL NOTES

1. REFER TO SHEET AS681 FOR EQUIPMENT SCHEDULE.
2. ALL CHAINLINK FENCE TO BE 8'-0" IN HEIGHT UNLESS NOTED OTHERWISE.
3. EXISTING FENCING POLES TO REMAIN SHALL BE PREPPED WITH ACRYLIC METAL PRIMER FOR GALVANIZED SURFACES PRIOR TO PAINTING.
4. BASE PATHS, FOUL LINES, BATTERS BOXES, COACHES BOXES AND ALL OTHER FIELD STRIPING TO BE STITCHED IN WHITE TURF.
5. INSTALLER RESPONSIBLE FOR MEETING ALL FIELD OF PLAY GUIDELINES AS ADOPTED BY MSHSAA AND NFHS

SITE - KEYED NOTES

1. EXISTING PORTION OF FENCING TO REMAIN. AND ALL ASSOCIATED CONDUIT/SOUND SYSTEM COMPONENTS. PAINT FENCE POSTS BLACK. INSTALL BLACK PVC COATED CHAINLINK TO EXISTING POSTS. HEIGHTS VARY. VERIFY IN FIELD
2. 4'-0" PASS THROUGH GATE
3. PAIR OF 7'-0" ACCESS GATES

TURF COLOR LEGEND

FIELD GREEN

LIME GREEN

BROWN

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KEVIN E. NELSON
A-2019015618
ARCHITECT
JULY 12, 2023

JOB NO: 23047
DRAWN BY: GT
CHECKED BY: Checker
DATE: 07.12.23

AS111

ARCHITECTURAL SITE PLAN - BASEBALL

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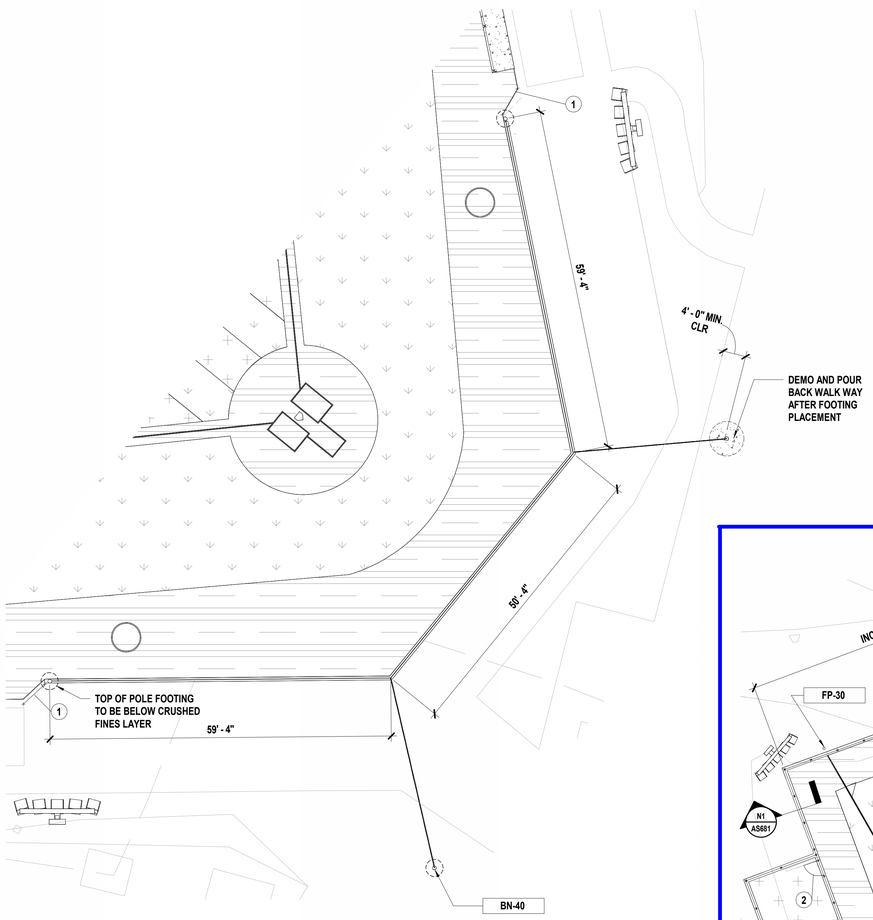
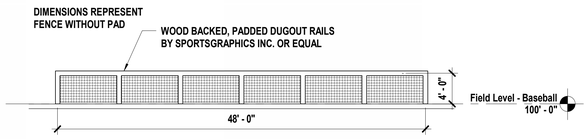
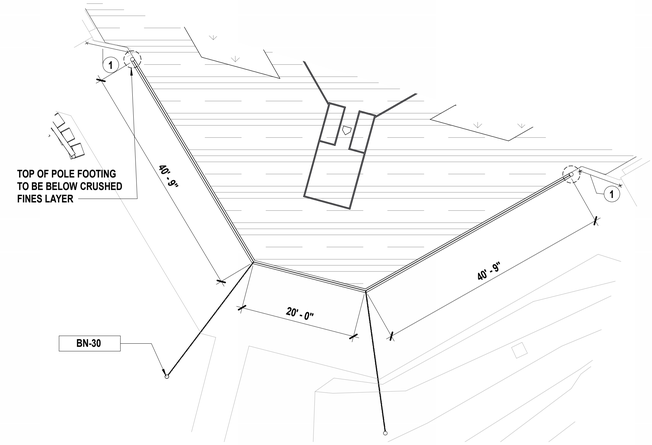


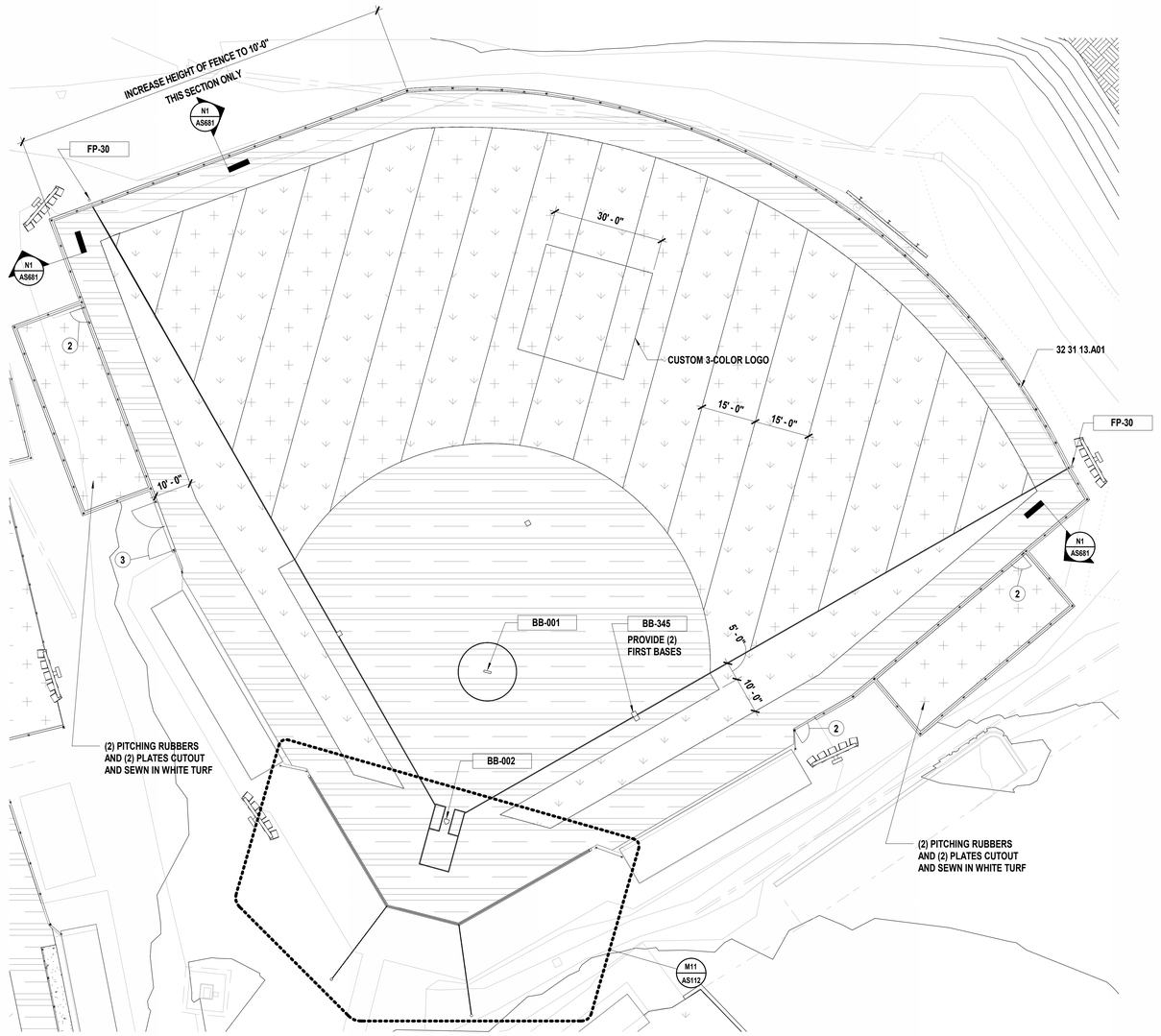
G1 Scale 3/32" = 1'-0" — Enlarged Plan - 40' Netted Backstop @ Baseball



E1 Scale 1/8" = 1'-0" — Elevation - Padded Fence at Dugout



M11 Scale 3/32" = 1'-0" — Enlarged Plan - 30' Netted Backstop @ Softball



A7 Scale 1/16" = 1'-0" — Field Level - Softball

SHEET KEYNOTE LEGEND

32 31 13.A01	CHAIN LINK FENCING

SITE - GENERAL NOTES

1. REFER TO SHEET AS681 FOR EQUIPMENT SCHEDULE.
2. ALL CHAINLINK FENCE TO BE 8'-0" IN HEIGHT UNLESS NOTED OTHERWISE.
3. EXISTING FENCING POLES TO REMAIN SHALL BE PREPPED WITH ACRYLIC METAL PRIMER FOR GALVANIZED SURFACES PRIOR TO PAINTING.
4. BASE PATHS, FOUL LINES, BATTERS BOXES, COACHES BOXES AND ALL OTHER FIELD STRIPING TO BE STITCHED IN WHITE TURF.
5. INSTALLER RESPONSIBLE FOR MEETING ALL FIELD OF PLAY GUIDELINES AS ADOPTED BY MSHSAA AND NFHS

SITE - KEYED NOTES

1. EXISTING PORTION OF FENCING TO REMAIN. AND ALL ASSOCIATED CONDUIT/SOUND SYSTEM COMPONENTS. PAINT FENCE POSTS BLACK. INSTALL BLACK PVC COATED CHAINLINK TO EXISTING POSTS. HEIGHTS VARY. VERIFY IN FIELD
2. 4'-0" PASS THROUGH GATE
3. PAIR OF 7'-0" ACCESS GATES

TURF COLOR LEGEND

FIELD GREEN

LIME GREEN

BROWN

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CONSTRUCTION DOCUMENTS

LNHS Baseball & Softball Upgrades
Liberty Public Schools 53
1000 NE 104th Street
Liberty, MO 64068

REVISIONS:

#	Description	Date

KEVIN E. NELSON
A-2019015618
ARCHITECT
STATE OF MISSOURI
JULY 12, 2023

JOB NO: 23047
DRAWN BY: GT
CHECKED BY: Checker
DATE: 07.12.23

AS112

ARCHITECTURAL SITE PLAN - SOFTBALL

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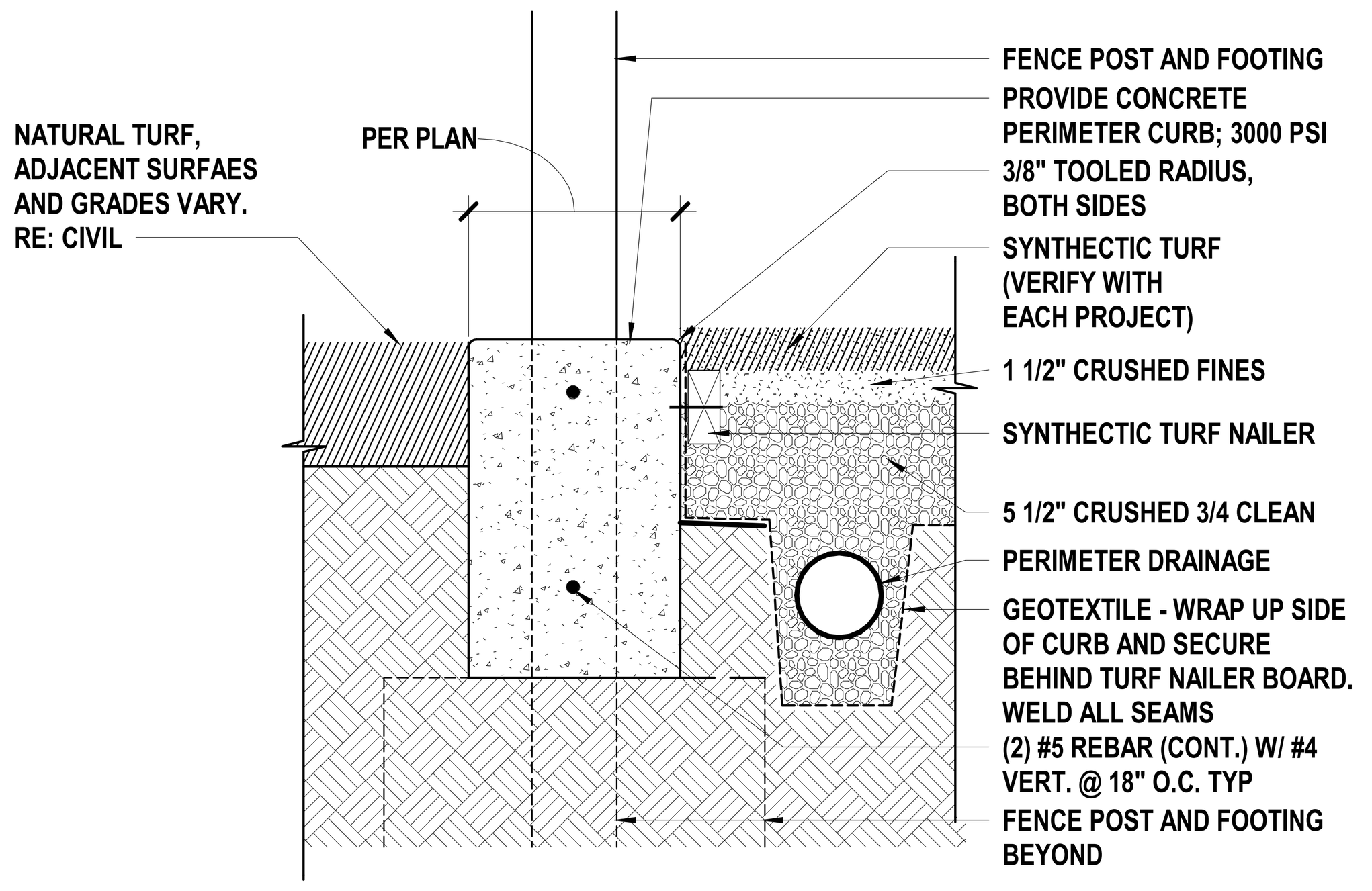
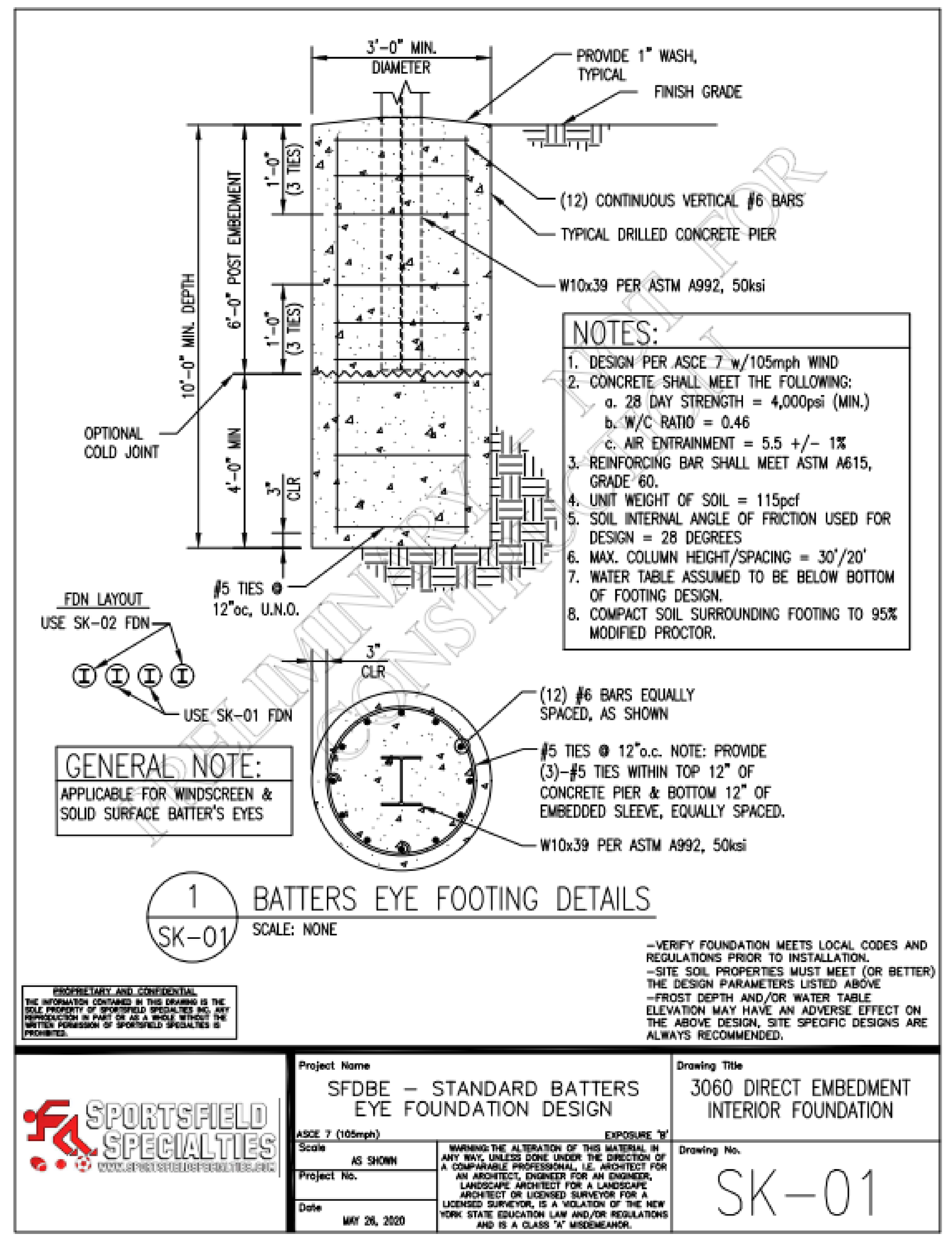


N1 | Scale 1 1/2" = 1'-0" | Typical Perimeter Turf Curb with Fence

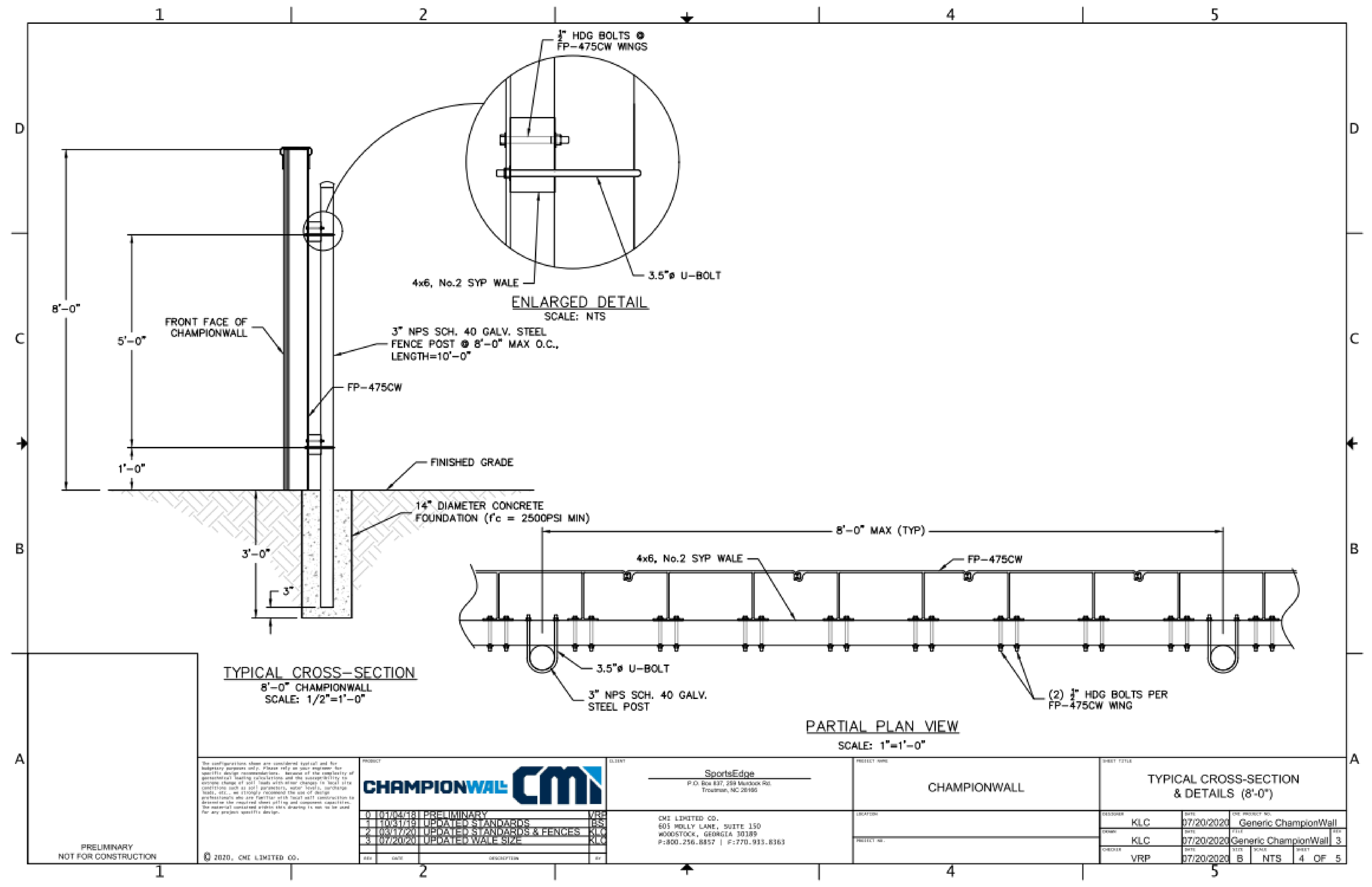
EQUIPMENT SCHEDULE

Specialty Equipment Schedule				
Mark	Keynote	Description	Manufacturer	Model
BB-001	11 66 73	Pitching Rubber	Sportsfield Specialties	TBPR
BB-002	11 66 73	Home Plate	Sportsfield Specialties	TBHP
BB-345	11 66 73	1st, 2nd, 3rd base set	Sportsfield Specialties	TBS
BE-20	11 66 73	Batter's Eye - 20'H x 40'L solid vinyl enclosure, direct embedment	Sportsfield Specialties	BE2040
BN-30	11 66 73	Custom tie-back tension softball backstop netting system with integrated wall pad and #36 nylon netting - 30'H x 120'L	Sportsfield Specialties	TNTB36WPB
BN-40	11 66 73	Custom tie-back tension baseball backtop netting system with integrated wall pad back and #36 nylon net - 40'H x 180'L	Sportsfield Specialties	TNTB36WPB
FP-30	11 66 73	Foul Pole with mesh wing, ground sleeve inserted - 30'H	Sportsfield Specialties	FPW630
FP-40	11 66 73	Foul Pole with mesh wing, ground sleeve inserted - 40'H	Sportsfield Specialties	FPW640
PM-13	11 66 73	Synthetic Portable Pitcher's bull Pen Mound	Sportsfield Specialties	PPBPBIT

NOTE: QUANTITIES REFLECTED IN SCHEDULE ARE BASE-BID ONLY. ALTERNATES ARE NOT INCLUDED.

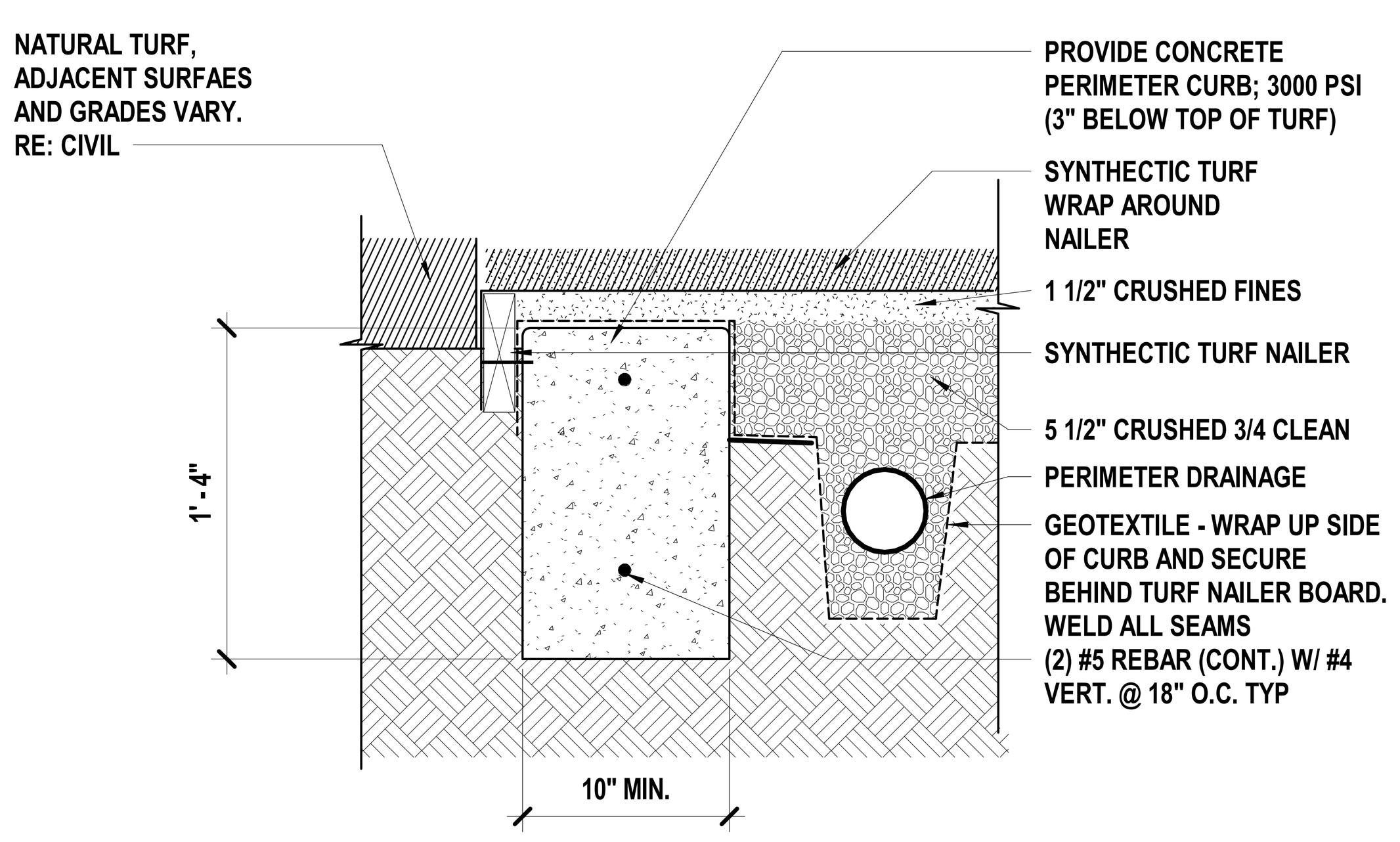


K7 | Scale 12" = 1'-0" | Batter's Eye Footing (BE-20)

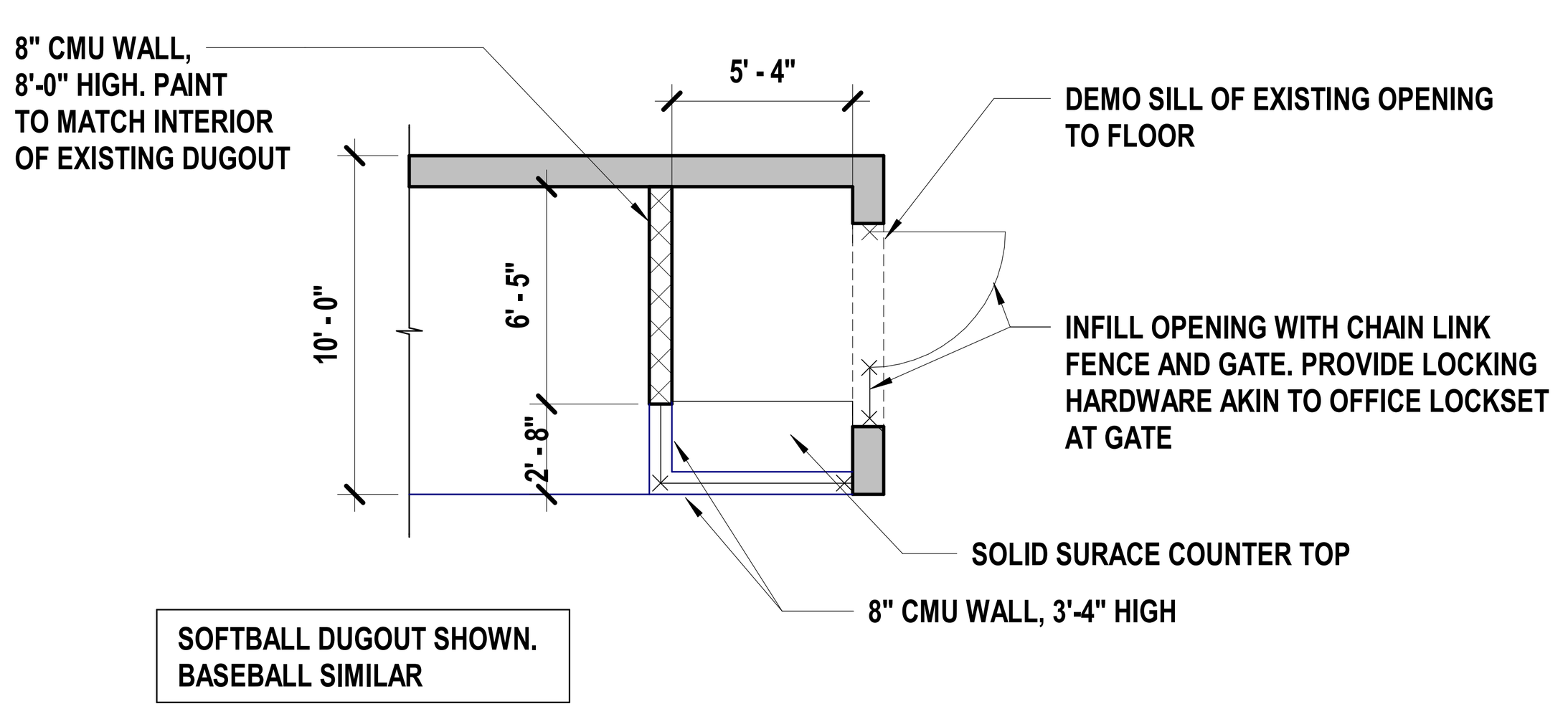


NOTE: MANUFACTURER'S STANDARD DETAIL INCLUDED FOR BIDDING PURPOSES ONLY. IF ALTERNATE IS TAKEN, ENGINEER OF RECORD TO RELEASE REVISED FOOTING DESIGN SPECIFIC TO GEOTECHNICAL REPORT'S FINDINGS

K12 | Scale 12" = 1'-0" | Typical Championwall Footing Detail - Alternate No. 4

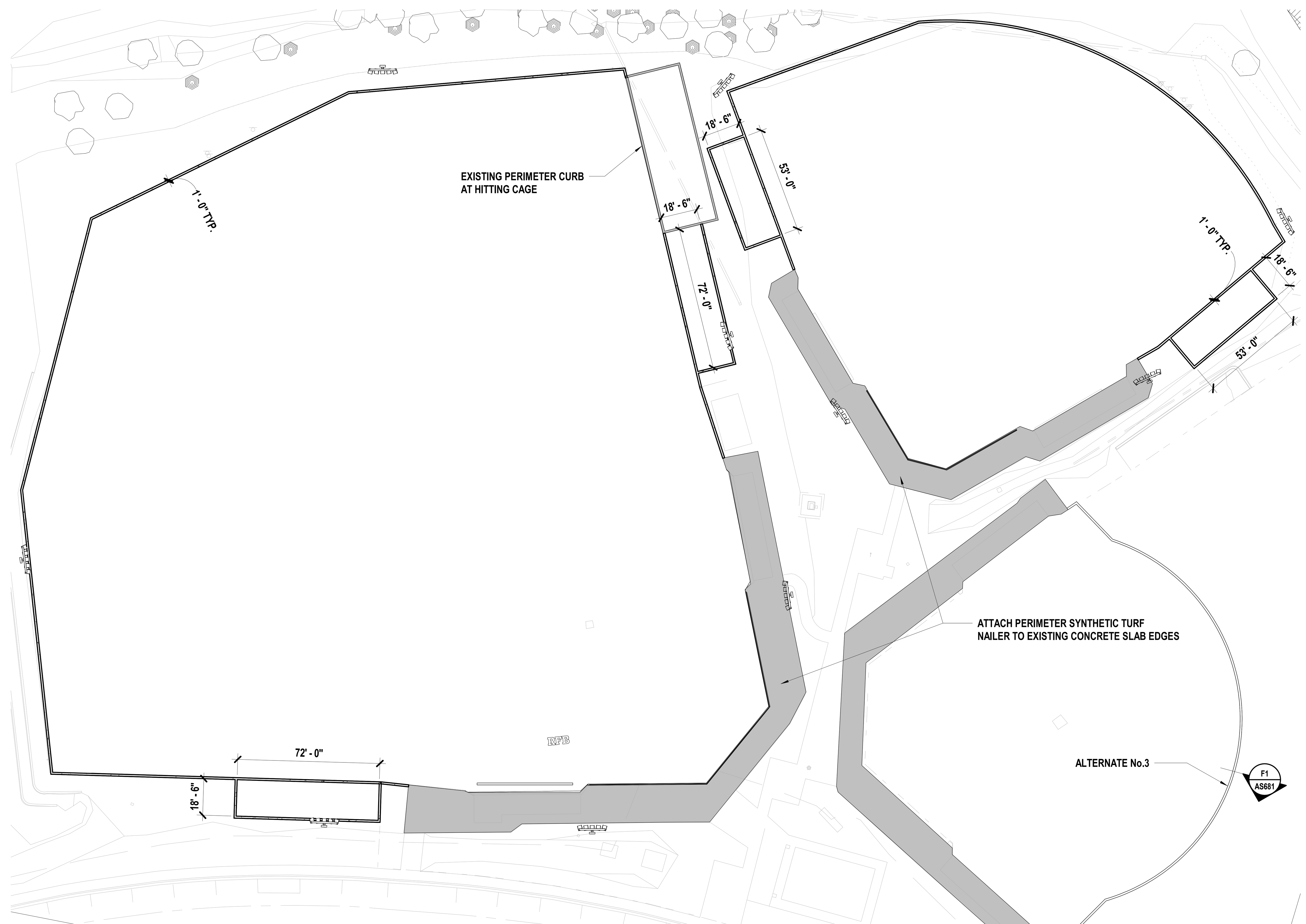


F1 | Scale 1 1/2" = 1'-0" | Typical Perimeter Turf Curb to Natural Grass Transition (Alternate No. 3)



SOFTBALL DUGOUT SHOWN. BASEBALL SIMILAR

A1 | Scale 3/16" = 1'-0" | Dugout Scorer's Box Retrofit



A6 | Scale 1/32" = 1'-0" | Perimeter Concrete Turf Curb

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CONSTRUCTION DOCUMENTS

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Liberty Public Schools 53
1000 NE 104th Street
Liberty, MO 64068

REVISIONS:

#	Description	Date

STATE OF MISSOURI
KEVIN E. NELSON
A-2019015618
ARCHITECT
JULY 12, 2023

JOB NO: 23047
DRAWN BY: Author
CHECKED BY: Checker
DATE: 07.12.23

AS681

SCHEDULES & CONCRETE DETAILS

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Please consider the environment before printing this.

A. **Building Code**

1. The design and construction shall conform to the 2018 International Building Code (IBC) as amended by the City of Liberty, Missouri.

B. **Design Loads**

1. This project is designed to resist the most critical loads resulting from the basic load combinations outlined in section 1605 of the code.

2. Snow - The snow load is in accordance with ASCE 7 with the following criteria:
   a. Ground snow load p_g = 20 psf,
   b. Exposure Factor C_e = 1.00
   c. Importance Factor I_s = 1.00
   d. Thermal Factor C_t = 1.10
   e. Roof Slope Factor C_s = 1.0
   f. Flat Roof Snow Load p_f = 15.4 psf
   g. Minimum Snow Load p_m = 22 psf

3. Wind - The wind load is in accordance with ASCE 7 with the following criteria:
   a. Basic wind speed V = 110 mph
   b. Allowable Stress Design Wind Speed V_{asd} = 86 mph
   c. Risk Category II
   d. Exposure Catergory C
   e. Internal Pressure Coefficient ± 0.00
   f. Components & Cladding Force per code

4. Seismic - The seismic design is in accordance with the general building code with the following criteria:
   a. Importance Factor I_E = 1.00
   b. Risk Category II
   c. 0.2 sec Spectral Response Acceleration S_S = 9.4%
   d. 1.0 sec Spectral Response Acceleration S_1 = 6.9%
   e. Soil Site Class D
   f. Design 0.2sec Spectral Response Acceleration S_{DS} = 10.0%
   g. Design 1.0sec Spectral Response Acceleration S_{D1} = 11.0%
   h. Seismic Design Category B

5. Rain - The rain load is in accordance with the general building code and ASCE 7 with the following criteria:
   a. Rainfall Intensity (15 minute) 7.62 in./hr
   b. Rainfall Intensity (60 minute) 3.68 in./hr

C. **Foundations**

1. Geotechnical Report
   a. A Geotechnical Engineering Report was not provided for this project.

2. Spread Footings, Trench Footing and Grade Beams
   a. All shallow foundations have been designed to bear on undisturbed soil or engineered fill for a net allowable bearing pressure of 1500 psf based on presumptive values per IBC table 1806.2.

D. **Concrete**

1. All concrete and reinforcing details shall conform to ACI 318 and CRSI "Manual of Standard Practice".

2. Strength - The following areas shall have a minimum 28 day compressive strength:
   a. Footing and grade beams: 4000 psi

3. No water may be added to the concrete mix on the job site unless specifically withheld at the batch plant. The workability should be attained through the use of water-reducing agents and/or super-plasticizing chemical admixtures.

4. Reinforcing
   a. Grade
      1. Typical reinforcing ASTM A615, Grade 60
      2. Welded reinforcing ASTM A706
   b. Lap splices and development lengths in reinforcement shall be 48 bar diameters unless indicated elsewhere in the drawings and specifications. Lap welded wire reinforcing one full mesh space plus 2 inches.
   c. Welded Wire Reinforcing ASTM A1064
      1. All welded wire reinforcing for slab on grade shall be supported on metal chairs specifically designed for soil bearing conditions. Pulling reinforcing up during concrete placement is not allowed.
      2. All welded wire for metal deck supported slab shall be supported by metal chairs with a maximum spacing of 4'-0" OC. Pulling reinforcing up during concrete placement is not allowed.
   d. All concrete shall be reinforced unless specifically identified on the drawings as unreinforced. Reinforce sections with similar conditions located elsewhere on the project.

5. Concrete cover shall be the following:
   a. Concrete cast against and exposed to earth 3"
   b. Concrete exposed to earth or weather #5 and smaller 1 ½"
   c. Concrete exposed to earth or weather #6 and larger 2"

6. All openings in foundations shall have an additional (2) #5's on each side, in each corner of the opening and each face of the member. Extend reinforcing 2'-6" beyond edge of opening.

7. The Contractor shall provide an additional (5) bars of each size specified on the structural drawings of reinforcing to be used at the direction of the Structural engineer. The Contractor shall include all costs associated with material, field fabrication, and placing.

8. Aluminum items shall not be embedded in concrete.

E. **Post Installed Anchors**

1. All post installed anchors shall be designed assuming cracked concrete at the anchorage.
2. All post installed anchors shall be installed per the manufacturers recommendations.
   a. Install expansion anchors per the manufacturers recommended standard embedment unless otherwise noted in the contract documents.
   b. The embedment of all post installed anchors shall be defined as the distance from the surface of the loaded material and the deepest part of the anchor after the anchor is placed but not expanded.

3. All expansion anchors shall perform to a minimum load capacity of the Hilti Kwik Bolt 3 or approved equal.

4. All adhesive anchors embedded in concrete shall perform to a minimum load capacity of the Hilti Hit HY-200-R V3 Adhesive Anchors.

5. All anchors shall be stainless steel at exterior exposed conditions.

F. **Miscellaneous**

1. Periodic site observation by field representatives of Hollis and Miller Architects, if provided, is solely for the purpose of determining if the work of the contractor is proceeding in general accordance with the structural contract documents. This limited site observation should not be construed as exhaustive or continuous to check the quality or quantity of the work, but rather periodic in an effort to guard the owner against defects or deficiencies in the work of the contractor. Observations by the engineer shall not be considered inspections, and in no way relieves the contractor of any requirements of the contract documents.

2. The structure is designed to function as a unit upon completion and is not structurally stable until all foundations are complete and have achieved their design strength. Contractor is solely responsible for maintaining structural stability during erection and construction and is responsible for furnishing all temporary bracing and/or support that may be required as the result of the contractor's construction methods and sequences. Temporary bracing plans shall include installation and removal sequencing as applicable. Temporary bracing systems are not to be removed until structural work is complete.

3. The contractor shall not alter or modify work shown on the structural drawings without receiving written approval from the engineer. When conflicts occur between the drawings and specifications, the strictest interpretation shall govern.

4. The contract structural drawings and specifications represent the finished structure, and except where specifically shown, do not indicate the method or means of construction. The contractor shall supervise and direct the work and shall be solely responsible for all construction means, methods, procedures, techniques, sequence, and safety precautions and programs. The engineer will not be responsible for the acts or omission of the contractor, subcontractor, or any other persons performing any of the work, or for the failure of any of them to carry out the work in accordance with the contract documents.

5. See architectural, mechanical, electrical, and civil drawings for other pertinent information related to the structural work and coordinate as required. These structural drawings are intended to be utilized as a complete set of documents that represent the building's structural systems. No single sheet or series of sheets is intended to "stand alone". Typical details may or may not be cut at specific locations throughout the drawings, but are to be applied where required. These structural drawings are intended to be included in a complete set of construction documents, including but not limited to, architectural drawings, civil drawings, and mechanical/electrical/plumbing drawings. Contractor shall verify coordination of these drawings with contents of above sets specified and only proceed with bidding and construction after such has taken place.

6. All existing field and building conditions shall be verified by the Contractor before any other work shall begin. Coordinate with Engineer of Record regarding any discrepancy with existing building dimensions.

7. Submittals
   a. Submittals are to be based upon the latest submitted contract documents. This includes all addendums, Architectural Supplemental Instructions (ASIs), Structural Supplemental Drawings (SSD's), and Requests for Information (RFI's).
   b. Submittals shall be original documents. Shop drawings shall not be a duplication, in any way,of the contract documents. This includes, but is not limited to, photocopies, electronic drawing copying or electronic scanning. Any submitted shop drawing that is not original will be rejected and returned without review.
   c. Prior to submission of the submittals to the Architect, the Contractor shall review the shop drawings for conformance to the means, methods, techniques, sequences, and operations of construction. The submittal shall be coordinated with all other trades and shall include responses to all Contractor directed questions. After all aspects of the Contractor's review are complete, the Contractor's review stamp shall be affixed to the shop drawings and those shop drawings forwarded to the Architect or Structural Engineer for review. Shop drawings not bearing the Contractor's review stamp will be returned without review.
   d. Submittals - Provide the following submittals for review:
      1. Concrete Mix Design and Materials
      2. Concrete Reinforcing
   e. Substitutions are allowed prior to bid only. Reference the specifications for timing of submission

G. **Special Inspections (based on 2018 IBC, Chapter 17)**

1. Special inspection reports shall be submitted to the Building Official, Owner, Architect, Engineer, Contractor, Sub-Contractor and any other pertinent entity in a timely manner.

2. All discrepancies found by the special inspector shall immediately be brought to the attention of the general contractor and corrected. If the contractor is unable to correct the discrepancy, the special inspector shall notify the Architect and Engineer.

3. Upon completion of the project, the special inspector shall submit a final report delineating that the work was, to the best of the inspector's knowledge, completed in conformance with the approved contract documents and applicable building code.

4. The Owner shall retain special inspection services for the items listed below. The Contractor shall provide light general labor as required to assist with special inspections.

5. Foundations
   a. See Schedule of Special Inspections Table this sheet.

6. Concrete
   a. See Schedule of Special Inspections Table this sheet.

7. Post installed Anchors

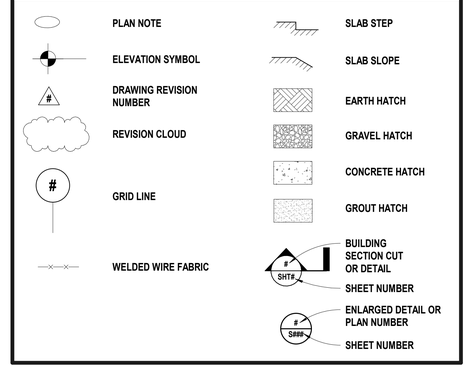
Special Inspection of Soils - Table 1705.6

Req'd	Inspection Task	Continuous	Periodic
Yes	1. Verify materials below shallow foundations are adequate to achieve the required bearing capacity.		X
Yes	2. Verify excavations are extended to proper depth and have reached proper material.		X
Yes	3. Perform classification and testing of compacted fill materials.		X
Yes	4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill.	X	
Yes	5. Prior to placement of controlled fill, observe subgrade and verify that site has been prepared properly.		X

Special Inspection of Concrete Construction - Table 1705.3

Req'd	Inspection Task	Continuous	Periodic
Yes	1. Inspect reinforcing steel, including prestressing tendons, and...		X
Yes	2. Inspection of reinforcing steel welding in accordance with Steel Construction section above.		X
Yes	3. Inspection of anchors cast in concrete.		X
Yes	4. Inspection of anchors post-installed in hardened concrete members.	X	
Yes	5. Verify use of approved design mix.		X
Yes	6. Prior to placement fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	X	
Yes	7. Inspect concrete and shotcrete placement for proper application techniques.	X	
Yes	8. Inspect for maintenance of specified curing temperature and techniques.		X
No	9. Inspection of prestressed concrete:		
No	9.a. Application of prestressing forces	X	
No	9.b. Grouting of bonded prestressing tendons in the...	X	
No	10. Erection of precast structural members		X
No	11. Verification of in-situ concrete strength, prior to...		X
Yes	12. Inspection formwork for shape, location and...		X

SYMBOLS LEGEND



Symbols

&	And
@	At

A

A	Axial Load
ADDL	Additional
AFF	Above Finished Floor
AHU	Air Handling Unit
ALT	Alternate
ALUM	Aluminum
APPROX	Approximate
AR	Anchor Rod
ARCH	Architect/Architectural Drawings
ATS	Anchor Tie-Down System

B

BAL	Balance
BL	Brick Ledge
BLDG	Building
BLKG	Blocking
BM	Beam
BO	Bottom of
BOD	Bottom of Deck
BOS	Bottom of Steel
BOT	Bottom
BRG	Bearing
BS	Both Sides
BTWN	Between

C

C	Compression
CANT	Cantilever
CFSF	Cold-Formed Steel Framing
CIP	Cast-in-Place
CJ	Control Joint
CJP	Complete Joint Penetration
CL	Center Line
CLR	Clear
CMU	Concrete Masonry Unit
COL	Column
CONC	Concrete
CONN	Connection
CONST	Construction
CONT	Continuous/Continue
COORD	Coordinate
CSJ	Construction Joint
CTRD	Centered

D

D	Dead Load
d	Penny
DBA	Deformed Bar Anchor
DIA or Ø	Diameter
DIM	Dimension
DN	Down
DT	Precast Double Tee
DTL	Detail
DWG	Drawing
DWL	Dowel

E

E	Seismic Load
EA	Each
EF	Each Face
EJ	Expansion Joint
EL	Elevation
ELEV	Elevator
EMBED	Embedment/Embedded
ENGR	Engineer
EOD	Edge of Deck
EOR	Engineer of Record
EOS	Edge of Slab
EQ	Equal
EQUIP	Equipment
EQUIV	Equivalent
ES	Each Side
EW	Each Way
EXIST or (E)	Existing
EXT	Exterior

F

FAB	Fabricate
f'c	28-day Concrete Strength
FD	Floor Drain
FFE	Finished Floor Elevations
FIN	Finish/Finished
FLR	Floor
f'm	28-day Masonry Strength
FND	Foundation
FO	Face of
FRAM	Framing
FS	Far Side
FT	Foot/Feet
FUT OR (F)	Future
FV	Field Verify
Fy	Yield Strength

G

GA	Gauge/Gage
GALV	Galvanize/Galvanized
GEN	General
GR	Grade
H	Horizontal Shear

H

HSA	Headed Stud Anchor
HD	Headed/Hold Down
HGR	Hanger
HK	Hook
HORIZ	Horizontal
HT	Height

I

ID	Inside Diameter
IF	Inside Face
IN	Inch
INT	Interior

J

JST	Joist
JT	Joint

K

K	Kip (1000 lbs)
KSF	Kips per Square Foot
KSI	Kips per Square Inch

L

L	Live Load
LBS	Pounds
LG	Length
LLBB	Long Leg Back to Back
LLH	Long Leg Horizontal
LLV	Long Leg Vertical
LOC	Location
LONG	Longitudinal
LR	Roof Live Load
LSH	Long Side Horizontal
LSV	Long Side Vertical
LWC	Light-Weight Concrete
LWT	Light-Weight

M

MAS	Masonry
MAX	Maximum
MCJ	Masonry Control Joint
MECH	Mechanical
MEP	Mechanical/Electrical/Plumbing
MEZZ	Mezzanine
MFR	Manufacturer
MIN	Minimum
MIR	Mirror
MISC	Miscellaneous
MO	Masonry Opening
MTL	Metal
MX	Strong Axis Moment
MY	Weak Axis Moment

N

NIC	Not in Contract
NM	Non-Metallic
NO or #	Number
NS	Near Side/Non-Shrink
NTS	Not to Scale
NWC	Normal-Weight Concrete
NWT	Normal-Weight

O

OC	On Center
OD	Outside Diameter
OF	Outside Face
OH	Opposite Hand
OPNG	Opening
OPP	Opposite

P

PAF	Powder Actuated Fastener
PAR	Parallel
PC	Precast Concrete
PCF	Pounds per Cubic Foot
PERP	Perpendicular
PL	Plate
PLF	Pounds per Linear Foot
PREFAB	Prefabricated
PRELIM	Preliminary
PSF	Pounds per Square Foot
PSI	Pounds per Square Inch
PT	Point or Post-Tensioned

Q

QTY	Quantity

R

R	Radius
REF	Reference/Refer to
REINF	Reinforcing/Reinforced/Reinforcement
REQD	Required
REQT	Requirement
RET	Return
REV	Revision
RO	Rough Opening
RTU	Roof Top Unit

S

S	Snow Load
SCHED	Schedule/Scheduled
SC	Slip Critical
SDS	Self-Drilling Screw
SECT	Section
SF	Square Foot
SHT	Sheet
SIM	Similar
SLBB	Short Leg Back to Back
SOG	Slab-on-Grade
SP	Spacing
SPEC	Specification
SQ	Square
SS	Stainless Steel
STD	Standard
STIF	Stiffener
STL	Steel
STR	Structure/Structural
SW	Shear Wall
SYM	Symmetrical

T

T	Tension
T&B	Top and Bottom
THK	Thickness
THRD	Threaded Rod
TO	Top of
TOC	Top of Concrete
TOF	Top of Foundation
TOM	Top of Masonry
TOS	Top of Steel/Top of Slab
TOW	Top of Wall
TRANS	Transverse
TYP	Typical

U

UNO	Unless Noted Otherwise

V

V	Vertical Shear
VAR	Varies
VERT	Vertical

W

W	Wind Load
W/	With
W/O	Without
WF	Wide Flange
WP	Work Point/Waterproofing
WS	Waterstop
WT	Weight
WWR	Welded Wire Reinforcing

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CONSTRUCTION DOCUMENTS

LNHS Baseball & Softball Upgrades
Liberty Public Schools 53
1000 NE 104th Street
Liberty, MO 64068

REVISIONS:

#	Description	Date

STATE OF MISSOURI
DAVID A. KRELL
NUMBER PE-2021014172
PROFESSIONAL ENGINEER

07/12/2023
David A. Krell
PE-2021014172

JOB NO: 23047.00
DRAWN BY: JCH
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S001

GENERAL NOTES, LEGENDS, & SPECIAL INSPECTIONS

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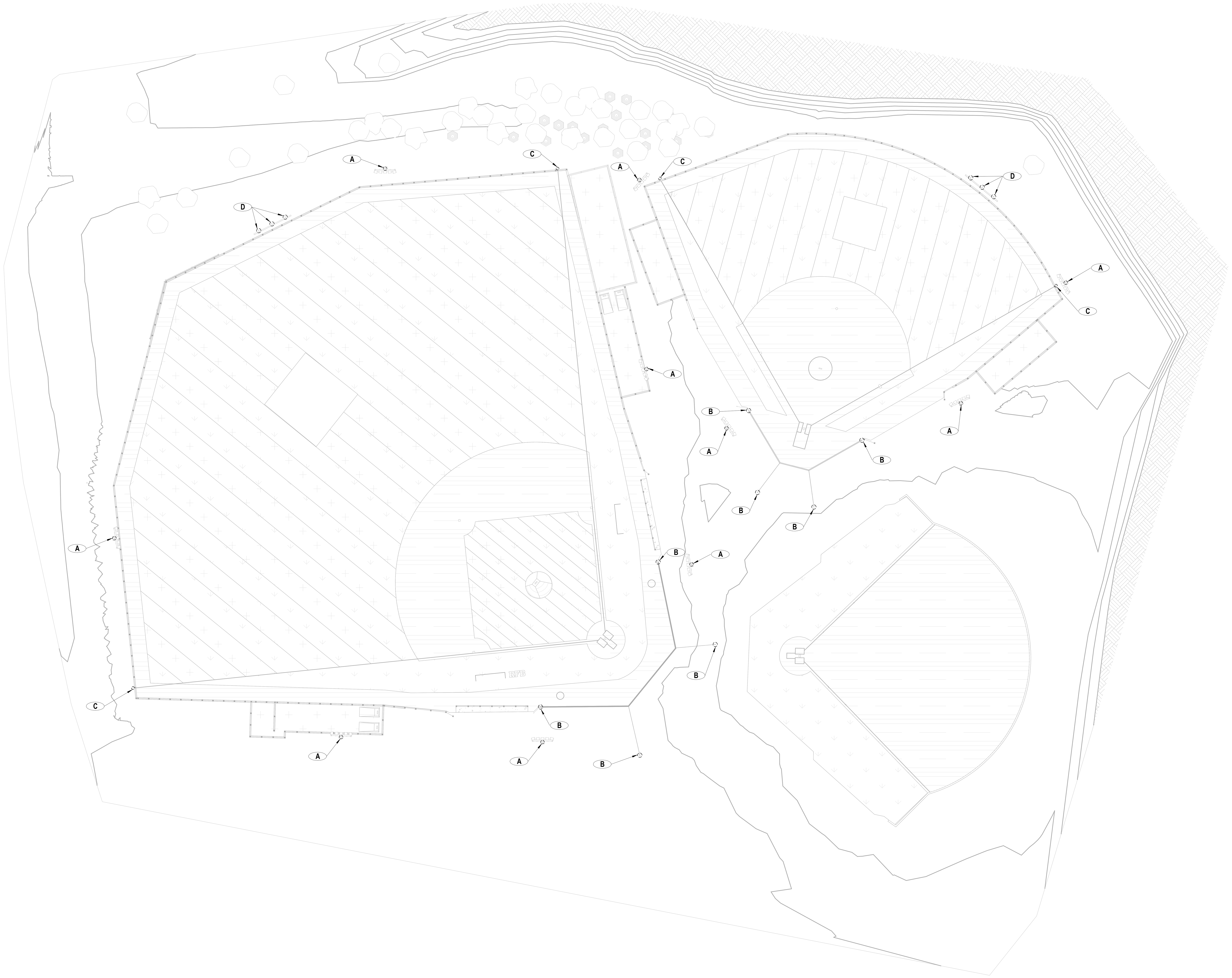

A1 | Scale 1" = 30'-0" | Foundation Plan - Overall

NORTH

PLAN REFERENCE NOTES

- (A) 70' MUSCO LIGHT POLE FOOTING PER LIGHT POLE MFR. REF: A1/S530.
- (B) TENSION BACKSTOP NETTING FOOTING PER A5/S530.
- (C) FOUL POLE FOOTING PER A9/S530.
- (D) BATTER'S EYE FOOTING PER E9/S530.

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FOUNDATION PLAN - OVERALL

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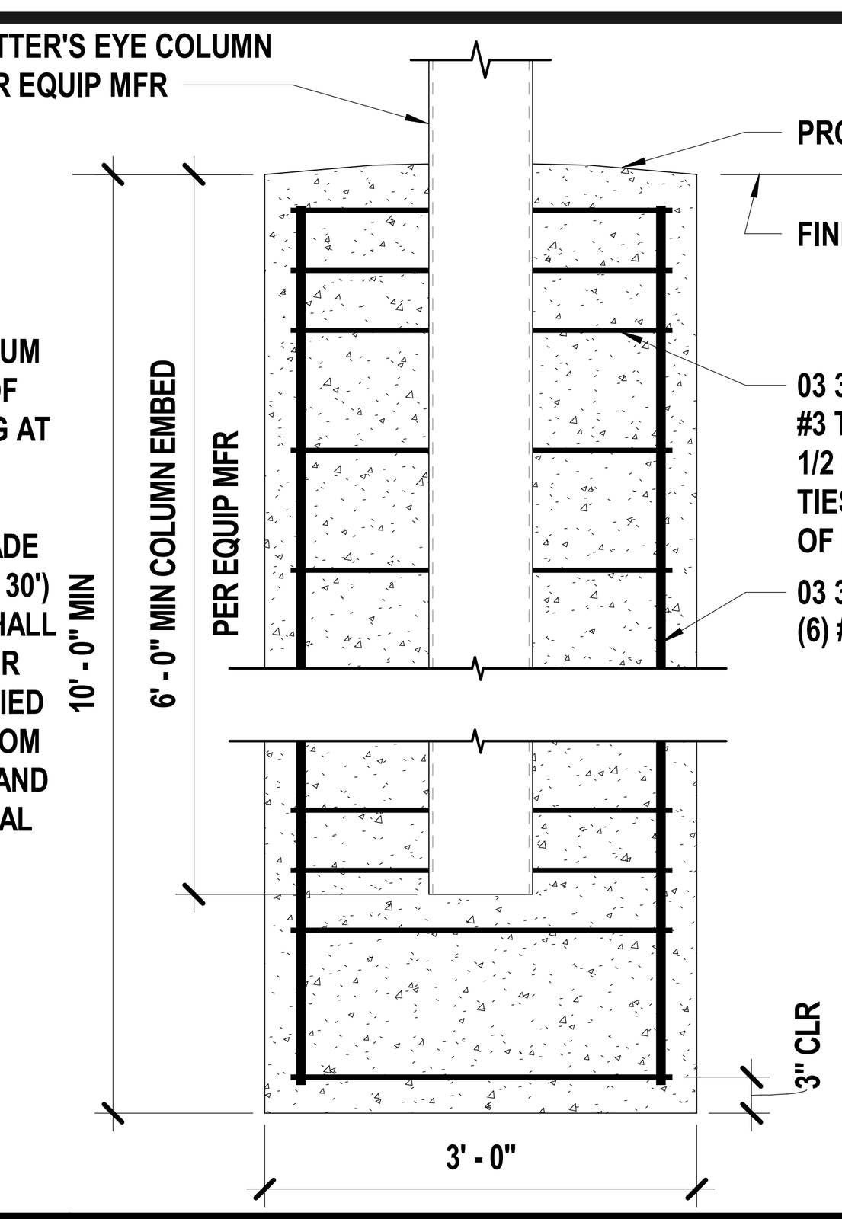
SHEET KEYNOTE LEGEND

03 30 00.A06 REINFORCING BARS

NOTES:
1. THIS FOUNDATION IS DESIGNED TO WITHSTAND A MAXIMUM HORIZONTAL LOAD OF <u>3050 LB</u> (ASD) ACTING AT A VERTICAL ECCENTRICITY OF 16'-4 1/2" ABOVE GRADE (MAX POLE HEIGHT = 30')
2. FOUNDATION SIZE SHALL BE CONFIRMED AFTER RECEIPT OF A) VERIFIED BASE REACTIONS FROM BATTER'S EYE MFR; AND B) SITE GEOTECHNICAL REPORT

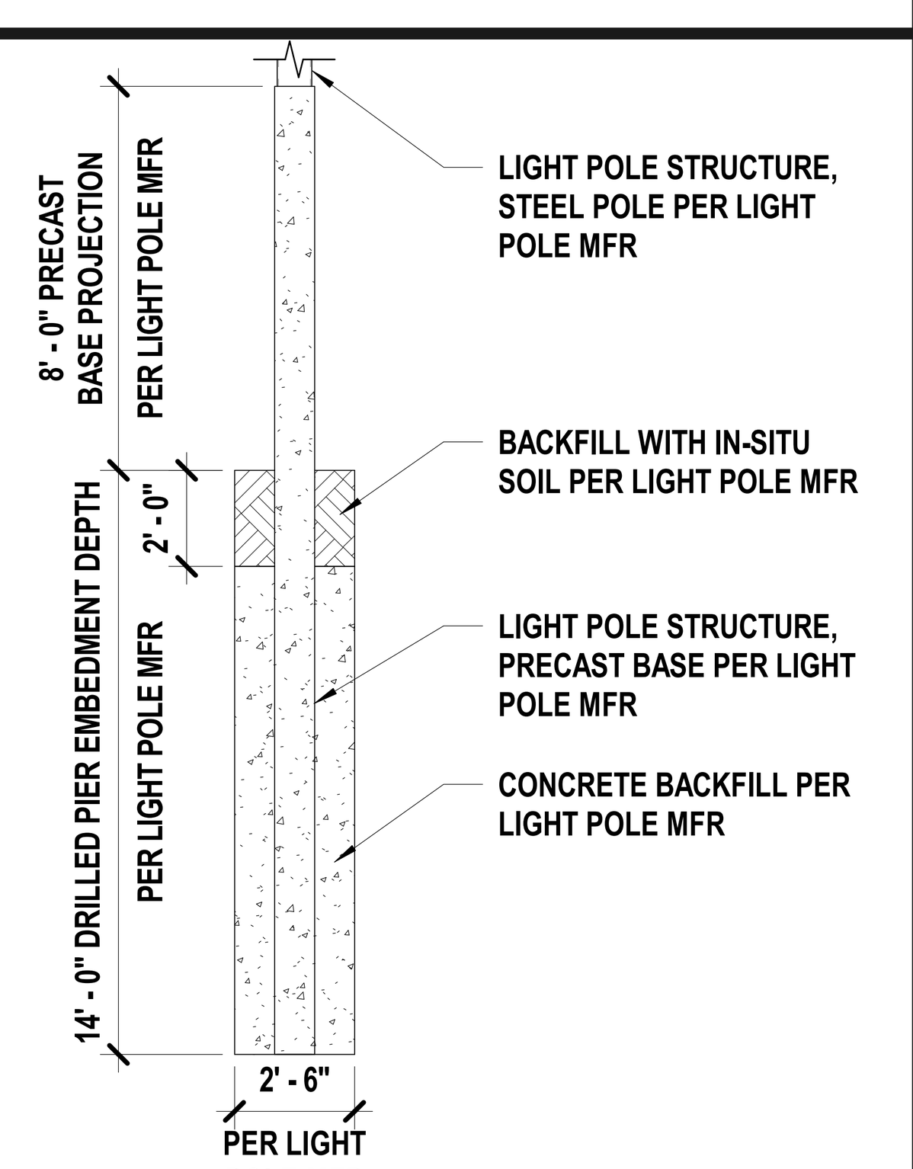


E9 Scale 3/4" = 1'-0" Typical Batter's Eye Footing

CONCRETE TENSION DEVELOPMENT AND LAP SPLICE LENGTHS GRADE 60 REINFORCEMENT, NORMALWEIGHT CONCRETE							
BAR SIZE	LAP CLASS	f'c = 3000 PSI		f'c = 4000 PSI		f'c = 5000 PSI	
		BOTTOM BARS	OTHER BARS	BOTTOM BARS	OTHER BARS	BOTTOM BARS	OTHER BARS
#3	A	12	13	12	12	12	12
	B	16	17	16	16	16	16
#4	A	17	22	15	19	13	17
	B	23	29	20	25	17	23
#5	A	25	32	21	28	19	25
	B	33	42	28	37	25	33
#6	A	33	43	29	37	26	34
	B	43	56	38	49	34	45
#7	A	53	69	46	60	42	54
	B	69	90	60	78	55	71
#8	A	66	86	57	74	51	67
	B	86	112	75	97	67	88
#9	A	80	104	69	90	62	81
	B	104	136	90	117	81	106
#10	A	96	125	83	108	75	97
	B	125	163	108	141	98	127
#11	A	113	146	98	127	87	114
	B	147	190	128	166	114	149

NOTES:
1. ALL SPLICE LENGTHS ARE IN INCHES.
2. THIS TABLE SHALL BE USED FOR CONCRETE ONLY. REFER TO OTHER DEVELOPMENT LENGTH TABLES FOR OTHER MEMBERS.
3. THE TENSION DEVELOPMENT LENGTH (Ld) IS EQUAL TO THE SCHEDULED "CLASS A" LAP SPLICE LENGTH.
4. A BOTTOM BAR IS DEFINED AS ANY BAR THAT DOES NOT HAVE MORE THAN 12" OF FRESH CONCRETE BELOW THE BAR.
5. OTHER BARS INCLUDE TOP BARS AND ALL OTHER BARS THAT HAVE MORE THAN 12" OF FRESH CONCRETE BELOW THE BAR. FOR TOP REINFORCEMENT IN SLABS THAT ARE 12" THICK OR LESS, TABULATED SPLICE LENGTHS FOR BOTTOM BARS SHALL BE USED.
6. FOR EPOXY-COATED BARS, MULTIPLY THE TABULATED SPLICE LENGTHS OF BOTTOM BARS BY 1.5 AND THE TABULATED SPLICE LENGTHS OF OTHER BARS BY 1.3.
7. WHEN LAP SPLICING BARS OF DIFFERENT SIZES, THE LAP LENGTH IS DETERMINED BY THE SMALLER BAR BUT MAY NOT BE LESS THAN THE "CLASS A" SPLICE LENGTH OF THE LARGER BAR.
8. FOR CONCRETE STRENGTHS IN BETWEEN THOSE TABULATED HERE, USE DEVELOPMENT AND LAP SPLICE LENGTHS OF LOWER CONCRETE STRENGTH.

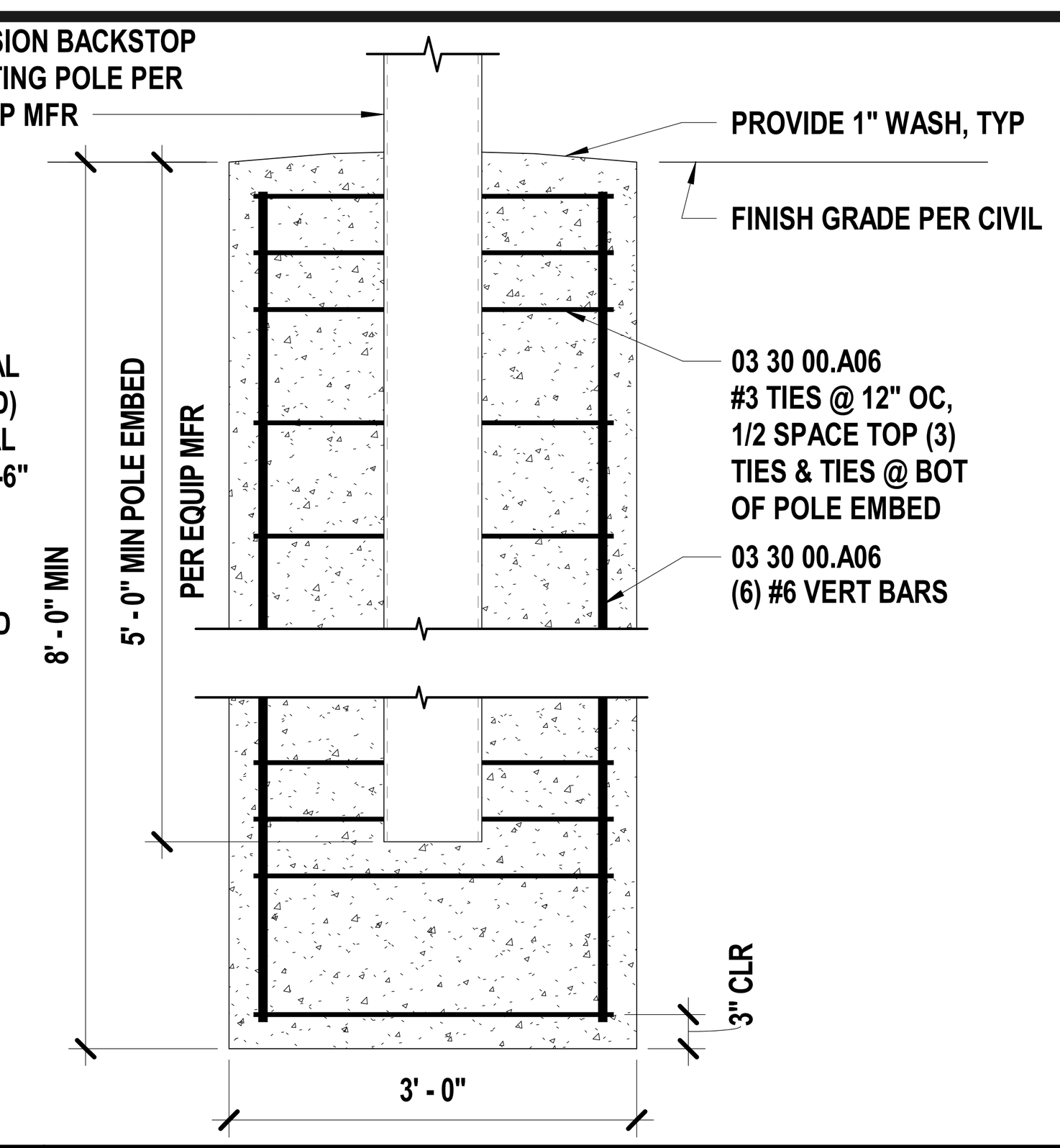
A13 Scale 12" = 1'-0" Typical Reinforcing Splice Length Table



NOTE: SECTION IS REPRESENTATIVE AND IS SHOWN FOR 70'-0" MUSCO LIGHT POLE. FINAL DESIGNS SHALL BE DESIGNED, DETAILED, AND CONFIRMED BY MANUFACTURER TO MEET GEOTECHNICAL REPORT

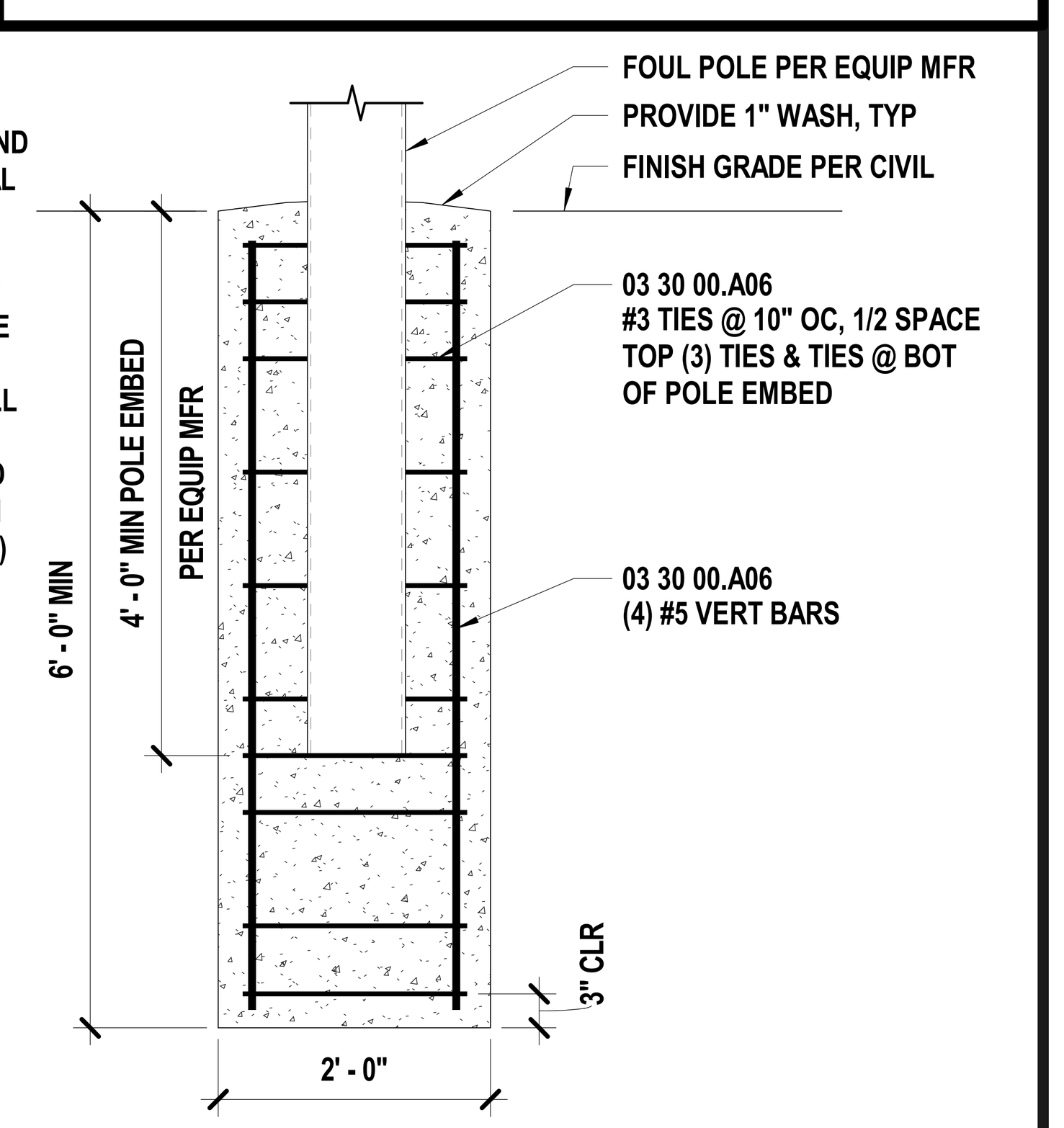
A1 Scale 1/4" = 1'-0" Typical 70' Musco Light Pole Footing

NOTES:
1. THIS FOUNDATION IS DESIGNED TO WITHSTAND A MAXIMUM HORIZONTAL LOAD OF <u>1375 LB</u> (ASD) ACTING AT A VERTICAL ECCENTRICITY OF 21'-6" ABVE GRADE (MAX POLE HEIGHT = 43')
2. FOUNDATION SIZE SHALL BE CONFIRMED AFTER RECEIPT OF A) VERIFIED BASE REACTIONS FROM TENSION BACKSTOP MFR; AND B) SITE GEOTECHNICAL REPORT



A5 Scale 3/4" = 1'-0" Typical Tension Backstop Netting Footing

NOTES:
1. THIS FOUNDATION IS DESIGNED TO WITHSTAND A MAXIMUM HORIZONTAL LOAD OF <u>375 LB</u> (ASD) ACTING AT A VERTICAL ECCENTRICITY OF 24'-0" ABVE GRADE (MAX POLE HEIGHT = 40')
2. FOUNDATION SIZE SHALL BE CONFIRMED AFTER RECEIPT OF A) VERIFIED BASE REACTIONS FROM FOUL POLE MFR; AND B) SITE GEOTECHNICAL REPORT



A9 Scale 3/4" = 1'-0" Typical Foul Pole Footing

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TYPICAL CONCRETE DETAILS

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CONDUIT AND WIRE

- ARROWS INDICATE CONDUIT AND WIRE HOME RUN(S) TO PANEL WITH 2-#12 AWG CONDUCTORS UNLESS NOTED OR OTHERWISE REQUIRED.
- CONDUIT RUN CONCEALED IN WALL OR ABOVE CEILING.
- CONDUIT RUN UNDERGROUND OR CONCEALED IN FLOOR SLAB.
- T — TELEPHONE CONDUIT
- LV — LOW VOLTAGE CONDUIT AND WIRING

LIGHTING

- BATTERY OPERATED EMERGENCY LIGHT (WALL MOUNTED)
- BATTERY OPERATED EMERGENCY LIGHT (CEILING MOUNTED)
- SURFACE/RECESSED LIGHT FIXTURE
- FLUORESCENT LIGHT FIXTURE
- FLUORESCENT STRIP FIXTURE
- SHADING DENOTES EMERGENCY FIXTURE
- POLE MOUNTED LIGHT FIXTURE
- EXIT LIGHT - DOUBLE FACE - ARROWS AS SHOWN
- EXIT LIGHT - SINGLE FACE - ARROWS AS SHOWN
- LIGHTING SWITCHES-SINGLE POLE, 3-WAY, 4-WAY, KEY, LOW VOLTAGE, PILOT LIGHT
- ^{D} DIMMER WITH SINGLE POLE SWITCH
- ^{D3} DIMMER WITH THREE WAY SWITCH (WATTAGE NOTED)
- ^{M} WALL MOUNTED MOTION SENSOR
- (A) CEILING MOUNTED MOTION SENSOR (LETTER DENOTES TYPE)
- SWITCH AND DUPLEX RECEPTACLE
- DENOTES A WALL MOUNTED FIXTURE

WIRING DEVICES

- DUPLEX RECEPTACLE.
- LINE THRU DEVICE INDICATES ABOVE COUNTER
- DUPLEX RECEPTACLE WITH ISOLATED GROUND (SINGLE AND FOURPLEX SIMILAR)
- DUPLEX RECEPTACLE - TOP HALF SWITCHED - BOTTOM HALF TO HAVE POWER AT ALL TIMES
- EM DUPLEX RECEPTACLE ON EMERGENCY POWER (SINGLE AND FOURPLEX SIMILAR)
- FOURPLEX RECEPTACLE
- SINGLE RECEPTACLE
- CEILING MOUNTED RECEPTACLE
- MULTI-SERVICE FLOOR BOX
- DIVIDED POWER POLE
- FLOOR BOX W/DUPLEX RECEPTACLE
- SPECIAL RECEPTACLE W/NEMA CONFIGURATION AS NOTED
- CLOCK RECEPTACLE
- MULTI-OUTLET ASSEMBLY

COMMUNICATIONS

- TELEPHONE OUTLET
- LINE THRU DEVICE INDICATES ABOVE COUNTER
- DATA OUTLET
- TELEPHONE/DATA OUTLET
- FLOOR BOX WITH COMMUNICATIONS OUTLET
- TELEVISION ANTENNA OUTLET
- TELEPHONE CABINET OR PLYWOOD BOARD

SECURITY

- CLOSED CIRCUIT TV CAMERA
- CR CARD READER
- DL DOOR LOCK
- M SECURITY MONITOR
- WT WATCH TOUR
- EDL ELECTRIC DOOR LOCK
- S MOTION SENSOR - SECURITY
- S MOTION SENSOR (WALL MOUNTED) - SECURITY

PUBLIC ADDRESS

- M MICROPHONE OUTLET
- H SPEAKER. ('H' DENOTES HORN TYPE)
- V SPEAKER VOLUME CONTROL
- SPEAKER CONDUIT AND WIRING
- PA PUBLIC ADDRESS AMPLIFIER AND CABINET
- BUZZER
- BELL
- INTERCOM OUTLET
- M INTERCOM OUTLET - MASTER
- D CLOCK SYSTEM RECEPTACLE WITH SINGLE FACE ('D' DENOTES DOUBLE FACE)

POWER DEVICE AND CONTROLS

- T THERMOSTAT
- DISCONNECT SWITCH. 30A-3P, NON-FUSED EXCEPT AS NOTED
- MANUAL MOTOR STARTER
- MAGNETIC MOTOR STARTER
- COMBINATION MOTOR STARTER AND DISCONNECT SWITCH
- MOTOR
- PANELBOARD (SEE ONE-LINE)
- DISTRIBUTION PANELBOARD
- CONTACTOR
- AUTOMATIC TRANSFER SWITCH
- PC PHOTOCELL
- J JUNCTION BOX
- PUSHBUTTON
- T TRANSFORMER

A	AMPS, AIR (COMPRESSED)	DX	DIRECT EXPANSION	HTG	HEATING	MUAF	MAKE UP AIR FAN	SD	SUPPLY DIFFUSER, SMOKE DAMPER
A/C	AIR CONDITIONING	EA	EXHAUST AIR	HTR	HEATER	MV	MIXING VALVE	SDCW	SOFT DOMESTIC COLD WATER
AD	AREA DRAIN, ACCESS DOOR	EAT	ENTERING AIR TEMPERATURE	HVU	HEATING AND VENTILATING UNIT	N	NITROGEN	SDHW	SOFT DOMESTIC HOT WATER
AFC	ABOVE FINISH CEILING	EC	ELECTRICAL CONTRACTOR, EMPTY CONDUIT	HW	DOMESTIC HOT WATER	N/A	NOT APPLICABLE	SDRHW	SOFT DOMESTIC RECIRCULATION HOT WATER
AFG	ABOVE FINISH GRADE	EF	EXHAUST FAN	HWR	HOT WATER RETURN	N/C	NORMALLY CLOSED	SF	SQUARE FEET
AHU	AIR HANDLING UNIT	EM	INDICATES EMERGENCY CIRCUIT	HWS	HOT WATER SUPPLY	N/O	NORMALLY OPEN	SP	STATIC PRESSURE
AFF	ABOVE FINISHED FLOOR	EPO	EMERGENCY POWER OFF	IE	INVERT ELEVATION	NF	INDICATES NON-FUSED DEVICE	SR	SUPPLY REGISTER
BD	BACKDRAFT DAMPER, BLOWDOWN	ER	EXHAUST REGISTER	IG	ISOLATED GROUND	NIC	NOT IN CONTRACT	ST	STORM
BFP	BACKFLOW PREVENTER	ETR	EXISTING TO REMAIN	KCMIL	1000 CIRCULAR MILS	NL	NIGHT LIGHT	ST/O	STORM OVERFLOW
BKR	BREAKER	EWB	ENTERING WET BULB	KV	KILOVOLT	NO	NITROUS OXIDE	STM	LOW PRESSURE STEAM
BOD	BOTTOM OF DUCT	EWC	ELECTRIC WATER COOLER	KVA	KILOVOLT AMPS	OA	OUTSIDE AIR	SWBD	SWITCHBOARD
BOP	BOTTOM OF PIPE	EWH	ELECTRIC WATER HEATER, ELEC. WALL HTR.	KW	KILOWATT	ORD	OVERFLOW ROOF DRAIN	TSTAT	THERMOSTAT
BOS	BOTTOM OF STRUCTURE	EXH	EXHAUST	KWH	KILOWATT HOUR	OX	OXYGEN	TU	TERMINAL UNIT
BTU	BRITISH THERMAL UNIT	F/S	COMBINATION FIRE AND SMOKE DAMPER	LAT	LEAVING AIR TEMPERATURE	PD	PUMP DISCHARGE	TW	TEMPERED WATER
C	CONDUIT	FACP	FIRE ALARM CONTROL PANEL	LDB	LEAVING DRY BULB	PH	PHASE	UH	UNIT HEATER
CATV	CABLE TELEVISION SYSTEM	FAACP	FIRE ALARM ANNUNCIATOR CONTROL PANEL	LP	LIQUIFIED PETROLEUM	PIV	POST INDICATOR VALVE	UL	UNDERWRITERS LABORATORIES INC.
CB	CIRCUIT BREAKER	FCO	FLOOR CLEANOUT	LRA	LOCKED ROTOR AMPS	PNL	PANEL	UNO	UNLESS NOTED OTHERWISE
CCTV	CLOSED CIRCUIT TELEVISION	FCU	FAN COIL UNIT	LV	LOW VOLTAGE	PRV	PRESSURE REDUCING VALVE	UPS	UNINTERRUPTIBLE POWER SUPPLY
CFM	CUBIC FEET PER MINUTE	FD	FIRE DAMPER, FLOOR DRAIN	LWB	LEAVING WET BULB	QTY	QUANTITY	V	VENT PIPE
CHWR	CHILLED/HOT WATER RETURN	FLA	FULL LOAD AMPS	LWT	LEAVING WATER TEMPERATURE	RA	RETURN AIR	VAC	MEDICAL VACUUM
CHWS	CHILLED/HOT WATER SUPPLY	FLR	FLOOR	MA	MEDICAL AIR	RD	ROOF DRAIN	VAV	VARIABLE AIR VOLUME
CKT	CIRCUIT	FOR	FUEL OIL RETURN	MAU	MAKE UP AIR UNIT	REV	REVISION	VD	VOLUME DAMPER
CO	CLEANOUT, CARBON MONOXIDE	FOS	FUEL OIL SUPPLY	MBH	1000 BTU PER HOUR	RG	RETURN GRILLE	VTR	VENT THROUGH ROOF
CO2	CARBON DIOXIDE	FP	FIRE PROTECTION	MC	MECHANICAL CONTRACTOR	RH	RELATIVE HUMIDITY	W	WIRE, WATT(S)
CTR	COOLING TOWER RETURN	FPB	FAN POWERED TERMINAL UNIT	MCA	MINIMUM CIRCUIT AMPACITY	RHW	DOMESTIC RECIRCULATION HOT WATER	W/	WITH
CTS	COOLING TOWER SUPPLY	FPVAV	FAN POWERED TERMINAL UNIT	MCC	MOTOR CONTROL CENTER	RL	REFRIGERANT LIQUID	W/O	WITHOUT
CU	COPPER, CONDENSING UNIT	FS	FLOOR SINK	MD	MOTORIZED DAMPER	RLA	RUNNING LOAD AMPS	WB	WET BULB
CUH	CABINET UNIT HEATER	G	GAS (NATURAL), GROUND	MDP	MAIN DISTRIBUTION PANEL	RPM	REVOLUTIONS PER MINUTE	WCO	WALL CLEANOUT
CW	DOMESTIC COLD WATER	GCO	GRADE CLEANOUT	MFR	MANUFACTURER	RS	REFRIGERANT SUCTION	WH	WALL HYDRANT
CWR	CHILLED WATER RETURN	GFI/GFCI	GROUND FAULT CIRCUIT INTERRUPTER	MH	MANHOLE	RTN	LOW PRESSURE CONDENSATE RETURN	WP	WEATHERPROOF
CWS	CHILLED WATER SUPPLY	GND	GROUND	MLO	MAIN LUGS ONLY	RTU	ROOF TOP UNIT	XFMR	TRANSFORMER
DDC	DIRECT DIGITAL CONTROL	GPM	GALLONS PER MINUTE	MTD	MOUNTED	SA	SUPPLY AIR	XP	EXPLOSION PROOF
DD	DECK DRAIN	HB	HOSE BIBB	MU	MAKE UP	SAN	SANITARY		
DN	DOWN	HOA	HAND OFF AUTOMATIC						

ELECTRICAL SYMBOLS AND ABBREVIATIONS

"SOME SYMBOLS AND ABBREVIATIONS ON THIS LEGEND MAY NOT BE USED. REFER TO FLOOR PLANS FOR ALL SYMBOLS AND ABBREVIATIONS."

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CONSTRUCTION DOCUMENTS

LNHS Baseball & Softball Upgrades
Liberty Public Schools 53
1000 NE 104th Street
Liberty, MO 64068

REVISIONS:

#	Description	Date

STATE OF MISSOURI
RYAN JEROD DIEDIKER
NUMBER PE-2015006511
REGISTERED PROFESSIONAL ENGINEER
7/12/23

JOB NO: 23047
DRAWN BY: SBI
CHECKED BY: RJD
DATE: 06.23.2023

ME101

SYMBOLS & ABBREVIATION - ELEC.

PANEL	B (ETR)						
MAIN BUS AMPS:	150 A	AIC:	65,000 A				
MAIN BREAKER:	150 A	SECTIONS:	1 - 30 SPACE				EQUIPMENT GROUND BUS
VOLTAGE:	208Y/120 V	MOUNTING:	SURFACE				
PHASES/WIRES:	3 PH / 4 W	ENCLOSURE TYPE:	NEMA 1				SERVICE ENTRANCE

CIRCUIT DESCRIPTION	POLES	AMPS	CKT NO	CKT NO	AMPS	POLES	CIRCUIT DESCRIPTION
-	-	-	1	2	-	-	-
-	-	-	3	4	-	-	-
-	-	-	5	6	-	-	-
SUB-PANEL S	3	50	7	8	**50**	**2**	**DOCK SPECIAL RECEPTACLE**
			9	10			
			11	12	20	1	**SOFTBALL RECPT / FUTURE CAMERA**
IRRIGATION CONTROL	1	20	13	14	20	2	SECURITY LIGHTS
SPECIAL RECEPTACLE	2	30	15	16			
			17	18	20	1	SCOREBOARD
FLAG POLE LIGHTING	1	20	19	20	20	1	PITCHING MACHINE
DUGOUT POWER	1	20	21	22	20	1	1ST BASE DUGOUTS
REFRIDGERATOR	1	20	23	24	20	1	FIELD RECEPTACLES
EXISTING LOAD	1	20	25	26	20	1	FIELD RECEPTACLES
EXISTING LOAD	1	20	27	28	**20**	**1**	**BASEBALL RECPT / FUTURE CAMERA**
SPACE			29	30			SPACE

ST - SHUNT TRIP

GENERAL NOTES:

1. ALL BRANCH CIRCUITS TO BE PROVIDED WITH #10 AWG UNLESS NOTED OTHERWISE.
2. PRIOR TO CONSTRUCTION CONTRACTOR SHALL LOCATE ALL UTILITIES. (PRIVATE AND PUBLIC) IF "HIT' CONTRACTOR IS RESPONSIBLE FOR REBUILD TO WORKING CONDITION. ALL REPAIRS SHALL BE APPROVED BY OWNER.
3. RESTORATION/REPAIR OF SITE: BACKFILL AND COMPACT EACH REMOVED LOCATION USING CS-1 MATERIALS (PEA GRAVEL IS ACCEPTABLE, BUT NOT SAND). COMPACT VIA POWER TAMPERS IN 6-INCH (MAXIMUM) LAYERS.
4. ALL TRENCHING SHALL BE BACKFILLED/COMPACTED LOCATION USING CS-1 MATERIALS (PEA GRAVEL IS ACCEPTABLE, BUT NOT SAND). COMPACT VIA POWER TAMPERS IN 6-INCH (MAXIMUM) LAYERS. REFER TO TRENCH DETAIL FOR ADDITIONAL INFORMATION.
5. REPAIR ALL ASPHALT/CONCRETE TO MATCH EXISTING. PROVIDE 6" ASPHALT (4" BASE & 2" BM2 TOP COURSE). OVERCUT ASPHALT BY 12" ON EACH SIDE OF TRENCH. REMOVE 6" P.C. CONCRETE. FIELD VERIFY PRIOR TO BID ALL WORK REQUIRED.
6. REPAIR/RESTORE ALL DIRT WORK BACK TO ORIGINAL GRADE. PROVIDE GRASS SEED/SOD AS REQUIRED.
7. ALL REPAIRS/PATCHING SHALL BE DONE BY A LICENSED
8. CONTRACTOR FROM THAT FIELD OF WORK. COORDINATE ALL LOCATIONS OF REQUIRED JUNCTION BOXES WITH OWNER PRIOR TO CONSTRUCTION. REFER TO IN-GRADE ELECTRICAL JUNCTION/PULL BOX DETAIL FOR ADDITIONAL INFORMATION.
9. PRIOR TO CONSTRUCTION VERIFY ACTUAL LOCATIONS OF NEW POLES WITH SPORTS LIGHTING MANUFACTURER. IF THERE IS EXISTING CIRCUMSTANCES THAT DO NOT ALLOW POLE TO BE INSTALLED AT THAT LOCATION REVISE POLE LOCATIONS AND COORDINATE WITH SPORTS LIGHTING MANUFACTURER.
10. ALL ELECTRICAL SPLICES/CONNECTIONS OUTSIDE SHALL USE ILSCO NIMBUS PRE-INSULATED CONNECTORS OR APPROVED EQUAL. IDENTIFICATION SHALL BE PROVIDED ON THE ENDS OF ALL CONDUCTORS INDICATING THE PANEL AND CIRCUIT NUMBER IN WHICH IT IS FED FROM.
11. ALL UNATTENDED HOLES/TRENCHES MUST BE FENCED OFF.
12. COORDINATE STAGING AREAS WITH OWNER IF REQUIRED.
13. ALL WORK SHOWN THIN LINE (HALF TONE) IS EXISTING, ALL WORK SHOWN THICK LINE (BOLD) IS NEW.
14. ALL WIRE AND CABLING ASSOCIATED WITH IRRIGATION SYSTEMS SCHEDULED TO BE REMOVED SHALL BE REMOVED BACK TO THE PANEL AND THE CIRCUIT BREAKERS SHALL BE MARKED AS SPARE. CUT AND CAP CONDUIT FLUSH WITH GRADE. RE: CIVIL DRAWINGS.

PLAN NOTES:

[1] LOCATION OF EXISTING ELECTRICAL GEAR AND PANEL "P".

[2] EXISTING RECEPTACLE AND DATA ENCLOSURE TO BE REMOVED DURING DEMOLITION OF FENCE. CONDUIT STUB UPS AND CIRCUIT TO BE PROTECTED DURING DEMOLITION FOR REUSE. REMOVE EXISTING CABLING BACK TO IT CLOSET. CAP LOW VOLTAGE CONDUIT AT GRADE. PROVIDE GFCI RECEPTACLE IN WEATHERPROOF ENCLOSURE AND MOUNT LOW ON NEW FENCE.

[3] PROVIDE DIVIDED ASSEMBLY QUAZITE BOX SERIES PG1730Z611 OR EQUAL. MOUNT FLUSH WITH GRADE AT LOCATION SHOWN FOR FUTURE POWER AND DATA CONNECTIONS. COORDINATE EXACT LOCATION OF QUAZITE BOXES WITH LNHS FACILITIES PRIOR TO ROUGH-IN. PROVIDE (1) 2" CONDUIT OUT OF LINE VOLTAGE SIDE AND (1) 2" CONDUIT OUT OF LOW VOLTAGE SIDE OF DIVIDED ASSEMBLY QUAZITE BOX AND ROUTE AS SHOWN.

[4] PANEL CR AND CM LOCATED INSIDE CONCESSIONS STAND.

[5] IT RACK LOCATED IN EXISTING CONCESSIONS BUILDING.

[6] PROVIDE NEMA L6-50 RECEPTACLE IN WEATHERPROOF ENCLOSURE. SURFACE MOUNT RECEPTACLE ON SIDE OF DUGOUT. CIRCUIT WITH 2#8,#10G, 3/4"C.

[7] PROVIDE 24" X 24" X 8" LOCKABLE WALL MOUNT ENCLOSURE, HOFFMAN SERIES ECL606020 OR EQUAL. MOUNT ENCLOSURE TO SIDE OF DUGOUT NEXT TO QUAZITE BOX. STUB UP (1) 2" CONDUIT FROM LOW VOLTAGE SIDE OF QUAZITE BOX INTO BOTTOM OF ENCLOSURE.

[8] PROVIDE 12" X 12" X6" LOCKABLE WALL MOUNT ENCLOSURE, HOFFMAN SERIES ECL303015 OR EQUAL. STUB UP (1) 2" CONDUIT FROM LOW VOLTAGE SIDE OF QUAZITE BOX INTO BOTTOM OF ENCLOSURE.

[9] PROVIDE 12" X 12" X6" LOCKABLE WALL MOUNT ENCLOSURE, HOFFMAN SERIES ECL303015 OR EQUAL. PROVIDE UNISTRUT FOR MOUNTING. STUB UP (1) 2" CONDUIT FROM LOW VOLTAGE SIDE OF QUAZITE BOX INTO BOTTOM OF ENCLOSURE.

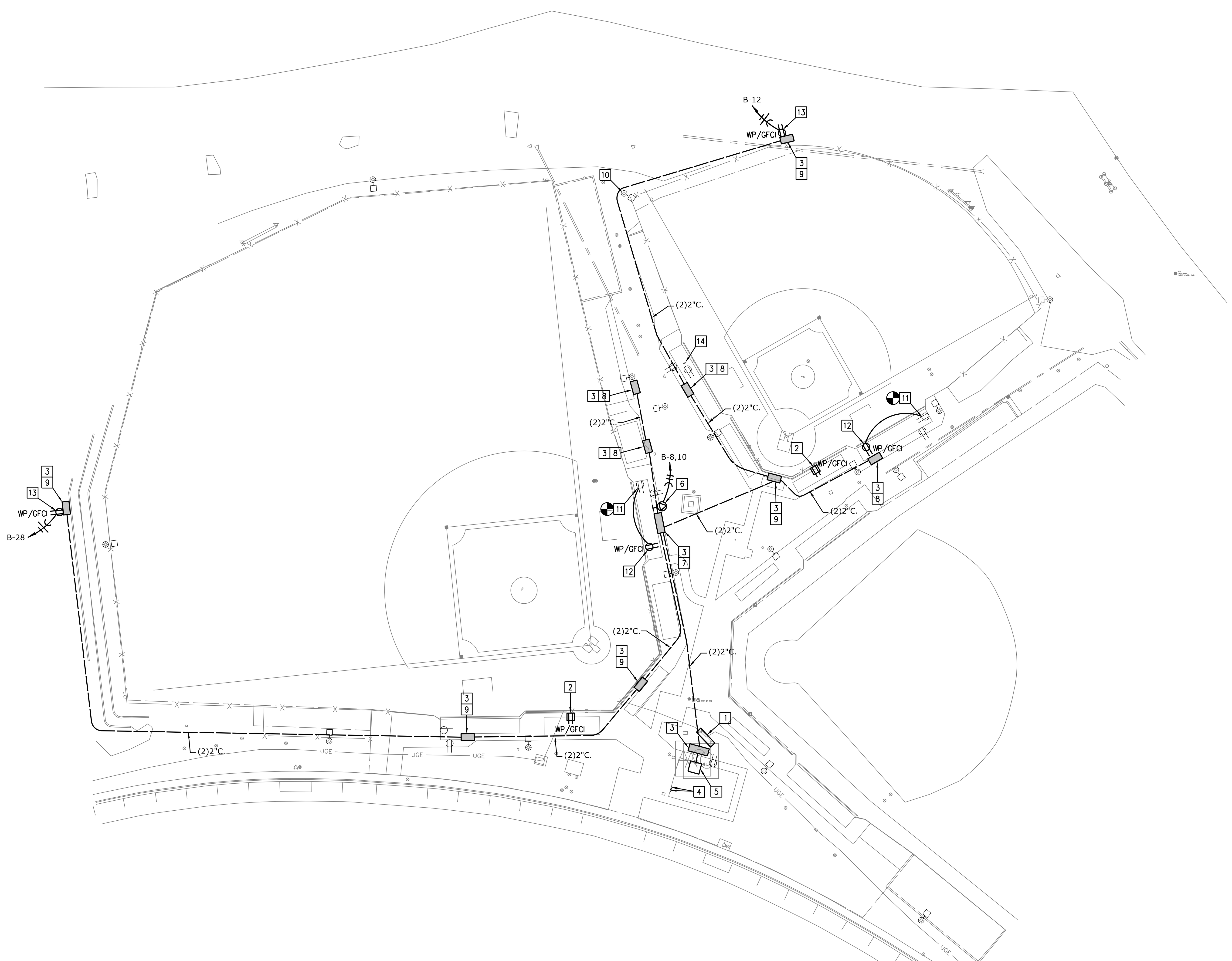
[10] RE-AIM EXISTING MUSCO SPORTS LIGHTING FIXTURE PER FIELD RECONFIGURATION.

[11] CONNECT RECEPTACLE TO EXISTING RECEPTACLE CIRCUIT IN DUGOUT.

[12] RECEPTACLE TO BE PLACED IN IN DUGOUT SCORERS BOX UNDER THE COUNTERTOP.

[13] MOUNT RECEPTACLE ON UNISTRUT OF WALL MOUNT ENCLOSURE.

[14] LOCATION OF EXISTING PANEL 'B'.



ELECTRICAL - SITE PLAN

SCALE: 1"=40'-0"

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