# 100% CONSTRUCTION DOCUMENTS

# SOUTH PUTNAM HS TRACK AND FIELD RENOVATION

1780 EAST U.S. HIGHWAY 40 GREENCASTLE, IN 46135

222152.06

01/30/2024

OWNER

SOUTH PUTNAM COMMUNITY SCHOOL CORPORATION



ARCHITECT

FANNING HOWEY
ASSOCIATES INC.
350 E. NEW YORK ST. SUITE 3

350 E. NEW YORK ST. SUITE 300 INDIANAPOLIS, IN 46204 317-848-0966



CONSTRUCTION MANAGER

260-744-4359

MICHAEL KINDER & SONS
6055 INNOVATION BLVD.
FORT WAYNE, IN 46203



SITE / CIVIL ENGINEER

HWC ENGINEERING

135 N. PENNSYLVANIA STREET, SUITE 2800 INDIANAPOLIS, IN 46204 317-347-3663

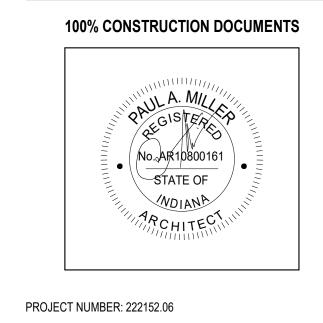


ELECTRICAL ENGINEER

CREATIVE ENGINEERING SOLUTIONS

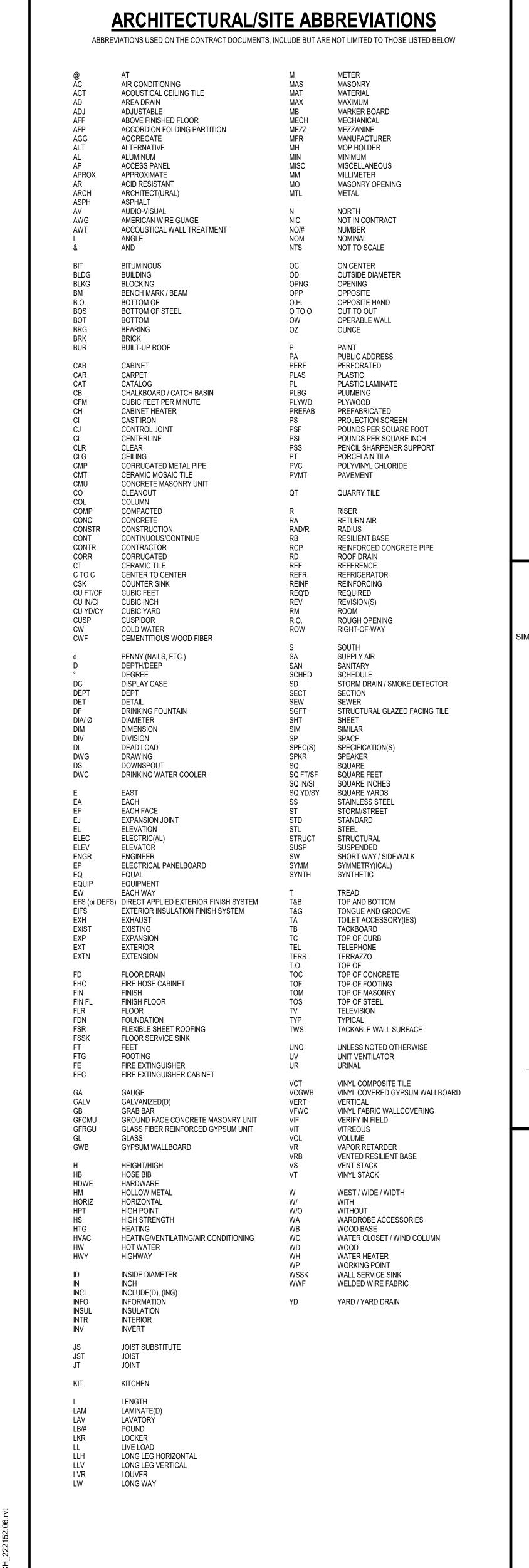
201 S. RURAL STREET, SUITE 210 INDIANAPOLIS, IN 46201 317-748-5252

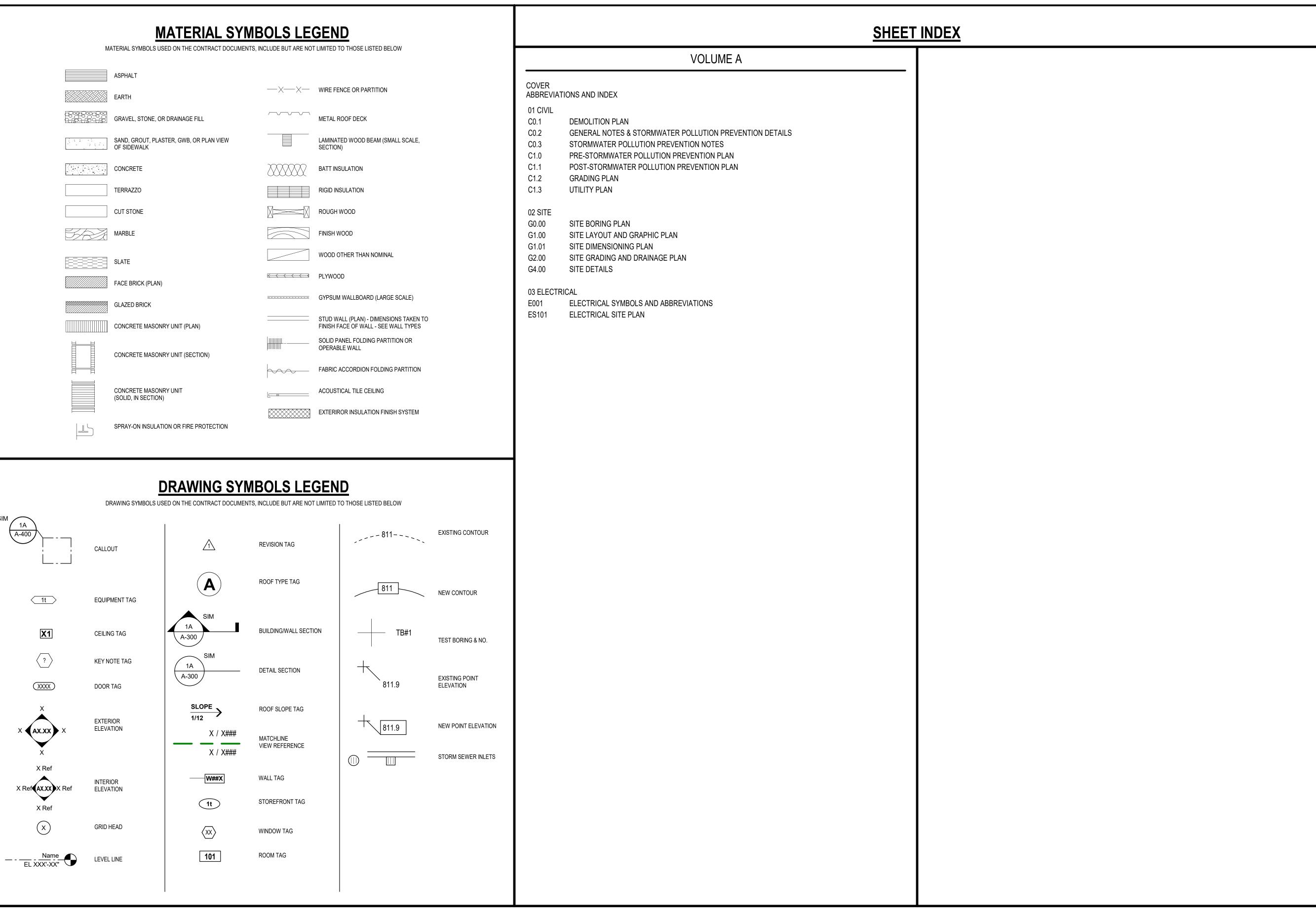




PROJECT ISSUE DATE: 01/30/2024

COVER SHEET





SOUTH PUTNAM
HS TRACK AND
FIELD
RENOVATION

COPYRIGHT 2024 BY FANNING/HOWEY ASSOCIATES, INC.

1780 EAST U.S. HIGHWAY 40 GREENCASTLE, IN 46135

SOUTH PUTNAM
COMMUNITY SCHOOL
CORPORATION

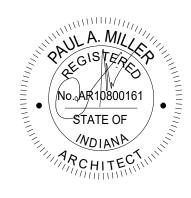


<u>ARCHITECT</u>



**317-848-0966 WWW.FHAI.COM**350 E. NEW YORK ST. SUITE 300 INDIANAPOLIS, IN 46204

100% CONSTRUCTION DOCUMENTS

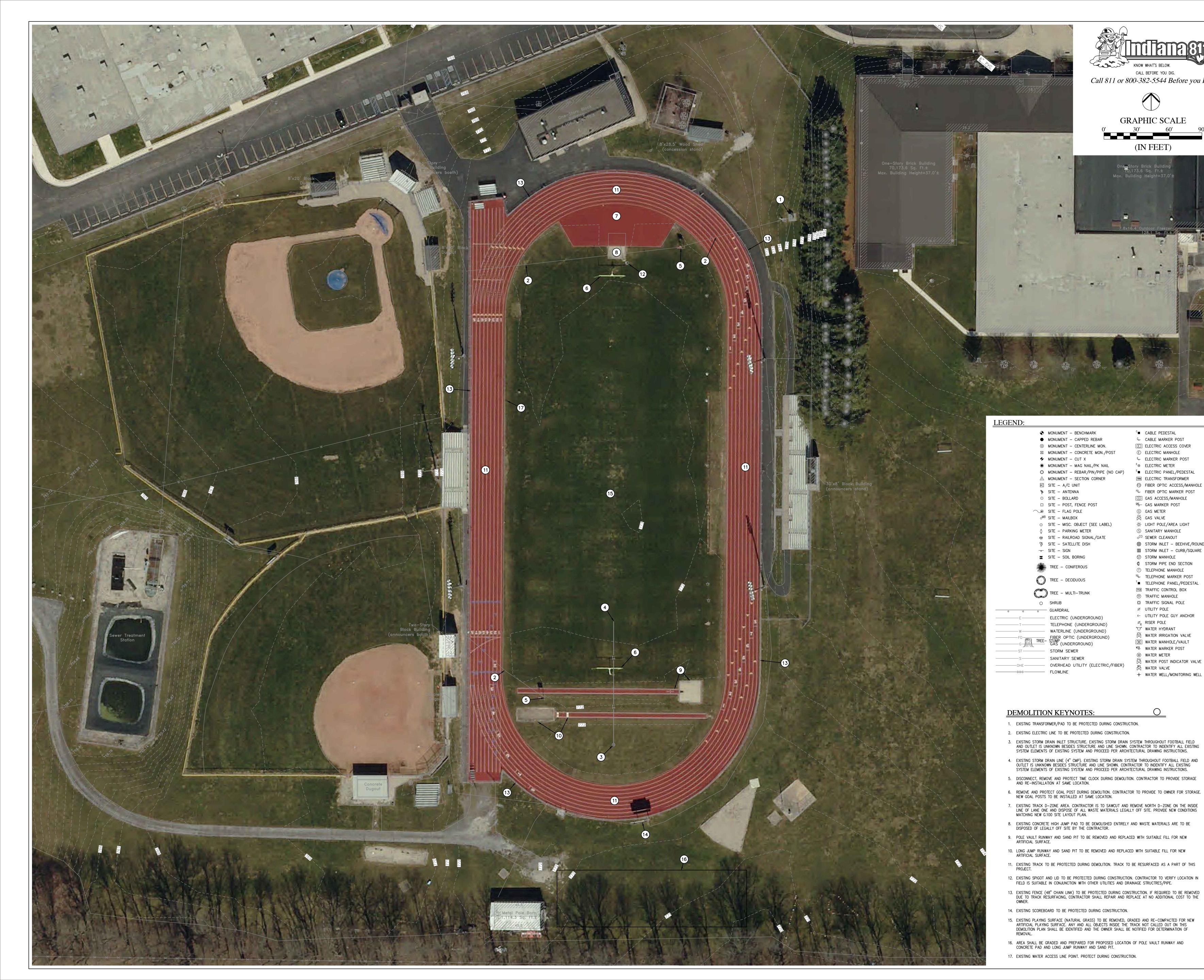


PROJECT NUMBER: 222152.06
PROJECT ISSUE DATE: 01/30/2024

REV. NO.	DESCRIPTION	DATE
-		

ABBREVIATIONS & INDEX

**INDEX A** 



### SOUTH PUTNAM HS TRACK AND FIELD RENOVATION

1780 US-40, GREENCASTLE, IN 46135 (765) 653-3148

CALL BEFORE YOU DIG.

Call 811 or 800-382-5544 Before you Dig!

GRAPHIC SCALE

(IN FEET)

<sup>c</sup>■ CABLE PEDESTAL <sup>©</sup>← CABLE MARKER POST

E ELECTRIC MANHOLE

<sup>E</sup>⊗ ELECTRIC METER

**E** ELECTRIC ACCESS COVER

€ ELECTRIC MARKER POST

<sup>E</sup>■ ELECTRIC PANEL/PEDESTAL

TRAN ELECTRIC TRANSFORMER

G GAS ACCESS/MANHOLE

★ LIGHT POLE/AREA LIGHT

⊕ STORM INLET − BEEHIVE/ROUND

■ STORM INLET - CURB/SQUARE

STORM PIPE END SECTION

<sup>™</sup> TELEPHONE PANEL/PEDESTAL TRAFFIC CONTROL BOX

 $\leftarrow$  UTILITY POLE GUY ANCHOR

WATER IRRIGATION VALVE

WATER POST INDICATOR VALVE

→ WATER WELL/MONITORING WELL

W WATER MANHOLE/VAULT WIR WATER MARKER POST

TELEPHONE MANHOLE ™ TELEPHONE MARKER POST

TRAFFIC MANHOLE TRAFFIC SIGNAL POLE

Ø UTILITY POLE

 $\varnothing_{_{\!R}}$  RISER POLE

WATER HYDRANT

W WATER METER

<sup>N</sup> WATER VALVE

S SANITARY MANHOLE  $\circ^{\text{CO}}$  SEWER CLEANOUT

STORM MANHOLE

GAS MARKER POST

© GAS METER

₩ GAS VALVE

© FIBER OPTIC ACCESS/MANHOLE

FO- FIBER OPTIC MARKER POST

SOUTH PUTNAM COMMUNITY SCHOOL CORPORATION





317-347-3663 WWW.HWCENGINEERING.COM 135 N. PENNSYLVANIA STREET, SUITE 2800, INDIANAPOLIS, IN., 46204



KEY PLAN



100% CONSTRUCTION DOCUMENTS



PROJECT MANAGER: RR DRAWN BY: BP

PROJECT NUMBER: 222152.06 (FH), 2024-005-S (HWC) PROJECT ISSUE DATE: JANUARY 30TH, 2024

REV. NO.△	DESCRIPTION	DATE
-	-	-

**DEMOLITION PLAN** 

C0.1

#### OVERALL PROJECT GENERAL NOTES:

- SURVEY PREPARED BY: CENTRAL STATES CONSULTING, LLC
  - 13 WEST PEARL STREET NORTH SALEM, INDIANA 46165 317-858-8662

P.O. BOX 4

- 2. CONTRACTOR SHALL PERFORM ALL MAINTENANCE OF TRAFFIC IN ACCORDANCE WITH STATE AND LOCAL STANDARDS AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION). THE REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT TO BE LIMITED TO NORMAL WORKING HOURS. CONTRACTOR SHALL, AT A MINIMUM, PROVIDE TRAFFIC CONTROL AS REQUIRED TO SAFELY PROTECT THE GENERAL PUBLIC, THE CONTRACTOR'S WORK FORCES AND THE WORK.
- CONTRACTOR SHALL COMPLY WITH ANY AND ALL SAFETY REGULATIONS AND REQUIREMENTS RELATED TO THE PROPOSED WORK. SAFETY PROVISIONS FOR THE WORK SHALL BE IN FULL COMPLIANCE WITH ALL APPLICABLE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND ANY OTHER LOCAL, STATE OR FEDERAL AGENCY HAVING JURISDICTION. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THE OPTION OF THE OWNER AND/OR ENGINEER TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON OR NEAR THE CONSTRUCTION SITE.
- 4. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL BARRICADES, FENCES, WARNING SIGNS, FLASHING LIGHTS, TEMPORARY WALKWAYS AND OTHER SAFETY MEASURES DURING CONSTRUCTION.
- 5. ALL WORK SHALL CONFORM TO FEDERAL, STATE AND LOCAL REGULATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FEES AND PERMITS REQUIRED FOR WORK.
- 7. PLANS AND SPECIFICATIONS REFERENCE ARCHITECT, ENGINEER AND LANDSCAPE ARCHITECT INTERCHANGEABLY THROUGHOUT.
- 8. NO CHANGES SHALL BE MADE TO THE PROPOSED WORK WITHOUT WRITTEN APPROVAL OF ENGINEER.
- 9. ANY DEVIATIONS OF THE EXISTING CONDITIONS FROM THOSE SHOWN ON THE PLANS THAT AFFECT THE IMPROVEMENTS SHALL BE REPORTED TO THE ENGINEER BEFORE CONSTRUCTION PROCEEDS AT THAT
- 10. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING SURVEY MONUMENTS, ANY MONUMENT DISTURBED OR DESTROYED DURING CONSTRUCTION ACTIVITY SHALL BE REPLACED BY A LICENSED SURVEYOR.
- 11. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING BENCHMARKS. IF BENCHMARKS ARE TO BE DISTURBED OR REMOVED AS PART OF THE WORK, CONTRACTOR SHALL HAVE A LICENSED SURVEYOR ESTABLISH ANOTHER BENCHMARK AT A LOCATION OUT OF HARM'S WAY
- 12. EXCAVATION AND DISPOSAL OF MATERIAL SHALL BE DONE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL LAWS, CODES, AND ENVIRONMENTAL REGULATIONS, CONTRACTOR SHALL CEASE EXCAVATION ACTIVITIES AND NOTIFY THE OWNER AND ARCHITECT IMMEDIATELY IF CONTAMINATED SOIL OR OTHER
- 13. CONTRACTOR SHALL ADJUST ELEVATION OF ANY SURFACE FEATURE (RIM, GRATE, HYDRANTS, VALVES, HAND HOLES, CASTINGS, IRRIGATION SYSTEM, UTILITY PEDESTALS, ETC.) AS AFFECTED BY NEW
- 14. CONTRACTOR SHALL REPAIR OR REPLACE ANY EXISTING SITE AREAS OR IMPROVEMENTS DAMAGED DURING CONSTRUCTION TO AT LEAST THE CONDITION THAT EXISTED BEFORE CONSTRUCTION.
- 15. COORDINATE WORK ON CIVIL DRAWINGS WITH ARCHITECTURAL, ELECTRICAL, MECHANICAL, PLUMBING, AND STRUCTURAL WORK.

#### UTILITY GENERAL NOTES:

ENVIRONMENTAL HAZARD IS ENCOUNTERED.

LOCATION.

- 1. NOT ALL UTILITY LINES, WHETHER ABOVE OR BELOW GROUND, HAVE BEEN SHOWN ON THE DRAWINGS. ANY UNDERGROUND INFORMATION SHOWN ON THE DRAWINGS HAS BEEN DETERMINED FROM THE BEST AVAILABLE INFORMATION AND IS GIVEN FOR THE CONTRACTOR'S BENEFIT. CONTRACTOR SHALL CONTACT 811 FOR LOCATION OF EXISTING UNDERGROUND UTILITIES BEFORE EXCAVATION BEGINS.
- CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR PROTECTING ALL UTILITIES IN THE WORK AREA WHETHER SHOWN OR NOT, AND SHALL REALIZE THAT THE ACTUAL LOCATION OF THE UTILITIES MAY BE DIFFERENT FROM THAT SHOWN ON THE DRAWINGS. ALL EXISTING UTILITIES ENCOUNTERED, WHETHER IN PUBLIC RIGHTS OF WAY OR ON PRIVATE PROPERTY, SHALL BE THE CONTRACTORS RESPONSIBILITY TO MAINTAIN IN SERVICE.
- 3. ANY UTILITIES WHICH CAN BE REMOVED DURING CONSTRUCTION WITHOUT UNDUE INTERRUPTION TO SERVICE MAY BE REMOVED AND REPLACED BY THE CONTRACTOR WITH THE PERMISSION OF THE UTILITY.
- 4. THE CONTRACTOR SHALL NOTIFY ALL APPROPRIATE UTILITY COMPANIES AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OR RESUMPTION OF WORK WHICH COULD DISRUPT THE RESPECTIVE UTILITY SERVICE. CONTRACTOR SHALL COORDINATE ANY DISRUPTION OF AN ACTIVE UTILITY SERVICE WITH ENGINEER, OWNER, AND UTILITY COMPANY.
- CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY FOR DIRECTION SHOULD UNCHARTED, INCORRECTLY CHARTED OR OTHER UTILITIES BE ENCOUNTERED DURING CONSTRUCTION. ANY DEVIATIONS FROM THE UTILITY LOCATIONS OR ELEVATIONS FROM THOSE SHOWN ON THE PLANS SHALL BE REPORTED TO THE ENGINEER BEFORE CONSTRUCTION PROCEEDS AT THAT LOCATION.
- 6. CONTRACTOR SHALL UNCOVER ALL TIE-IN AND CROSSING LOCATIONS PRIOR TO ANY UNDERGROUND PIPE
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RELOCATION OF ALL EXISTING UTILITIES WHICH ARE IN CONFLICT WITH THE IMPROVEMENTS SHOWN ON THE SITE PLANS. IF MINOR UTILITY CONFLICTS ARISE. CONTRACTOR MAY SHIFT THE LOCATION OF THE PROPOSED IMPROVEMENTS AFTER NOTIFYING ENGINEER.
- 8. REFER TO BUILDING PLANS FOR ALL INFORMATION REGARDING UTILITY LAYOUT AND DETAILS WITHIN THE BUILDING AND EXTENDING OUT 5-FEET FROM EXTERIOR FACE OF BUILDING. ALL MECHANICAL, ELECTRICAL, AND PLUMBING DESIGN AND COORDINATION SHALL BE THE RESPONSIBILITY OF CONTRACTOR.
- 9. ALL UTILITY MATERIALS AND INSTALLATION SHALL CONFORM TO LOCAL STANDARDS FOR EACH UTILITY AGENCY HAVING JURISDICTION.
- 10. ALL EXCAVATED TRENCHES UNDER PROPOSED PAVED AREAS, INCLUDING SIDEWALKS, SHALL BE BACKFILLED WITH GRANULAR MATERIAL AND COMPACTED IN LIFTS ACCORDING TO CONSTRUCTION DETAILS. GRANULAR MATERIAL SHALL EXTEND 5 FEET BEYOND THE LIMITS OF THE PAVEMENT AT THE SURFACE WITH A 1:1 SLOPE OUTWARD TO THE BOTTOM OF THE TRENCH.
- 11. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES AND CONDUITS TO AVOID CONFLICTS AND PROVIDE REQUIRED MINIMUM DEPTHS OF COVER. THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL BENDS, FITTINGS OR STRUCTURES REQUIRED TO ASSURE PROPER INSTALLATION.
- 12. ALL COORDINATES AND DIMENSIONS ARE TO THE CENTERLINE OF THE UTILITIES AND STRUCTURES.
- 13. WHERE NECESSARY, UTILITY SERVICE CONDUITS SHALL BE INSTALLED UNDER PAVED AREAS AND BACKFILLED AS SPECIFIED ABOVE BEFORE PAVEMENT IS CONSTRUCTED. COORDINATE CONDUIT REQUIREMENTS WITH UTILITY COMPANIES AND MECHANICAL CONTRACTOR.

#### **DEMOLITION NOTES:**

- PRIOR TO THE START OF DEMOLITION WORK, CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY LOCAL, STATE AND FEDERAL AGENCIES HAVING JURISDICTION. UNLESS NOTED OTHERWISE, CONTRACTOR SHALL DEMOLISH AND DISPOSE OF OFF-SITE ALL MATERIALS,
- STRUCTURES, FENCE, CONCRETE, PAVEMENTS, CURBS AND OTHER MISCELLANEOUS APPURTENANCES WITHIN DISTURBED LIMITS. GENERALLY, DEMOLITION AREAS AND FACILITIES ARE INDICATED WITH BOLD LINES AND/OR SHADED AREAS. DISPOSAL OF SITE MATERIALS SHALL BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL GUIDELINES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING FEATURES TO REMAIN OR WHICH LIE ALONG THE PERIMETER OF THE SITE. THESE FEATURES INCLUDE, BUT ARE NOT LIMITED TO: BUILDINGS, PAVEMENTS, FENCES, VEGETATION, UTILITIES, PROPERTY MARKERS, ETC. CONTRACTOR SHALL RESPONSIBLE FOR ANY DAMAGE WHICH OCCURS DURING OR AS A RESULT OF CONSTRUCTION ACTIVITY. REPLACEMENT OF DAMAGED PROPERTY SHALL BE EQUAL TO EXISTING CONDITIONS.
- 4. CLEAR AND GRUB ALL TREES, BRUSH, STUMPS AND OTHER VEGETATION NECESSARY FOR CONSTRUCTION. ALL CLEARING AND GRUBBING DEBRIS SCHEDULED FOR REMOVAL SHALL BE DISPOSED OF OFF-SITE.
- 5. TREES AND OTHER PLANT MATERIALS TO REMAIN SHALL BE PROTECTED BY TREE FENCE INSTALLED OUTSIDE THE DRIP LINE. NO CONSTRUCTION EQUIPMENT, MATERIALS OR DEBRIS SHALL BE LOCATED WITHIN TREE PROTECTION BOUNDARIES. 6. DEMOLISH FOUNDATIONS AND OTHER BELOW-GRADE CONSTRUCTION, INCLUDING CONCRETE SLABS, TO A
- 7. COMPLETELY FILL BELOW-GRADE AREAS AND VOIDS RESULTING FROM DEMOLITION OF STRUCTURES IN

DEPTH OF NOT LESS THAN 48-INCHES BELOW THE LOWEST GRADE/SUBGRADE LEVEL.

- ACCORDANCE WITH THE EARTHWORK SPECIFICATIONS.
- 8. PROVIDE NEAT, STRAIGHT, VERTICAL SAWCUT AT ALL LOCATIONS WHERE PROPOSED PAVEMENTS, CURBS, ETC. ABUT EXISTING PAVEMENTS, CURBS, ETC. TO REMAIN.
- 9. UNLESS NOTED OTHERWISE, ALL UNDERGROUND UTILITIES SCHEDULED FOR DEMOLITION SHALL BE COMPLETELY EXCAVATED AND DISPOSED OF OFF-SITE, AND THE TRENCH BACKFILLED IN ACCORDANCE WITH THE EARTHWORK SPECIFICATIONS.
- 10. UNLESS NOTED OTHERWISE, ALL UTILITIES TO BE REMOVED SHALL BE DISCONNECTED AND CAPPED AT THE NEAREST CONNECTION POINT.
- 11. DEMOLITION ITEMS INCLUDE, BUT ARE NOT LIMITED TO, REMOVAL ITEMS INDICATED ON THE DEMOLITION PLAN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE OR RELOCATED ITEMS WHICH INTERFERE WITH
- PROPOSED CONSTRUCTION 12. CONDUCT DEMOLITION AND CONSTRUCTION OPERATIONS TO ENSURE MINIMAL INTERFERENCE WITH STREETS, WALKS, AND OTHER ADJACENT OCCUPIED FACILITIES.
- 13. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS OR OTHER OCCUPIED FACILITIES WITHOUT PERMISSION FROM THE LOCAL AUTHORITIES HAVING JURISDICTION. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR
- 14. ENSURE SAFE PASSAGE OF PERSONS AROUND AREAS OF DEMOLITION AND CONSTRUCTION. CONDUCT OPERATIONS TO PREVENT DAMAGE TO ADJACENT STRUCTURES AND OTHER FACILITIES AND INJURY TO
- 15. PROMPTLY REPAIR DAMAGE TO ADJACENT FACILITIES CAUSED BY DEMOLITION AND CONSTRUCTION OPERATIONS.
- 16. NO ON-SITE BURNING IS PERMITTED.
- 17. THE USE OF ANY TYPE OF EXPLOSIVES SHALL NOT BE PERMITTED.

OBSTRUCTED TRAFFIC WAYS, IF REQUIRED BY GOVERNING AUTHORITIES.

#### SITE IMPROVEMENTS NOTES:

- CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO THE START OF CONSTRUCTION AND SHALL BE RESPONSIBLE FOR ALL FIELD DIMENSIONS THROUGHOUT CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL REQUIRED CONSTRUCTION LINE AND GRADE TO ENSURE ACCURATE LAYOUT OF SITE IMPROVEMENTS.
- UNLESS NOTED OTHERWISE, ALL DIMENSIONS ARE REFERENCED TO THE EDGE OF PAVEMENT, EDGE OF SIDEWALK, FACE OF CURB, OR OUTSIDE SURFACE OF FOUNDATION WALL.
- 4. REFER TO BUILDING PLANS FOR ALL BUILDING DIMENSIONS AND LAYOUT DETAILS.
- FOLLOWING THE COMPLETION OF ALL UNDERGROUND WORK IN PAVED AREAS, AGGREGATE BASE SHALL BE PLACED AND COMPACTED TO THE THICKNESS INDICATED ON THE APPROPRIATE PAVEMENT DESIGN DETAIL. WHEN THICKNESS OF COMPACTED AGGREGATE BASE EXCEEDS 6 INCHES, PLACE MATERIALS IN EQUAL LAYERS, WITH NO LAYER MORE THAN 6 INCHES OR LESS THAN 3 INCHES THICK WHEN COMPACTED. COMPACT WITH A MEDIUM WEIGHT SMOOTH WHEELED ROLLER OR EQUIVALENT. ALONG CURBS, WALLS AND ALL LOCATIONS NOT ACCESSIBLE TO THE ROLLER, COMPACT AGGREGATE BASE WITH HAND OPERATED
- 6. ASPHALT PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CONSTRUCTION AND MATERIAL GUIDELINES OF THE INDOT STANDARD SPECIFICATIONS, LATEST EDITION. SEE CONSTRUCTION DETAILS FOR PAVEMENT DESIGN INFORMATION.
- 7. THE CONNECTION OF NEW PAVEMENT TO EXISTING PAVEMENT IN THE PARKING LOTS AND DRIVEWAYS SHALL MATCH EXISTING GRADES AND PROFILES. A LAP JOINT IS REQUIRED FOR CONNECTIONS BETWEEN EXISTING AND PROPOSED ASPHALT PAVEMENTS. SEE CONSTRUCTION DETAILS. THE EDGE OF THE EXISTING ASPHALT PAVEMENT SHALL BE PROPERLY SEALED WITH A TACK COAT MATERIAL IN ALL LOCATIONS WHERE NEW ASPHALT PAVEMENT IS INDICATED TO JOIN EXISTING ASPHALT.
- 8. UNLESS NOTED OTHERWISE, ALL PAVEMENT STRIPING WITHIN THE PROJECT SITE SHALL BE 4-INCHES WIDE, PAINTED WITH WHITE LATEX, WATERBORNE EMULSION, LEAD AND CHROMATE FREE, READY MIXED, COMPLYING WITH FS TT-P-1952. APPLY PAINT WITH MECHANICAL EQUIPMENT AND/OR STENCILS TO PRODUCE CLEAN, STRAIGHT AND UNIFORM EDGES. APPLY AT MANUFACTURER'S RECOMMENDED RATES TO PRODUCE A MINIMUM 12 TO 15 MILS DRY THICKNESS.
- 9. PORTLAND CEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-150. ONLY ONE BRAND AND MANUFACTURER OF APPROVED CEMENT SHALL BE USED FOR ANY ONE STRUCTURE. REGULAR FINE AND COARSE AGGREGATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-33. ALL WATER USED SHALL BE POTABLE, CLEAN AND FREE FROM OILS, ACIDS, ALKALIS, ORGANIC MATERIAL OR OTHER SUBSTANCES THAT MAY BE DELETERIOUS TO CONCRETE OR STEEL.
- 10. REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-615, GRADE 60. WELDED WIRE FABRIC OR WIRE MESH SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-185. REINFORCEMENT SHALL BE CUT AND BENT IN ACCORDANCE WITH ACI 315. COMPLY WITH ARSI RECOMMENDED PRACTICE "PLACING REINFORCING BARS" FOR PLACING AND SUPPORTING REINFORCEMENT.
- 11. ALL CONCRETE USED SHALL BE CLASS A STRUCTURAL CONCRETE WITH A 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI, 6-1/2 BAGS, 2 TO 4 INCH SLUMP RANGE, 5% TO 8% AIR CONTENT. CLASS A CONCRETE SHALL BE PROPORTIONED IN ACCORDANCE WITH ACI 211.1. ALL READY MIXED CONCRETE SHALL BE MIXED, DELIVERED, AND PLACED IN ACCORDANCE WITH ASTM C-94.
- 12. FORMS SHALL BE CONSTRUCTED OF WOOD, PLYWOOD, STEEL, OR OTHER APPROVED MATERIALS AND SHALL BE MORTAR TIGHT. THE FORMS AND ASSOCIATED FALSE WORK SHALL BE SUBSTANTIAL AND UNYIELDING AND SHALL BE CONSTRUCTED SO THAT THE FINISHED CONCRETE WILL CONFORM TO THE DIMENSIONS AND CONTOURS SHOWN ON THE DRAWINGS. FORM SURFACES SHALL BE SMOOTH AND FREE FROM HOLES, DENTS, SAGS, AND OTHER IRREGULARITIES. THE FORMS SHALL BE COATED WITH A NON-STAINING OIL BEFORE CONCRETE IS POURED. REMOVE FORMS A MINIMUM OF 24 HOURS AFTER PLACING CONCRETE.
- 13. ALL CONCRETE SHALL BE PLACED IN ACCORDANCE WITH ACI 304. FORMED CONCRETE SHALL BE UNIFORMLY CONSOLIDATED USING A MECHANICAL VIBRATOR. COMPLY WITH THE RECOMMENDATIONS OF ACI 306R FOR COLD WEATHER PLACEMENT AND ACI 305R FOR HOT WEATHER PLACEMENT. PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND TO ENSURE PROPER MOISTURE CONTROL DURING
- 14. CONCRETE SAW CUTTING SHALL BE DONE AS SOON AS POURED CONCRETE HAS CURED AND CAN SUPPORT WEIGHT. PROVIDE A NEAT, STRAIGHT CUT WHICH IS TRUE IN ALIGNMENT. ALL JOINTS ARE TO CONTINUE FROM PROPOSED SIDEWALK OR CONCRETE PAVEMENT THROUGH THE CURB.
- 15. ALL CONSTRUCTION JOINTS SHALL BE SAWN, CLEANED OF DEBRIS, BLOWN DRY AND IMMEDIATELY SEALED WITH THE APPROPRIATE SEALANT ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- 16. ALL SIDEWALKS SHALL COMPLY WITH AMERICAN WITH DISABILITIES ACT (ADA) STANDARDS. MAXIMUM CROSS SLOPE SHALL BE 1:50 AND MAXIMUM LONGITUDINAL SLOPE SHALL BE 1:20.

#### **EARTHWORK NOTES:**

- CONTRACTOR SHALL REFER TO THE GEOTECHNICAL ENGINEERING INVESTIGATION REPORT FOR INFORMATION ABOUT THE SOIL CONDITIONS. GEOTECHNICAL REPORT WILL BE PROVIDED BY ENGINEER AT REQUEST BY CONTRACTOR.
- EARTHWORK SHALL BE COMPLETED IN ACCORDANCE WITH PUTNAM COUNTY AND INDOT STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL NOTIFY ENGINEER AND THE OWNER AT LEAST 48 HOURS BEFORE STARTING EARTHWORK OPERATIONS.
- 3. THE CONTRACTOR SHALL EMPLOY A QUALIFIED GEOTECHNICAL ENGINEER FOR THIS PROJECT. THE GEOTECHNICAL ENGINEER SHALL INSPECT SOIL CONDITIONS, PROOF-ROLLING, AND FIELD DENSITY OF COMPACTED FILLS. ALL SUBGRADES AND FILLS SHALL MEET OR EXCEED THE COMPACTION REQUIREMENTS SPECIFIED BELOW. BASED UPON REPORTS FROM THE GEOTECHNICAL ENGINEER, SUBGRADES OR FILLS WHICH ARE BELOW SPECIFIED DENSITIES REQUIRE ADDITIONAL COMPACTION WORK AND TESTING AT NO ADDITIONAL EXPENSE TO THE OWNER.
- 4. TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR USE DURING FINISH GRADING AND LANDSCAPE WORK. STRIPPED TOPSOILS SHALL BE STOCKPILED AS SHOWN IN STORMWATER POLLUTION PREVENTION PLAN. TOPSOIL IS DEFINED AS FERTILE, FRIABLE NATURAL LOAM SURFACE SOILS, REASONABLY FREE OF SUBSOIL CLAY LUMPS, BRUSH, AND OTHER LITTER OR STONES LARGER THAN 1/2 INCH. LOOSE DEBRIS, TOPSOILS AND UNSUITABLE SUBSOILS SHALL BE STRIPPED FROM AREAS OF THE SITE THAT ARE TO BE DEVELOPED. THE DEPTH OF STRIPPING OF SURFACE SOILS MAY VARY BY LOCATION WITHIN THE SITE. THE ENGINEER SHALL DESIGNATE ON-SITE LOCATIONS TO STORE OR DEPOSIT STRIPPED SOILS. CONTRACTOR SHALL REMOVE TOPSOILS AND UNSUITABLE SUBSOILS FROM ALL AREAS TO BE OCCUPIED BY BUILDINGS AND PAVEMENTS. IN ADDITION, ANY AREAS TO BE UTILIZED AS BORROW AREAS FOR FILL MATERIAL MUST ALSO BE STRIPPED OF TOPSOILS. IF THE AMOUNT OF STOCKPILED TOPSOIL EXCEEDS QUANTITY REQUIRED, THE EXCESS SHALL BE SPREAD ON THE SITE WHERE DIRECTED BY THE ENGINEER OR DISPOSED OF OFFSITE.
- . ALL COMPACTED FILL AND BACKFILL MATERIAL SHALL BE SATISFACTORY MATERIAL APPROVED BY THE GEOTECHNICAL ENGINEER, ALL FILL MATERIAL SHALL CONTAIN LESS THAN 3-PERCENT ORGANIC MATERIAL BY WEIGHT, LARGE ROCK GREATER THAN 4-INCHES, RUBBISH, OR OTHER UNSUITABLE MATERIAL. SAMPLE: OF THE FILL MATERIALS SHALL BE SUBMITTED TO THE GEOTECHNICAL ENGINEER FOR APPROVAL PRIOR TO PLACEMENT. ALL FILL EMBANKMENTS AND UNDER BUILDING PAVED AREAS, SIDEWALKS, AND PADS SHALL BE COMPACTED TO 98% OF MAXIMUM DRY DENSITY AND SHALL BE WITHIN  $\pm /-2\%$  OF OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM DENSITY TEST D-698. THE AREA OF COMPACTED FILL FOR THE BUILDING SHALL EXTEND AT LEAST 5-FEET BEYOND THE FOUNDATION WALLS. ALL FILLS OUTSIDE OF PAVEMENT, SIDEWALK OR BUILDING SHALL BE COMPACTED TO 90% MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM DENSITY TEST D-698. FILL MATERIALS SHALL BE PLACED IN LIFTS NOT TO EXCEED 8-INCHES IN LOOSE THICKNESS AND SHOULD BE SPRINKLED WITH WATER AS REQUIRED TO ENSURE COMPACTION SPECIFICATIONS DETAILED ABOVE ARE MET. EXCESSIVELY WET MATERIAL SHALL BE SPREAD AND DRIED SUFFICIENTLY SO THAT THE MOISTURE CONTENT WILL PERMIT PROPER COMPACTION. EACH LAYER SHALL BE LINIFORMLY COMPACTED USING A VIBRATORY COMPACTOR OR OTHER APPROVED EQUIPMENT SUITED TO THE LOCATION AND MATERIAL BEING PLACED. LIFTS SHALL NOT EXCEED 4-INCHES IN LOOSE THICKNESS FOR MATERIAL COMPACTED BY HAND OPERATED TAMPERS.
- 6. IN-PLACE DENSITY TESTS SHALL BE PERFORMED THROUGHOUT THE BUILDING FILL EMBANKMENTS. AT EACH COMPACTED FILL AND BACKFILL LIFT, ONE (1) DENSITY TEST SHALL BE PERFORMED FOR EVERY 5000 SQ. FT OF FILL PLACED, BUT IN NO CASE FEWER THAN TWO (2) TESTS PER LIFT. AREAS WHERE RESULTS OF THE IN-PLACE DENSITY TESTS INDICATE COMPACTION SPECIFICATIONS ARE NOT OBTAINED SHALL BE REWORKED UNTIL COMPACTION CRITERIA IS ACHIEVED. APPROVED COMPACTED SUBGRADE DISTURBED BY CONTRACTOR'S SUBSEQUENT ACTIVITY OR ADVERSE WEATHER CONDITIONS SHALL BE SCARIFIED AND RECOMPACTED AS SPECIFIED ABOVE PRIOR TO CONTINUATION OF CONSTRUCTION. THE GEOTECHNICAL ENGINEER SHALL ISSUE A REPORT DOCUMENTING THE SUFFICIENCY OF THE FINAL COMPACTED FILL TO
- 7. UPON REACHING SUBGRADE ELEVATION IN AREAS THAT HAVE BEEN FILLED AND COMPACTED, OR IN AREAS WHERE THE PAVEMENT SUBGRADE ELEVATIONS ARE ACHIEVED WITHOUT FILL OPERATIONS, CONTRACTOR SHALL PROOF-ROLL SUBGRADE WITH A FULLY LOADED TRI-AXLE DUMP TRUCK, MEDIUM WEIGHT ROLLER OR OTHER APPROVED EQUIPMENT, TO DETERMINE IF ANY POCKETS OF SOFT, UNSUITABLE MATERIALS ARE PRESENT. POCKETS OF UNSUITABLE MATERIALS SHALL BE REMOVED AND REPLACED WITH SUBGRADE REINFORCEMENT OR COMPACTED GRANULAR FILL AS DIRECTED BY THE GEOTECHNICAL ENGINEER. GEOTECHNICAL ENGINEER SHALL BE PRESENT DURING PROOF—ROLLING OPERATIONS AND SHALL SUBMIT A REPORT OF ACCEPTANCE TO ENGINEER.
- EXCAVATE FOR STRUCTURES TO WITHIN 0.1 FOOT OF THE DESIGN ELEVATIONS AND DIMENSIONS. EXTEND EXCAVATIONS A SUFFICIENT DISTANCE FROM STRUCTURES FOR PLACING AND REMOVING CONCRETE FORMS. OO NOT DISTURB THE BOTTOM OF THE EXCAVATION INTENDED FOR BEARING SURFACE. EXCAVATE BY HAND TO FINAL GRADE BEFORE PLACING CONCRETE FORMS AND REINFORCEMENT SO FOOTINGS AND FOUNDATIONS BEAR ON UNDISTURBED COMPACTED SOILS.
- 9. BACKFILL MATERIAL SHALL MEET THE REQUIREMENTS OF AND SHALL BE COMPACTED ACCORDING TO THE EARTHWORK SPECIFICATIONS. WHERE BACKFILLING IS REQUIRED ON BOTH SIDES OF A FOUNDATION WALL, THE BACKFILL MATERIAL SHALL BE PLACED EQUALLY ON BOTH SIDES TO AVOID UNBALANCED SOIL PRESSURE ON ONE SIDE OF THE WALL.
- 10. TRENCHES UNDER PAVED AREAS SHALL BE BACKFILLED AND COMPACTED WITH APPROVED GRANULAR MATERIAL PER CONSTRUCTION DETAILS. GRANULAR MATERIAL SHALL EXTEND 5 FEET BEYOND THE PAVEMENT WITH A 1:1 SLOPE OUTWARD TO THE BOTTOM OF THE TRENCH.
- 11. DUE TO SITE CONSTRAINTS. THE EARTHWORK FOR THE SITE AS DESIGNED MAY OR MAY NOT BE BALANCED. CONTRACTOR SHALL REVIEW THE EXISTING SITE CONDITIONS AND INCLUDE IN THEIR BID ALL EARTHWORK COSTS, INCLUDING IMPORTS AND/OR EXPORTS NECESSARY TO MAKE THE SITE BALANCE.

#### **GRADING NOTES:**

- CONTRACTOR SHALL TAKE PARTICULAR CARE WHEN GRADING IN AND AROUND EXISTING UTILITY LINES AND EQUIPMENT. VERIFY COVER REQUIREMENTS BY UTILITY CONTRACTORS AND/OR UTILITY COMPANIES SO AS NOT TO
- 2. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES 48-HOURS BEFORE SITE GRADING IS TO START TO VERIFY IF ANY UTILITIES ARE PRESENT ON SITE. ALL VERIFICATIONS (LOCATION, SIZE AND DEPTH), SHALL BE MADE BY THE APPROPRIATE UTILITY COMPANIES. WHEN GRADING OPERATIONS MAY IMPACT EXISTING UTILITIES, CONTRACTOR SHALL NOTIFY THE UTILITY COMPANY SO A REPRESENTATIVE CAN BE PRESENT TO INSTRUCT AND OBSERVE DURING
- CONTRACTOR SHALL ADJUST ALL EXISTING SURFACE INFRASTRUCTURE (HYDRANTS, VALVES, HANDHOLES, CASTINGS, IRRIGATION SYSTEM, UTILITY PEDESTALS, ETC.) AS REQUIRED TO MEET PROPOSED GRADE.
- AFTER STRIPPING TOPSOIL MATERIAL, PROOFROLL SHALL BE PERFORMED BY A LOADED TANDEM PNEUMATIC TIRE DUMP TRUCK MINIMUM GROSS VEHICLE WEIGHT OF 22 TONS. THE TIRES SHALL BE OPERATED AT INFLATION PRESSURES BETWEEN 70-80 PSI UNLESS OTHERWISE NOTED BY THE GOETECHNICAL ENGINEER. THE TIRES SHALL BE INFLATED WITH AIR ONLY, NO LIQUID SHALL BE USED. THE PROOFROLL SHALL BE COMPLETED UNDER INSPECTION OF SOILS FIRM TO DETERMINE LOCATIONS OF ANY POCKETS OF UNSUITABLE MATERIAL. THE NECESSITY FOR SUBDRAINS AND/OR REMOVAL OF ANY UNSUITABLE MATERIAL WILL BE DETERMINED AT THE TIME OF CONSTRUCTION.
- FOLLOWING THE COMPLETION OF SITE GRADING AND SUBSURFACE UTILITY INSTALLATION, TOPSOIL SHALL BE PLACED IN AREAS DESIGNATED FOR SEEDING, SODDING, OR LANDSCAPING TO A MINIMUM DEPTH OF 6 INCHES. THE FINISHED SURFACE SHALL BE UNIFORMLY AND SMOOTHLY GRADED AND SHALL BE FREE OF DEPRESSED AREAS WHERE WATER WILL POND. LIGHTLY COMPACT TOPSOIL AFTER PLACEMENT. THE FINISHED SURFACE GRADES SHALL NOT BE MORE THAN 0.1 FOOT ABOVE OR BELOW THE GRADES INDICATED ON THE PLANS. PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING GRADES AND ADJACENT FILL EMBANKMENTS.
- 6. PROVIDE POSITIVE DRAINAGE WITHOUT PONDING IN ALL AREAS. UPON REACHING FINAL GRADE, CONTRACTOR SHALL CORRECT ANY, STANDING WATER CONDITIONS.
- 7. ALL PROPOSED SPOT ELEVATIONS OR CONTOURS ARE THE FINAL PAVEMENT AND FINAL GRADE ELEVATIONS.
- 8. SEE APPROPRIATE DETAILS TO DETERMINE SUBGRADE ELEVATIONS BELOW FINISH GRADE ELEVATIONS INDICATED. CONTRACTOR SHALL PERPETUATE ANY SUBSURFACE DRAIN TILES OR PIPES ENCOUNTERED DURING CONSTRUCTION AND PROVIDE POSITIVE OUTLET TO DOWNSTREAM RECEIVING SYSTEM. CONTRACTOR SHALL NOTIFY THE ENGINEER WITH ANY CIRCUMSTANCES WHERE THIS CANNOT BE ACCOMPLISHED.

#### WATER SYSTEM NOTES:

DIRECTION SHALL BE RIGHT-HAND OPEN/COUNTERCLOCKWISE.

- ALL WATER LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH WATER MAIN SPECIFICATIONS OR SOUTH 43 WATER ASSOCIATION, INC. TYPICAL CONSTRUCTION STANDARDS, SPECIFICATIONS AND DETAILS. AND SHALL MEET THE MINIMUM REQUIREMENTS OF THE INDIANA STATE BOARD OF HEALTH.
- 2. THE CONTRACTOR SHALL FURNISH, INSTALL AND TEST ALL GATE VALVES. VALVES SHALL BE INSTALLED WITH VALVE BOX ALIGNERS (POSI-CAPS) AND MUST BE CENTERED PRIOR TO ACCEPTANCE. VALVE OPENING
- WATER MAINS AND SERVICE LINES SHALL HAVE A MINIMUM OF 3'-6" OF COVER OVER TOP OF THE PIPE. A MINIMUM OF 18-INCH VERTICAL SEPARATION AND 10'-0" HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN THE OUTSIDE WALLS OF WATER MAINS AND SEWERS (SANITARY AND STORM).
- 4. CONTRACTOR SHALL PERFORM ALL OF THE WORK ASSOCIATED WITH CONNECTIONS TO THE EXISTING FACILITIES. THE CONTRACTOR SHALL COORDINATE THE CLOSURE OF VALVES, INSPECTION, AND ALL SERVICE SHUT-OFFS WITH LOCAL UTILITY COMPANY.
- 5. THE COMPLETED WATER LINE SHALL BE TESTED AND DISINFECTED IN ACCORDANCE WITH WATER MAIN SPECIFICATIONS OR SOUTH 43 WATER ASSOCIATION, INC. REQUIREMENTS.
- 6. IN THE EVENT OF A CONFLICT BETWEEN WATER LINES AND STORM DRAINS, CONTRACTOR SHALL EITHER ADJUST THE WATER LINE IN SUCH A MANNER SO THAT THE PIPE MANUFACTURER'S RECOMMENDATIONS ON PIPE DEFLECTION AND JOINT STRESS ARE NOT EXCEEDED.

#### STORM SEWER NOTES:

- CONSTRUCTION OF STORM DRAINS SHALL BE IN ACCORDANCE WITH THE STORM SEWER SPECIFICATIONS OR PUTNAM COUNTY TYPICAL CONSTRUCTION STANDARDS, SPECIFICATIONS AND DETAILS.
- 2. ALL MAIN LINE STORM SEWER PIPE SHALL BE CONSTRUCTED OF REINFORCED CONCRETE PIPE (RCP) OR HIGH DENSITY POLYETHYLENE (HDPE) PIPE. STORM DRAIN PIPE FOR ROOF DOWNSPOUT AND OTHER MISCELLANEOUS CONNECTIONS SHALL BE CONSTRUCTED OF POLYVINYL CHLORIDE (PVC) SDR-35 PIPE AND SHALL MEET OR EXCEED ASTM D-3034 OR ASTM F-679, AS APPLICABLE. JOINTS SHALL BE GASKETED BELL AND SPIGOT TYPE WITH THE BELL END MADE INTEGRAL WITH THE PIPE. PIPE MATERIAL SUBSTITUTIONS
- 3. A MINIMUM OF 18" VERTICAL SEPARATION AND 10'-0" HORIZONTAL SEPARATION TO BE MAINTAINED BETWEEN THE OUTSIDE WALLS OF WATER MAINS, HYDRANTS AND SEWERS (SANITARY AND STORM).
- 4. INLETS, JUNCTION BOXES AND MANHOLES MUST BE SIZED PROPERLY TO ACCOMMODATE THE PROPOSED PIPE
- 5. PIPE LENGTHS SHOWN ON THE DRAWINGS ARE FOR HYDRAULIC CALCULATION PURPOSES ONLY. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING EXACT PIPE LENGTHS REQUIRED FOR INSTALLATION.

#### **EROSION CONTROL NOTES:**

SHALL BE REQUESTED IN WRITING TO ENGINEER.

- 1. ALL PROPOSED EROSION AND SEDIMENT CONTROL SHALL BE IN ACCORDANCE WITH PUTNAM COUNTY AND INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (IDEM) STANDARDS AND SPECIFICATIONS. DISCREPANCIES BETWEEN THE PLANS AND THE JURISDICTIONAL REQUIREMENTS SHALL NOT ALLEVIATE THE CONTRACTOR FROM ADHERING TO THE REQUIREMENTS AS SET FORTH IN THE STANDARDS AND
- 2. PERIMETER EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY COMMENCING.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SOIL AND EROSION CONTROL AND DUST CONTROL MEASURES PRIOR TO AND DURING CONSTRUCTION. CONTRACTOR SHALL MAINTAIN THE MEASURES THROUGHOUT THI CONSTRUCTION PERIOD TO PREVENT EROSION OF SOIL AND ENTRY OF SOIL—BEARING WATER AND AIRBORNE DUST ONTO ADJACENT PROPERTIES AND INTO THE PUBLIC STORM WATER FACILITIES.
- 4. THE EROSION CONTROL PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SEDIMENT FROM LEAVING THE SITE. ADDITIONAL EROSION AND
- SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON SITE INSPECTION. 5. ALL CLEARING, DEMOLITION, EARTHWORK AND GRADING SHALL BE DONE IN A WAY THAT WILL MINIMIZE
- 6. SEDIMENT LADEN WATER SHALL BE DETAINED BY EROSION CONTROL PRACTICES AS NEEDED TO MINIMIZE SEDIMENTATION IN RECEIVING WATER. NO STORM WATER SHALL BE DISCHARGED FROM THE SITE IN A MANNER THAT CAUSES EROSION AT THE POINT OF DISCHARGE, SEDIMENT-LADEN GROUNDWATER ENCOUNTERED DURING TRENCHING, BORING OR OTHER EXCAVATION ACTIVITIES SHALL BE PUMPED TO A SEDIMENT TRAPPING DEVICE PRIOR TO BEING DISCHARGED INTO A STREAM, POND, SWALE OR STORM INLET.
- WASTE AND UNUSED BUILDING MATERIALS SHALL NOT BE ALLOWED TO BE CARRIED FROM THE SITE BY STORM WATER RUNOFF. PROPER DISPOSAL OF ALL WASTE AND UNUSED BUILDING MATERIALS IS REQUIRED CONTRACTOR SHALL KEEP ALL PUBLIC ROADWAYS CLEAN AND FREE FROM ANY CONSTRUCTION RELATED
- 8. ACTIONS MUST BE TAKEN TO MINIMIZE THE TRACKING OF MUD AND SOIL FROM CONSTRUCTION AREAS ONTO PUBLIC ROADWAYS. SOIL TRACKED ONTO THE ROADWAY SHALL BE REMOVED DAILY. REMOVAL OF ACCUMULATED SEDIMENT SHALL NOT INCLUDE FLUSHING WITH WATER. CLEARED SEDIMENT SHALL BE
- RETURNED TO THE SITE FOR DISPOSAL. 9. SOIL WHICH HAS ACCUMULATED NEXT TO EROSION CONTROL DEVICES SHALL BE COLLECTED AND RE-DISTRIBUTED ON SITE AFTER EACH RAINFALL EVENT AND AT LEAST ONCE PER WEEK.

10. PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC IF INSTALLATION OF STORM DRAINAGE SYSTEM IS

- INTERRUPTED FOR ANY REASON. 11. WHERE CONSTRUCTION OR LAND DISTURBANCE ACTIVITY WILL OR HAS TEMPORARILY CEASED ON ANY PORTION OF THE SITE, TEMPORARY SITE STABILIZATION MEASURES SHALL BE REQUIRED AS SOON AS PRACTICABLE, BUT NO LATER THAN 14 CALENDAR DAYS AFTER THE ACTIVITY HAS CEASED. THE DURATION OF TIME WHICH AN AREA REMAINS EXPOSED SHALL BE KEPT TO A PRACTICAL MINIMUM, ALTERNATIVE MEASURES OF SITE STABILIZATION ARE ACCEPTABLE IF THE CONTRACTOR CAN DEMONSTRATE THEY HAVE
- IMPLEMENTED EROSION AND SEDIMENT CONTROL MEASURES ADEQUATE TO PREVENT SEDIMENT DISCHARGE. 12. TOPSOIL REPLACEMENT SHALL TAKE PLACE FROM MARCH 1 TO OCTOBER 31. STOCKPILE TOPSOIL AT ALL OTHER TIMES OF THE YEAR. PERMANENT AND FINAL VEGETATION, AND STRUCTURAL EROSION CONTROL
- 13. SOIL STOCKPILES SHALL BE LOCATED AWAY FROM STREAMS, PONDS, SWALES, AND CATCH BASINS. STOCKPILES SHALL BE SEEDED, MULCHED, AND ADEQUATELY CONTAINED THROUGH THE USE OF SILT FENCE.

DEVICES SHALL BE INSTALLED WITHIN SEVEN (7) DAYS AFTER FINAL GRADING, OR AS SOON AS POSSIBLE.

- 14. INSTALL INLET PROTECTION ON STORM INLETS IMMEDIATELY UPON COMPLETION OF THE STRUCTURE. REMOVE INLET PROTECTION FOR PAVING OPERATION AND REPLACE AFTER PAVING IS COMPLETE. INLET PROTECTION
- 15. DETENTION BASINS, IF APPLICABLE, SHALL BE CONSTRUCTED FIRST AND SHALL PERFORM AS SEDIMENT BASINS DURING CONSTRUCTION UNTIL THE CONTRIBUTING DRAINAGE AREAS ARE SEEDED AND STABILIZED.

SHALL REMAIN IN PLACE UNTIL VEGETATION IS ESTABLISHED ON ALL DISTURBED AREAS.

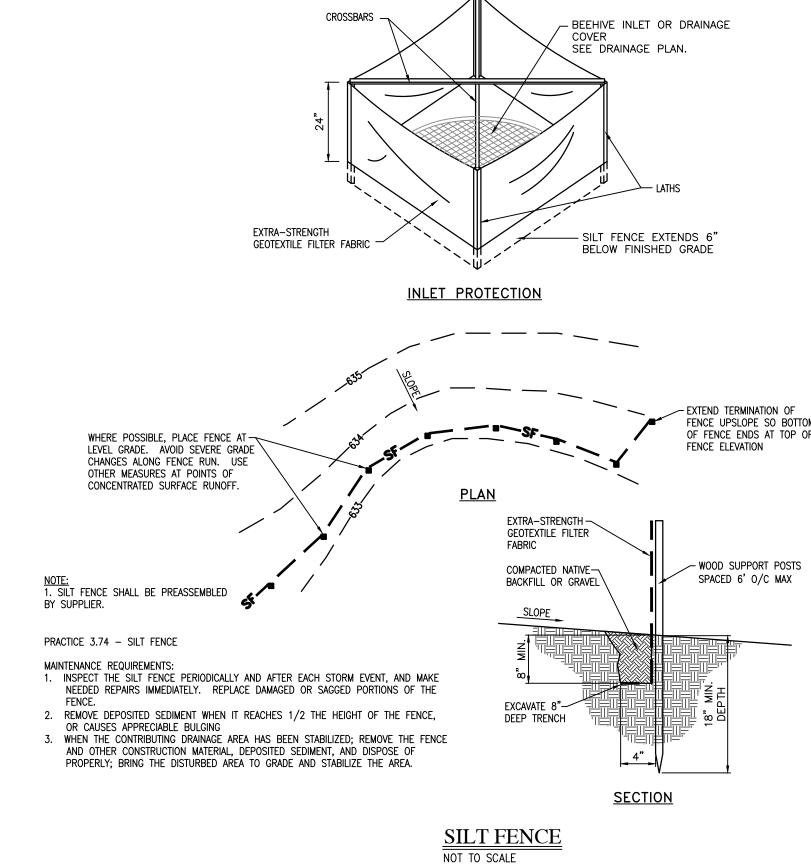
16. PRIOR TO COMPLETION OF THE PROJECT, CONTRACTOR SHALL CLEAN OUT ALL STORM DRAINAGE

17. CONTRACTOR SHALL REMOVE ALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES ONCE

STRUCTURES AND RESTORE ALL DITCHES AND PONDS TO DESIGNED GRADES.

CONSTRUCTION IS COMPLETE AND THE SITE HAS BEEN STABILIZED.

OR CAUSES APPRECIABLE BULGING AND OTHER CONSTRUCTION MATERIAL, DEPOSITED SEDIMENT, AND DISPOSE OF PROPERLY; BRING THE DISTURBED AREA TO GRADE AND STABILIZE THE AREA.



CULVERT PIPE DIVERSION RIDGE PLACE AT LEAST 6" COURSE AGGREGATE (INDOT #2 CRUSHED STONE) OVER STABLE SUBGRADE. GEOTEXTILE FABRIC ÚNDER STONE IS REQUIRED. TEMPORARY STONE FNTRANCE MAY SLOPE TOWARD OR AWAY FROM PUBLIC ROAD. 8" HIGH DIVERSION RIDGE TO -BE INSTALLED WHEN SLOPE TOWARD PUBLIC ROAD EXCEEDS 2%. GEOTEXTILE FABRIC PRACTICE 3.01 - TEMPORARY GRAVEL CONSTRUCTION ENTRANCE CULVERT PIPE AS — NEEDED TO MAINTAIN MAINTENANCE REQUIREMENTS PROPER PUBLIC ROAD 1. INSPECT ENTRANCE PAD WEEKLY, AFTER STORM EVENTS, AND DRAINAGE. AFTER HEAVY USE. RESHAPE PAD AS NEEDED TO MAINTAIN DRAINAGE AND RUNOFF CONTROL. 2. TOP DRESS WITH STONE TO MAINTAIN 6" CLEAN DEPTH THROUGHOUT FNTRANCE

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE

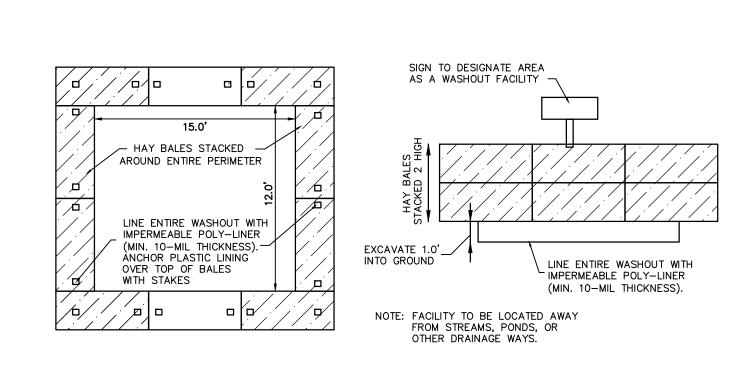
NOT-TO-SCALE

3. IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED

DO NOT FLUSH WITH WATER UNLESS SEDIMENT TRAP IS

INSTALLED IN ROADWAY DRAINAGE IMPROVEMENTS.

ONTO PUBLIC ROAD. CLEAN BY SCRAPING OR SWEEPING ONLY



CONCRETE WASHOUT DETAIL NOT-TO-SCALE

COPYRIGHT 2024 BY FANNING/HOWEY ASSOCIATES, INC.

#### **SOUTH PUTNAM HS** TRACK AND FIELD RENOVATION

1780 US-40, **GREENCASTLE** IN 46135 (765) 653-3148

**SOUTH PUTNAM COMMUNITY SCHOOL CORPORATION** 





317-347-3663 WWW.HWCENGINEERING.COM 135 N. PENNSYLVANIA STREET, SUITE 2800. INDIANAPOLIS. IN., 46204



KEY PLAN



STATE OF

Ryan A. Robinson PROJECT MANAGER: RR DRAWN BY: BP

PROJECT NUMBER: 222152.06 (FH), 2024-005-S (HWC)

PROJECT ISSUE DATE: JANUARY 30TH, 2024 DESCRIPTION DATE

**GENERAL NOTES &** STORMWATER POLLUTION PREVENTION DETAILS

VEHICLE & EQUIPMENT MAINTENANCE DESCRIPTION AND PURPOSE FLUID LEAKS). IMPLEMENTATION: SURFACE IN A DEDICATED MAINTENANCE AREA. SPILL PROTECTION DEVICES. DISPOSE OF PROPERLY REMOVE FROM SITE. CONTAINMENT AND COVERS FOR THESE MATERIALS IF STORED ONSITE. PROPERLY DISPOSE OF OR RECYCLE USED BATTERIES. DO NOT BURY USED TIRES. REPAIR LEAKS OF FLUIDS AND OIL IMMEDIATELY. KEEP AMPLE SUPPLIES OF SPILL CLEANUP MATERIALS ONSITE. MAINTAIN WASTE FLUID CONTAINERS IN LEAK PROOF CONDITION. <u>VEHICLE AND EQUIPMENT FUELING</u>
DESCRIPTION AND PURPOSE IN PROPER FUELING PROCEDURES. LIMITATIONS VEHICLES AND FOUIPMENT WITH A STABILIZED CONSTRUCTION ENTRANCE/EXIT. ELIMINATING THE NEED FOR A SEPARATE FUELING AREA AT A SITE. DISCOURAGE "TOPPING OFF' OF FUEL TANKS. ON FUELING TRUCKS AND SHOULD BE DISPOSED OF PROPERLY AFTER USE. ABSORBENT MATERIALS PROMPTLY AND DISPOSE OF PROPERLY. THE EQUIPMENT TO DESIGNATED FUELING AREAS. TRAIN EMPLOYEES AND SUBCONTRACTORS IN PROPER FUELING AND CLEANUP PROCEDURES. DEDICATED FUELING AREAS SHOULD BE PROTECTED FROM STORMWATER RUNON AND RUNOFF AND SHOULD BE LOCATED AT LEAST 50 FT AWAY FROM DOWNSTREAM DRAINAGE FACILITIES AND WATERCOURSES. FUELING MUST BE PERFORMED ON LEVEL GRADE AREAS. PROTECT FUELING AREAS WITH BERMS AND DIKES TO PREVENT RUNON, RUNOFF, AND TO CONTAIN NOZZLES USED IN VEHICLE AND EQUIPMENT FUELING SHOULD BE EQUIPPED WITH AN AUTOMATIC SHUTOFF TO CONTROL DRIPS, FUFLING OPERATIONS SHOULD NOT BE LEFT UNATTENDED. FEDERAL, STATE, AND LOCAL REQUIREMENTS SHOULD BE OBSERVED FOR ANY STATIONARY ABOVE GROUND STORAGE TANKS.

VEHICLES AND EQUIPMENT SHOULD BE INSPECTED EACH DAY OF USE FOR LEAKS. LEAKS SHOULD BE

IMMEDIATELY CLEAN UP SPILLS AND PROPERLY DISPOSE OF CONTAMINATED SOIL AND CLEANUP

THE FOLLOWING STEPS WILL HELP REDUCE STORMWATER POLLUTION FROM CONCRETE WASTES:
DISCUSS THE CONCRETE MANAGEMENT TECHNIQUES DESCRIBED IN THIS BMP (SUCH AS HANDLING OF

INCORPORATE REQUIREMENTS FOR CONCRETE WASTE MANAGEMENT INTO MATERIAL SUPPLIES AND

DO NOT WASH OUT CONCRETE TRUCKS INTO STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS.

LOCATE WASHOUT AREA AT LEAST 50 FEET FROM STORM DRAINS, OPEN DITCHES, OR

WASH OUT WASTES INTO THE TEMPORARY PIT WHERE THE CONCRETE CAN SET, BE

AVOID CREATING RUNOFF BY DRAINING WATER TO A BERMED OR LEVEL AREA WHEN

STORM DRAIN. COLLECT AND RETURN SWEEPINGS TO AGGREGATE BASE STOCKPILE OR

DO NOT WASH SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE INTO THE STREET OR

WASHING CONCRETE TO REMOVE FINE PARTICLES AND EXPOSE THE AGGREGATE.

SOLID WASTE MANAGEMENT PROCEDURES AND PRACTICES ARE DESIGNED TO PREVENT OR REDUCE THE

THIS BMP IS SUITABLE FOR CONSTRUCTION SITES WHERE THE FOLLOWING WASTES ARE GENERATED OR

SOLID WASTE GENERATED FROM TREES AND SHRUBS REMOVED DURING LAND CLEARING, DEMOLITION OF

SCRAP OR SURPLUS BUILDING MATERIALS INCLUDING SCRAP METALS, RUBBER, PLASTIC, GLASS PIECES

CONSTRUCTION WASTES INCLUDING BRICK, MORTAR, TIMBER, STEEL AND METAL SCRAPS, PIPE AND

INFORM CONTRACTORS THAT YOU WILL ACCEPT ONLY WATERTIGHT DUMPSTERS FOR ONSITE USE.

INSPECT DUMPSTERS FOR LEAKS AND REPAIR ANY DUMPSTER THAT IS NOT WATERTIGHT.

COLLECT SITE TRASH DAILY, ESPECIALLY DURING RAINY AND WINDY CONDITIONS.

ARRANGE FOR REGULAR WASTE COLLECTION BEFORE CONTAINERS OVERFLOW.

LITTERING ON THE PROJECT SITE SHOULD BE PROHIBITED.

DISPOSED OF BY THE TRASH HAULING CONTRACTOR.

GRATES, TRASH RACKS, AND DITCH LINES SHOULD BE A PRIORITY.

LOCATIONS WHERE WORKERS CONGREGATE FOR LUNCH AND BREAK PERIODS.

THE CONTAINER TO KEEP RAIN OUT OR TO PREVENT LOSS OF WASTES WHEN IT IS WINDY.

ELECTRICAL CUTTINGS, NONHAZARDOUS EQUIPMENT PARTS, STYROFOAM AND OTHER MATERIALS FROM

PROVIDE AN ADEQUATE NUMBER OF CONTAINERS WITH LIDS OR COVERS THAT CAN BE PLACED OVER

PLAN FOR ADDITIONAL CONTAINERS AND MORE FREQUENT PICKUP DURING THE DEMOLITION PHASE OF

REMOVE THIS SOLID WASTE PROMPTLY SINCE EROSION AND SEDIMENT CONTROL DEVICES TEND TO

MAKE SURE THAT TOXIC LIQUID WASTES (USED OILS, SOLVENTS, AND PAINTS) AND CHEMICALS (ACIDS,

DO NOT HOSE OUT DUMPSTERS ON THE CONSTRUCTION SITE. LEAVE DUMPSTER CLEANING TO THE TRASH

PESTICIDES, ADDITIVES, CURING COMPOUNDS) ARE NOT DISPOSED OF IN DUMPSTERS DESIGNATED FOR

CLEAN UP IMMEDIATELY IF A CONTAINER DOES SPILL.
MAKE SURE THAT CONSTRUCTION WASTE IS COLLECTED, REMOVED, AND DISPOSED OF ONLY AT

INCORPORATE REQUIREMENTS FOR SOLID WASTE MANAGEMENT INTO BUILDER AND SUBCONTRACTOR

LITTER FROM WORK AREAS WITHIN THE CONSTRUCTION LIMITS OF THE PROJECT SITE SHOULD BE

SHOULD NOT BE PLACED IN OR NEXT TO DRAIN INLETS, STORMWATER DRAINAGE SYSTEMS, OR

DUMPSTERS OF SUFFICIENT SIZE AND NUMBER SHOULD BE PROVIDED TO CONTAIN THE SOLID WASTE

FULL DUMPSTERS SHOULD BE REMOVED FROM THE PROJECT SITE AND THE CONTENTS SHOULD BE

TO PREVENT CLOGGING OF THE STORM DRAINAGE SYSTEM, LITTER AND DEBRIS REMOVAL FROM DRAINAGE

TRASH RECEPTACLES SHOULD BE PROVIDED IN THE CONTRACTOR'S YARD, FIELD TRAILER AREAS, AND AT

COLLECTED AND PLACED IN WATERTIGHT DUMPSTERS AT LEAST WEEKLY, REGARDLESS OF WHETHER THE

LITTER WAS GENERATED BY THE CONTRACTOR, THE PUBLIC, OR OTHERS. COLLECTED LITTER AND DEBRIS

DOMESTIC WASTES INCLUDING FOOD CONTAINERS SUCH AS BEVERAGE CANS, COFFEE CUPS, PAPER BAGS,

DISCHARGE OF POLLUTANTS TO STORMWATER FROM SOLID OR CONSTRUCTION WASTE BY PROVIDING

DESIGNATED WASTE COLLECTION AREAS AND CONTAINERS, ARRANGING FOR REGULAR DISPOSAL, AND

DO NOT ALLOW EXCESS CONCRETE TO BE DUMPED ONSITE, EXCEPT IN DESIGNATED AREAS.

STORE DRY AND WET MATERIALS UNDER COVER, AWAY FROM DRAINAGE AREAS.

BROKEN UP. AND THEN DISPOSED PROPERLY.

EXISTING STRUCTURES (RUBBLE), AND BUILDING CONSTRUCTION.

PACKAGING MATERIALS INCLUDING WOOD, PAPER, AND PLASTIC.

FRANSPORT AND PACKAGE CONSTRUCTION MATERIALS

SELECT DESIGNATED WASTE COLLECTION AREAS ONSITE.

PERFORM WASHOUT OF CONCRETE TRUCKS OFFSITE OR IN DESIGNATED AREAS ONLY.

CONCRETE WASTE AND WASHOUT) WITH THE READY MIX CONCRETE SUPPLIER BEFORE ANY DELIVERIES

KEEP AMPLE SUPPLIES OF SPILL CLEANUP MATERIALS ONSITE.

AVOID MIXING EXCESS AMOUNTS OF FRESH CONCRETE.

SUBCONTRACTOR AGREEMENTS.

FOR ONSITE WASHOUT:

SOLID WASTE MANAGEMENT DESCRIPTION AND PURPOSE

IMPLEMENTATION

CONSTRUCTION.

COLLECT LITTER.

AGREEMENTS.

ONSITE VEHICLE AND EQUIPMENT MAINTENANCE SHOULD ONLY BE USED WHERE IT IS IMPRACTICAL TO SEND VEHICLES AND

WITH A STABILIZED CONSTRUCTION ENTRANCE/EXIT. OUTDOOR VEHICLE OR EQUIPMENT MAINTENANCE IS A POTENTIALLY

AND SERVICE, CHANGING OR REPLACEMENT OF FLUIDS, AND OUTDOOR EQUIPMENT STORAGE AND PARKING (ENGINE FLUID

EQUIPMENT OFFSITE FOR MAINTENANCE AND REPAIR. SENDING VEHICLES/EQUIPMENT OFFSITE SHOULD BE DONE IN CONJUNCTION

SIGNIFICANT SOURCE OF STORMWATER POLLUTION. ACTIVITIES THAT CAN CONTAMINATE STORMWATER INCLUDE ENGINE REPAIR

CONSTRUCTION DEBRIS.

HAULING CONTRACTOR.

AUTHORIZED DISPOSAL AREAS.

GENERATED BY THE PROJECT

WATER BODIES.

DISPOSE IN THE TRASH.

TRAINING EMPLOYEES AND SUBCONTRACTORS.

REPAIRED IMMEDIATELY, OR PROBLEM VEHICLES OR EQUIPMENT SHOULD BE REMOVED FROM THE PROJECT

B15 MATERIAL HANDLING AND STORAGE PROCEDURES ASSOCIATED WITH CONSTRUCTION ACTIVITY CONSTRUCTION DEBRIS AND WASTE SHOULD BE REMOVED FROM THE SITE BIWEEKLY OR MORE FREQUENTLY AS NEEDED. CONSTRUCTION MATERIAL VISIBLE TO THE PUBLIC SHOULD BE STORED OR STACKED IN AN ORDERLY PREVENT OR REDUCE THE CONTAMINATION OF STORMWATER RESULTING FROM VEHICLE AND EQUIPMENT MAINTENANCE BY RUNNING A "DRY AND CLEAN SITE". THE BEST OPTION WOULD BE TO PERFORM MAINTENANCE ACTIVITIES AT AN OFFSITE FACILITY IF THIS OPTION IS NOT AVAILABLE THEN WORK STORMWATER RUNON SHOULD BE PREVENTED FROM CONTACTING STORED SOLID WASTE THROUGH THE USE OF BERMS, DIKES, OR OTHER TEMPORARY DIVERSION STRUCTURES OR THROUGH THE USE OF SHOULD BE PERFORMED IN DESIGNATED AREAS ONLY. WHILE PROVIDING COVER FOR MATERIALS STORED OUTSIDE, CHECKING FOR LEAKS AND SPILLS, AND CONTAINING AND CLEANING UP SPILLS IMMEDIATELY. MEASURE TO ELEVATE WASTE FROM SITE SURFACES. SOLID WASTE STORAGE AREAS SHOULD BE LOCATED AT LEAST 50 FT. FROM DRAINAGE FACILITIES AND THESE PROCEDURES ARE SUITABLE ON ALL CONSTRUCTION PROJECTS WHERE AN ONSITE YARD AREA IS WATERCOURSES AND SHOULD NOT BE LOCATED IN AREA PRONE TO FLOODING OR PONDING. NECESSARY FOR STORAGE AND MAINTENANCE OF HEAVY EQUIPMENT AND VEHICLES. NSPECTION AND MAINTENANCE INSPECT CONSTRUCTION WASTE AREA WEEKLY. ONSITE VEHICLE AND EQUIPMENT MAINTENANCE SHOULD ONLY BE USED WHERE IT IS IMPRACTICAL TO ARRANGE FOR REGULAR WASTE COLLECTION. SEND VEHICLES AND FOLLIPMENT DEESITE FOR MAINTENANCE AND REPAIR SENDING VEHICLES /FOLLIPMEN' OFFSITE SHOULD BE DONE IN CONJUNCTION WITH A STABILIZED CONSTRUCTION ENTRANCE/EXIT. OUTDOOR VEHICLE OR EQUIPMENT MAINTENANCE IS A POTENTIALLY SIGNIFICANT SOURCE OF STORMWATER POLLUTION. ACTIVITIES THAT CAN CONTAMINATE STORMWATER INCLUDE ENGINE REPAIR AND SERVICE, DEWATERING OPERATIONS ARE PRACTICES THAT MANAGE THE DISCHARGE OF POLLUTANTS WHEN NON-STORMWATER AND ACCUMULATED PRECIPITATION MUST BE REMOVED FROM A WORK LOCATION SO CHANGING OR REPLACEMENT OF FLUIDS, AND OUTDOOR EQUIPMENT STORAGE AND PARKING (ENGINE THAT CONSTRUCTION WORK MAY BE ACCOMPLISHED. SUITABLE APPLICATIONS IF MAINTENANCE MUST OCCUR ONSITE, USE DESIGNATED AREAS, LOCATED AWAY FROM DRAINAGE THESE PRACTICES ARE IMPLEMENTED FOR DISCHARGES OF NON-STORMWATER FROM CONSTRUCTION SITES. NON-STORMWATERS INCLUDE, BUT ARE NOT LIMITED TO, GROUNDWATER, WATER FROM COURSES, DEDICATED MAINTENANCE AREAS SHOULD BE PROTECTED FROM STORMWATER RUNON AND RUNOFF, AND SHOULD BE LOCATED AT LEAST 50 FT FROM DOWNSTREAM DRAINAGE FACILITIES AND COFFERDAMS, WATER DIVERSIONS, AND WATERS USED DURING CONSTRUCTION ACTIVITIES THAT MUST BE REMOVED FROM A WORK AREA. PRACTICES IDENTIFIED IN THIS SECTION ARE ALSO APPROPRIATE FOR IMPLEMENTATION WHEN MANAGING THE REMOVAL OF ACCUMULATED PRECIPITATION (STORMWATER) FROM DRIP PANS OR ABSORBENT PADS SHOULD BE USED DURING VEHICLE AND EQUIPMENT MAINTENANCE DEPRESSED AREAS AT A CONSTRUCTION SITE. WORK THAT INVOLVES FLUIDS, UNLESS THE MAINTENANCE WORK IS PERFORMED OVER AN IMPERMEABLE SITE CONDITIONS WILL DICTATE DESIGN AND USE OF DEWATERING OPERATIONS. THE CONTROLS DISCUSSED IN THIS BEST MANAGEMENT PRACTICE (BMP) ADDRESS SEDIMENT ONLY. THE CONTROLS DETAILED IN THIS PLACE A STOCKPILE OF SPILL CLEANUP MATERIALS WHERE IT WILL BE READILY ACCESSIBLE. BMP ONLY ALLOW FOR MINIMAL SETTLING TIME FOR ALL FUELING TRUCKS AND FUELING AREAS ARE REQUIRED TO HAVE SPILL KITS AND/OR USE OTHER SEDIMENT PARTICLES. USE ONLY WHEN SITE CONDITIONS RESTRICT THE USE OF THE OTHER CONTROL METHODS. DEWATERING OPERATIONS WILL REQUIRE, AND MUST COMPLY WITH, APPLICABLE LOCAL USE ABSORBENT MATERIALS ON SMALL SPILLS. REMOVE THE ABSORBENT MATERIALS PROMPTLY AND MPI FMFNTATION DEWATERING DISCHARGES MUST NOT CAUSE EROSION AT THE DISCHARGE POINT. A VARIETY OF INSPECT ONSITE VEHICLES AND EQUIPMENT DAILY AT STARTUP FOR LEAKS, AND REPAIR IMMEDIATELY, OR METHODS CAN BE USED TO TREAT WATER DURING DEWATERING OPERATIONS. SEVERAL DEVICES ARE PRESENTED BELOW AND PROVIDE OPTIONS TO ACHIEVE SEDIMENT REMOVAL. THE SIZE OF PARTICLES PRESENT IN THE SEDIMENT AND PERMIT OR RECEIVING WATER LIMITATIONS ON SEDIMENT ARE KEY KEEP VEHICLES AND FOUIPMENT CLEAN: DO NOT ALLOW EXCESSIVE BUILD-UP OF OIL AND GREASE CONSIDERATIONS FOR SELECTING SEDIMENT TREATMENT OPTION(S); IN SOME CASES, THE USE OF SEGREGATE AND RECYCLE WASTES, SUCH AS GREASES, USED OIL OR OIL FILTERS, ANTIFREEZE, CLEANING MULTIPLE DEVICES MAY BE APPROPRIATE. SOLUTIONS, AUTOMOTIVE BATTERIES, HYDRAULIC AND TRANSMISSION FLUIDS. PROVIDE SECONDARY TRAIN FMPLOYEES AND SUBCONTRACTORS IN PROPER MAINTENANCE AND SPILL CLEANUP PROCEDURES. A SEDIMENT TRAP IS A TEMPORARY BASIN FORMED BY EXCAVATION AND/OR CONSTRUCTION OF AN EARTHEN EMBANKMENT ACROSS A WATERWAY OR LOW DRAINAGE AREA TO DETAIN RUNOFF AND ALLOW PROPERLY DISPOSE OF USED OILS, FLUIDS, LUBRICANTS, AND SPILL CLEANUP MATERIALS. SEDIMENT TO SETTLE OUT BEFORE DISCHARGING. SEDIMENT TRAPS ARE GENERALLY SMALLER THAN DO NOT PLACE USED OIL IN A DUMPSTER OR POUR INTO A STORM DRAIN OR WATERCOURSE. APPROPRIATE APPLICATIONS EFFECTIVE FOR THE REMOVAL OF LARGE AND MEDIUM SIZED PARTICLES (SAND AND GRAVEL) AND SOME METALS THAT SETTLE OUT WITH THE SEDIMENT. EXCAVATION AND CONSTRUCTION OF RELATED FACILITIES IS REQUIRED. TRAP INLETS SHOULD BE LOCATED O MAXIMIZE THE TRAVEL DISTANCE TO THE TRAP OUTLET. USE ROCK OR VEGETATION TO PROTECT THE TRAP OUTLETS AGAINST EROSION. MAINTENANCE IS REQUIRED FOR VEGETATION, EMBANKMENT, INLET AND OUTFALL STRUCTURES, AS WELL AS OTHER FEATURES. REMOVAL OF SEDIMENT IS REQUIRED WHEN THE STORAGE VOLUME IS REDUCED VEHICLE EQUIPMENT FUELING PROCEDURES AND PRACTICES ARE DESIGNED TO PREVENT FUEL SPILLS AND BY ONE THIRD. LEAKS AND REDUCE OR FLIMINATE CONTAMINATION OF STORMWATER. THIS CAN BE ACCOMPLISHED BY GRAVITY BAG FILTER (DEWATERING BAG)
DESCRIPTION USING OFFSITE FACILITIES, FUELING IN DESIGNATED AREAS ONLY, ENCLOSING OR COVERING STORED FUEL, IMPLEMENTING SPILL CONTROLS, AND TRAINING EMPLOYEES AND SUBCONTRACTORS ONSITE VEHICLE AND EQUIPMENT FUELING SHOULD ONLY BE USED WHERE IT IS IMPRACTICAL TO SEND OFFSITE FOR FUELING. SENDING VEHICLES AND EQUIPMENT OFFSITE SHOULD BE DONE IN CONJUNCTION WITH THE SEDIMENT. MPI FMFNTATION USE OFFSITE FUFLING STATIONS AS MUCH AS POSSIBLE. THESE BUSINESSES ARE BETTER FOUIPPED TO HANDLE FUEL AND SPILLS PROPERLY. PERFORMING THIS WORK OFFSITE CAN ALSO BE ECONOMICAL BY ABSORBENT SPILL CLEANUP MATERIALS AND SPILL KITS SHOULD BE AVAILABLE IN FUELING AREAS AND REASONABLE RATE. THE BAG IS DISPOSED OF OFFSITE. DRIP PANS OR ABSORBENT PADS SHOULD BE USED DURING VEHICLE AND EQUIPMENT FUELING, UNLESS THE FUELING IS PERFORMED OVER AN IMPERMEABLE SURFACE IN A DEDICATED FUELING AREA. USE ABSORBENT MATERIALS ON SMALL SPILLS. DO NOT HOSE DOWN OR BURY THE SPILL. REMOVE THE RUNOFF TEMPERATURES, PESTICIDES AND PATHOGENS. AVOID MOBILE FUELING OF MOBILE CONSTRUCTION EQUIPMENT AROUND THE SITE; RATHER, TRANSPORT

A GRAVITY BAG FILTER, ALSO REFERRED TO AS A DEWATERING BAG, IS A SQUARE OR RECTANGULAR BAG MADE OF NON-WOVEN GEOTEXTILE FABRIC THAT COLLECTS SAND, SILT, AND FINES. EFFECTIVE FOR THE REMOVAL OF SEDIMENTS (GRAVEL, SAND, AND SILT). SOME METALS ARE REMOVED WATER IS PUMPED INTO ONE SIDE OF THE BAG AND SEEPS THROUGH THE BOTTOM AND SIDES OF THE BAG. A SECONDARY BARRIER, SUCH AS A ROCK FILTER BED OR STRAW/HAY BALE BARRIER, IS PLACED BENEATH AND BEYOND THE EDGES OF THE BAG TO CAPTURE SEDIMENTS THAT ESCAPE THE BAG. INSPECTION OF THE FLOW CONDITIONS. BAG CONDITION, BAG CAPACITY, AND THE SECONDARY BARRIER IS REQUIRED. REPLACE THE BAG WHEN IT NO LONGER FILTERS SEDIMENT OR PASSES WATER AT A C1 DESCRIPTION OF POLLUTANTS AND THEIR SOURCES ASSOCIATED WITH THE PROPOSED LAND USE: LEAVES, MULCH, VEHICULAR SOURCES SUCH AS LEAKING FUEL OR OIL, BRAKE FLUID, BRAKE

JUST. GREASE. ANTIFREEZE. METALS, RUBBER FRAGMENTS, ROAD GRIT. SALTS AND SANDS. AND DEBRIS. FERTILIZERS, CLEANING AGENTS CHEMICALS, PAINT, ANIMAL WASTE, ELEVATED STORM C2 DESCRIPTION OF PROPOSED POST CONSTRUCTION STORMWATER QUALITY MEASURES; VEGETATED SWALES
THE VEGETATED SWALES INSTALLED DURING CONSTRUCTION WILL SLOW RUNOFF AND ACT AS A SLOWING THE RUNOFF WILL NOT ONLY ALLOW SEDIMENT TO DROP OUT, BUT LIMIT THE ABILITY FOR

THE STORM WATER TO ERODE AND CARRY POLLUTANTS DOWNSTREAM. <u>PERMANENT SEEDING</u> PERMANENT SEEDING WILL BE PLACED TO ACT AS A FILTER AND TO PREVENT EROSION. <u>WET DETENTION BASIN</u> THEY SERVE TO CONTROL THE VOLUME AND RATE OF RUNOFF. THE FACILITY REMOVES SEDIMENT. BOD ORGANIC NUTRIENTS AND TRACE METALS THROUGH THE PROCESS OF SETTLING OF POLLUTANTS. BIOLOGICAL PROCESSES OCCURRING IN THE POND AID IN REDUCING THE AMOUNT OF SOLUBLE NUTRIENTS PRESENT SUCH AS NITRATE AND PHOSPHORUS.

C3 LOCATION, DIMENSIONS, SPECIFICATIONS AND CONSTRUCTION DETAILS OF STORMWATER QUALITY FOR LOCATIONS SEE PLAN SET: SHEETS C1.5-C1.8

FOR DETAILS: SEE SHEET C8.2 C4 SEQUENCE DESCRIBING STORMWATER QUALITY MEASURE IMPLEMENTATION: REFERENCE EROSION CONTROL SEQUENCING

SEE PLAN SET: PRE-CONSTRUCTION AND POST-CONSTRUCTION STORMWATER POLLUTION PREVENTION PLANS, SHEETS C1.5-C1.8 <u>VEGETATED SWALES</u>
THEY WILL BE CONSTRUCTED DURING AND FOLLOWING THE MASS GRADING OF THE SITE. THEY WILL BE IMMEDIATELY STABILIZED WITH PERMANENT SEEDING AND MULCH AND EROSION CONTROL

BLANKETS AS SHOWN ON THE PLAN. THEY WILL PERSIST IN THE POST CONSTRUCTION PHASE AS PERMANENT SEEDING OF EXPOSED AREAS SHALL BE INITIATED ON THE SEVENTH (7TH) DAY AND STABILIZATION ACTIVITIES SHALL BE COMPLETED BY THE FOURTEENTH (14) DAY ONCE FINAL

WET DETENTION BASIN
WET DETENTION BASIN WILL BE INITIALLY EXCAVATED AS PART OF MASS GRADING OF THE SITE. IT WILL BE USED THROUGHOUT THE CONSTRUCTION PHASE TO CONTROL SEDIMENT, THEN PERSIST

RETENTION AND SEDIMENT CONTROL. OUTLET PROTECTION
OUTLET PROTECTION WILL BE INSTALLED AS SOON AS THE POND OUTFALL PIPE IS INSTALLED. OUTLET PROTECTION WILL PREVENT MAJOR EROSION FROM DAMAGING DOWNSTREAM CHANNELS. DUTLET PROTECTION WILL SIGNIFICANTLY REDUCE EROSION AND SEDIMENT BY REDUCING FLOW

INTO THE POST CONSTRUCTION PHASE AS PERMANENT FEATURES PROVIDING STORMWATER

C5 DESCRIPTION OF MAINTENANCE GUIDELINES FOR POST CONSTRUCTION STORMWATER QUALITY SEE BMP O&M MAINTENANCE MANUAL

VEGETATED SWALES
THE VEGETATED SWALES SHOULD BE CHECKED ANNUALLY FOR ISSUES RELATED TO PERFORMANCE. DURING THIS TIME TRASH SHOULD BE REMOVED, SEED PLANTED IF NECESSARY, AND ANY EROSION PROBLEMS ADDRESSED. THE GRASS IN THE SWALE SHOULD BE KEPT AT A 3"-4" HEIGHT. MAINTENANCE ASSOCIATED WITH THE VEGETATED SWALE IS THE RESPONSIBILITY OF THE LOCAL LANDOWNER FOR INDIVIDUAL LOTS AND HOME OWNERS ASSOCIATION FOR COMMON AREAS. THE HOMEOWNERS ASSOCIATION SHOULD CONDUCT THE INSPECTION AND REMINDED HOMEOWNERS OF MAINTENANCE NEEDS.

PERMANENT SEEDING
PERMANENT SEEDING AREAS SHOULD BE CHECKED ANNUALLY FOR ISSUES RELATED TO PERFORMANCE. DURING THIS TIME PLANT SEED IF NECESSARY AND ANY EROSION PROBLEMS ADDRESSED. TRASH SHOULD BE REMOVED ON AN AS NEED BASIS. THE GRASS SHOULD BE KEPT TO A 3"-4" HEIGHT. MAINTENANCE IS THE RESPONSIBILITY OF THE LOCAL LANDOWNER FOR INDIVIDUAL LOTS AND HOME OWNERS ASSOCIATION FOR COMMON AREAS. THE HOMEOWNERS ASSOCIATION SHOULD CONDUCT THE INSPECTION AND REMINDED HOMEOWNERS OF MAINTENANCE NEEDS.

WET DETENTION BASINS (PONDS)
INLETS AND OUTLETS SHOULD BE CHECKED TO MAKE SURE THEY ARE FREE OF DEBRIS. THE WET PONDS SHOULD BE CHECKED SEMIANNUALLY TO ENSURE PROPER PERFORMANCE, BANKS SHOULD BE CHECKED FOR EROSION, AND REPAIRED IF NECESSARY, SEDIMENT SHOULD BE REMOVED FROM HE POOL WHEN THE ACCUMULATED SEDIMENT VOLUME EXCEEDS 20% OF THE BASIN VOLUME. MAINTENANCE SHALL BE DONE BY THE HOME OWNERS ASSOCIATION.

T PROTECTION
CT OUTLET PROTECTION ON A REGULAR BASIS FOR EROSION, SEDIMENTATION, SCOUR OR JNDERCUTTING. REPAIR OR REPLACE RIPRAP, AS NECESSARY TO HANDLE DESIGN FLOWS. REMOVE

TRASH, DEBRIS, GRASS, SEDIMENT OR BURROWING ANIMALS AS NEEDED. MAINTENANCE MAY BE MORE EXTENSIVE IF SMALL RIPRAP SIZES ARE USED, AS CHILDREN MAY TEMPTED TO THROW OR OTHERWISE DISPLACE STONES AND ROCKS. STREET CLEANING AND TRASH COLLECTION WILL BE PART OF THE TOWN OF TRAFALGAR PUBLIC

WORKS DEPARTMENT'S NORMAL RIGHT-OF-WAY UPKEEP AND WILL BE DONE ON AN AS NEEDED BASIS. STREETS SHOULD BE MONITORED MONTHLY AND SWEPT AS NEEDED TO REMOVE AS MUCH SEDIMENT AS POSSIBLE BEFORE ENTERING STORM SEWER SYSTEM AND DOWNSTREAM WATERWAYS. THIS SHALL BE DONE BY THE DEVELOPER UNTIL THE STREETS ARE ACCEPTED BY THE TOWN OF TRAFALGAR PUBLIC WORKS DEPARTMENT.

NDIVIDUAL LOT OWNERS ARE RESPONSIBLE FOR PREVENTING POLLUTANTS FROM LEAVING THE LOTS. THE HOMEOWNERS ASSOCIATION SHOULD REMIND HOMEOWNERS OF NECESSITY OF STORM COLLECTION SYSTEM AND THE THEIR INDIVIDUAL RESPONSIBILITY TO KEEP IT CLEAN AND FUNCTIONING.

C6 ENTITY THAT WILL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF THE POST-CONSTRUCTION STORMWATER MEAURES:

LONG-TERM:

COPYRIGHT 2024 BY FANNING/HOWEY ASSOCIATES, INC.

### **SOUTH PUTNAM HS** TRACK AND FIELD RENOVATION

1780 US-40, **GREENCASTLE** IN 46135 (765) 653-3148

SEEDING SCHEDULI

JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC

TEMPORARY SEEDING DATES

INCREASE APPLICATION RATES 50% FOR DORMANT SEEDING

PERMANENT SEEDING DATE

INCREASE APPLICATION RATES 50% FOR DORMANT SEEDING |

SIMILAR INFORMATION INDICATED ON THIS SHEET.

ON THE PLANS.

WITH TOPSOIL.

APPLICATION RATES.

EQUIVALENT METHOD.

THE FOLLOWING:

8. SEED MIXTURES AND APPLICATION RATES:

KENTUCKY 31 FESCUE - 95 LB/ACRE

PERENNIAL RYEGRASS - 65 LB/ACRE

JASPER RED FESCUE - 10 LB/ACRE

I. PERMANENT SEEDING INFORMATION SHOWN ON THIS PLAN IS FOR

EROSION CONTROL PURPOSES ONLY. IF THE LANDSCAPING PLANS AND

SPECIFICATIONS CONTAIN INFORMATION CONCERNING PERMANENT LAWN

2. AREAS TO BE SEEDED SHALL BE SMOOTH AND UNIFORM AND SHALL BE

IN ACCORDANCE WITH THE FINISHED GRADE AND CROSS SECTION SHOWN

INCHES. LIGHTLY COMPACT PLACED TOPSOIL BY ROLLING OR TAMPING.

4. PRIOR TO REPLACING TOPSOIL, LOOSEN SUBSOIL TO ENSURE GOOD BOND

5. APPLY SEEDING WITH 800 LB/ACRE OF 12-12-12 FERTILIZER AND MULCH

WITH A CONTINUOUS BLANKET OF STRAW AT A RATE OF 2 TONS/ACRE,

OR USE HYDROSEEDING TECHNIQUES WITH EQUIVALENT APPLICATION

6. APPLY TEMPORARY SEEDING WITH 200 LB/ACRE OF 12-12-12 FERTILIZER

AND MULCH WITH A CONTINUOUS BLANKET OF STRAW AT A RATE OF 2

7. ON SLOPES GRADED AT 3:1 OR STEEPER, STRAW MULCH SHALL BE HELD

IN PLACE WITH POLYMERIC PLASTIC NET TACKED WITH WIRE STAPLES, OR

GRASS MIX APPLIED AT 170 LB/ACRE (4 LB/1000 SQ.FT.) COMPRISED OF

TONS/ACRE, OR USE HYDROSEEDING TECHNIQUES WITH EQUIVALENT

3. AREAS TO BE SEEDED SHALL HAVE A MINIMUM TOPSOIL DEPTH OF 6

SEEDING AND/OR SODDING, THEN THAT INFORMATION SHALL SUPERSEDE

PERENNIAL RYGRASS

DORMANT SEEDING

NON-IRRIGATED

DORMANT SEEDING

LIRRIGATED

**SOUTH PUTNAM COMMUNITY SCHOOL CORPORATION** 





317-347-3663 WWW.HWCENGINEERING.COM 135 N. PENNSYLVANIA STREET, SUITE 2800, INDIANAPOLIS, IN., 46204



KEY PLAN

100% CONSTRUCTION DOCUMENTS



PROJECT MANAGER: RR DRAWN BY: BP PROJECT NUMBER: 222152.06 (FH), 2024-005-S (HWC)

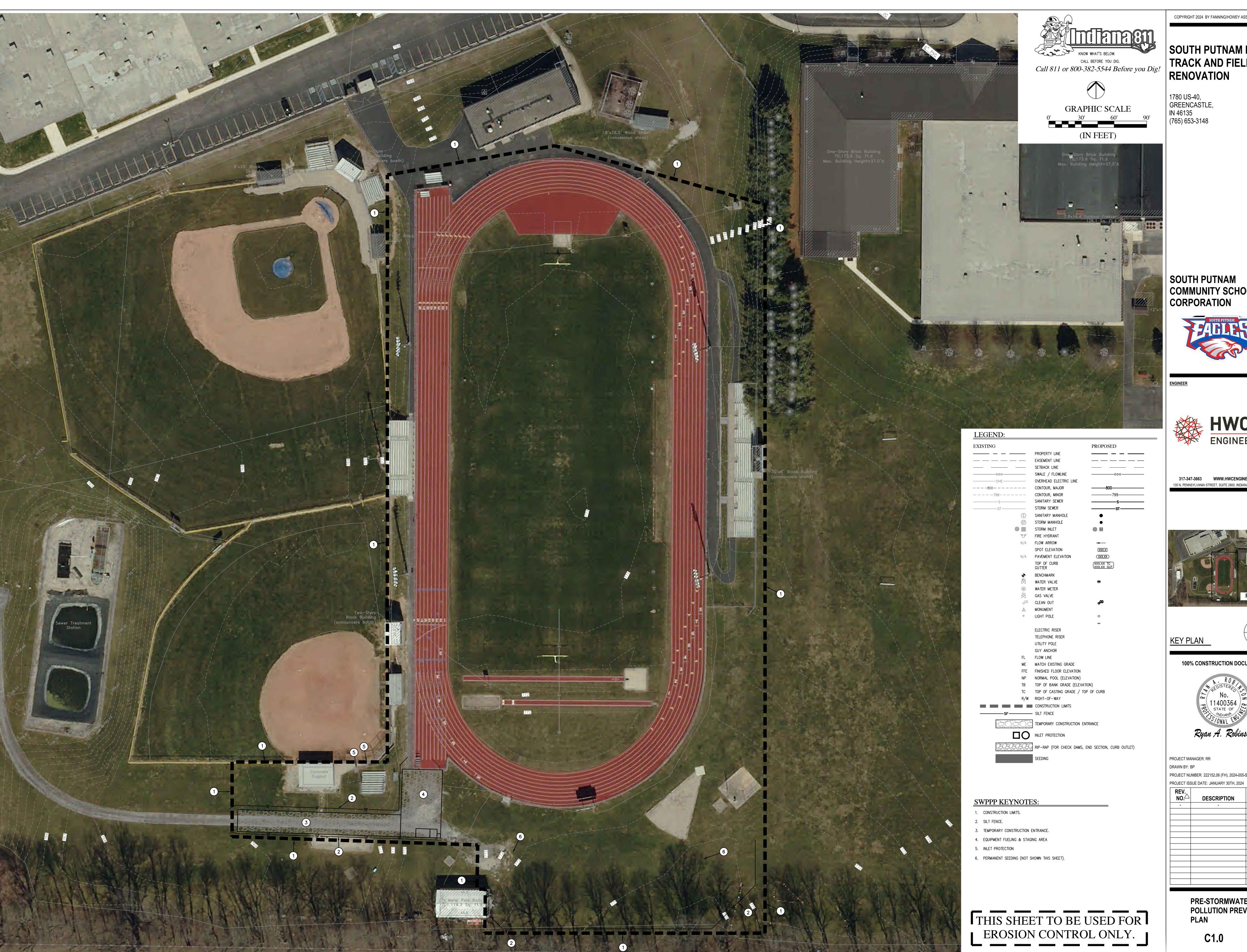
PROJECT ISSUE DATE: JANUARY 30TH, 2024

DESCRIPTION DATE

> STORMWATER POLLUTION PREVENTION NOTES

CONSTRUCTION STORMWATER GENERAL PERMIT (CSGP)

STORMWATER POLLUTION PREVENTION PLAN IS IN COMPLIANCE WITH THE REQUIREMENTS OF IDEM



## SOUTH PUTNAM HS TRACK AND FIELD RENOVATION

1780 US-40, GREENCASTLE, IN 46135 (765) 653-3148

SOUTH PUTNAM COMMUNITY SCHOOL CORPORATION





317-347-3663 WWW.HWCENGINEERING.COM 135 N. PENNSYLVANIA STREET, SUITE 2800, INDIANAPOLIS, IN., 46204



KEY PLAN



100% CONSTRUCTION DOCUMENTS



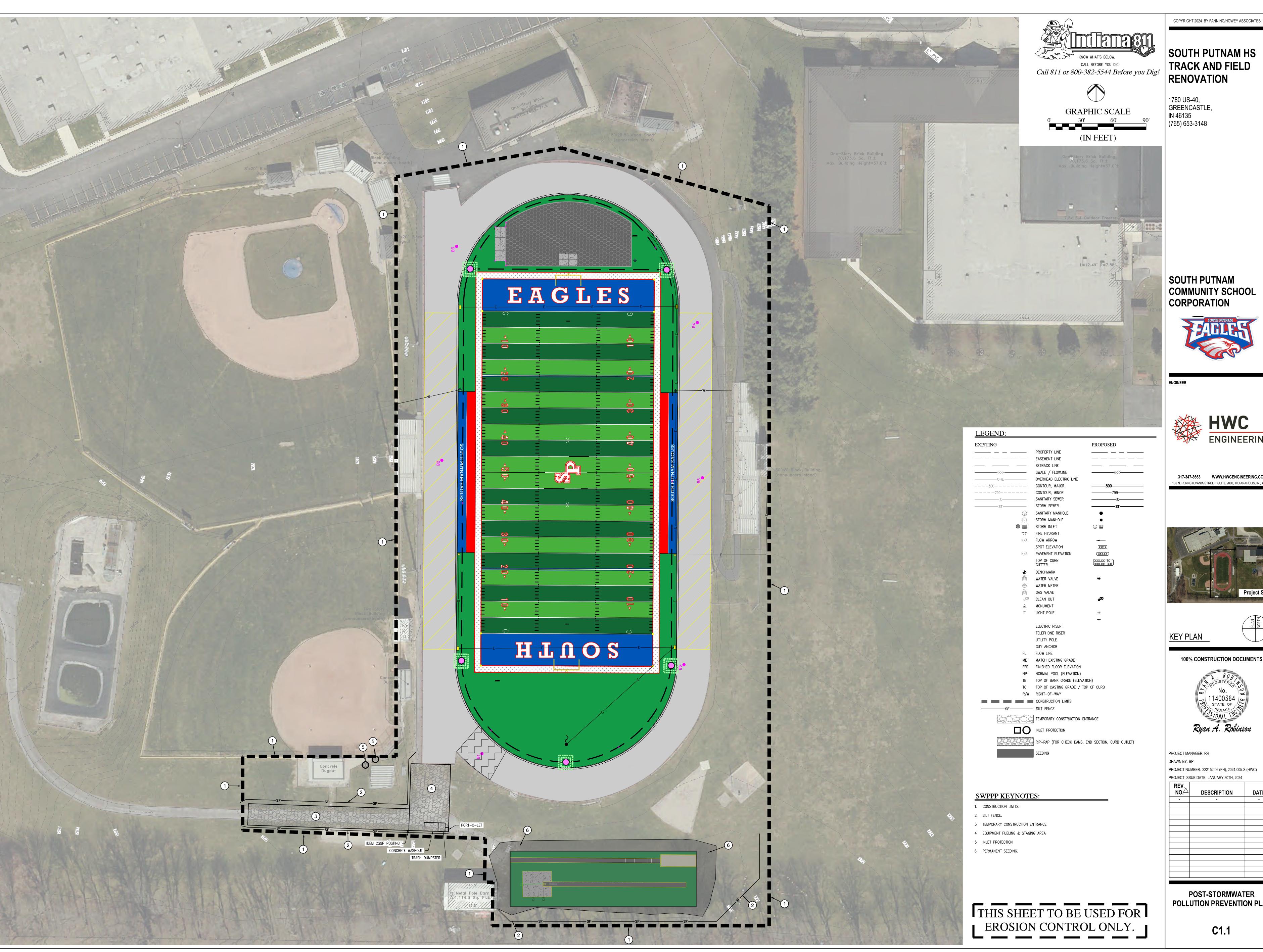
Ryan A. Robinson

PROJECT MANAGER: RR DRAWN BY: BP PROJECT NUMBER: 222152.06 (FH), 2024-005-S (HWC)

NO.	DESCRIPTION	DATE
-	-	-
		·

PRE-STORMWATER POLLUTION PREVENTION PLAN

C1.0



TRACK AND FIELD

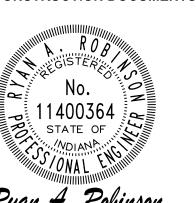




317-347-3663 WWW.HWCENGINEERING.COM 135 N. PENNSYLVANIA STREET, SUITE 2800, INDIANAPOLIS, IN., 46204



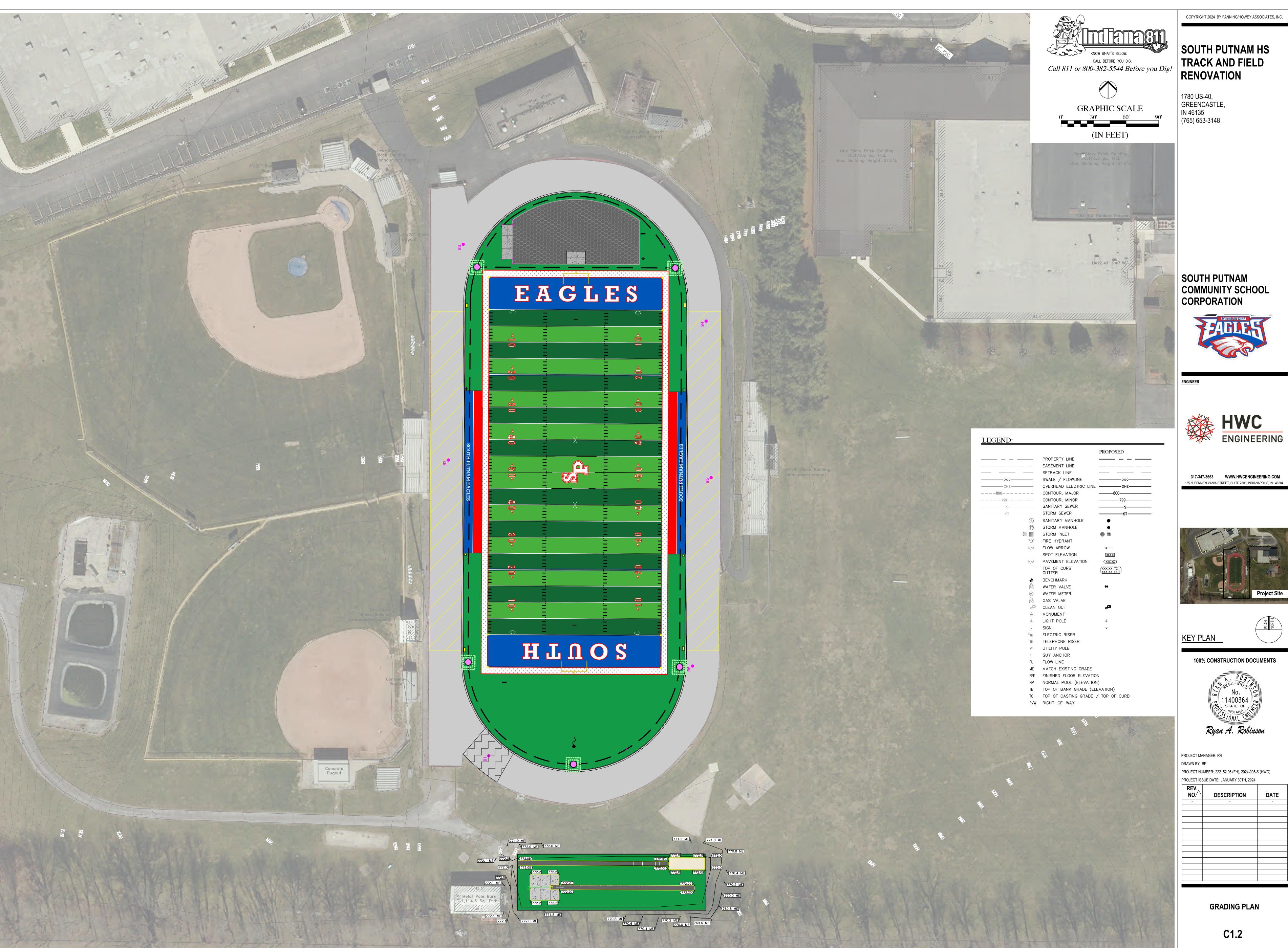




PROJECT NUMBER: 222152.06 (FH), 2024-005-S (HWC)

NO.	DESCRIPTION	DATE
-	-	-

POST-STORMWATER POLLUTION PREVENTION PLAN

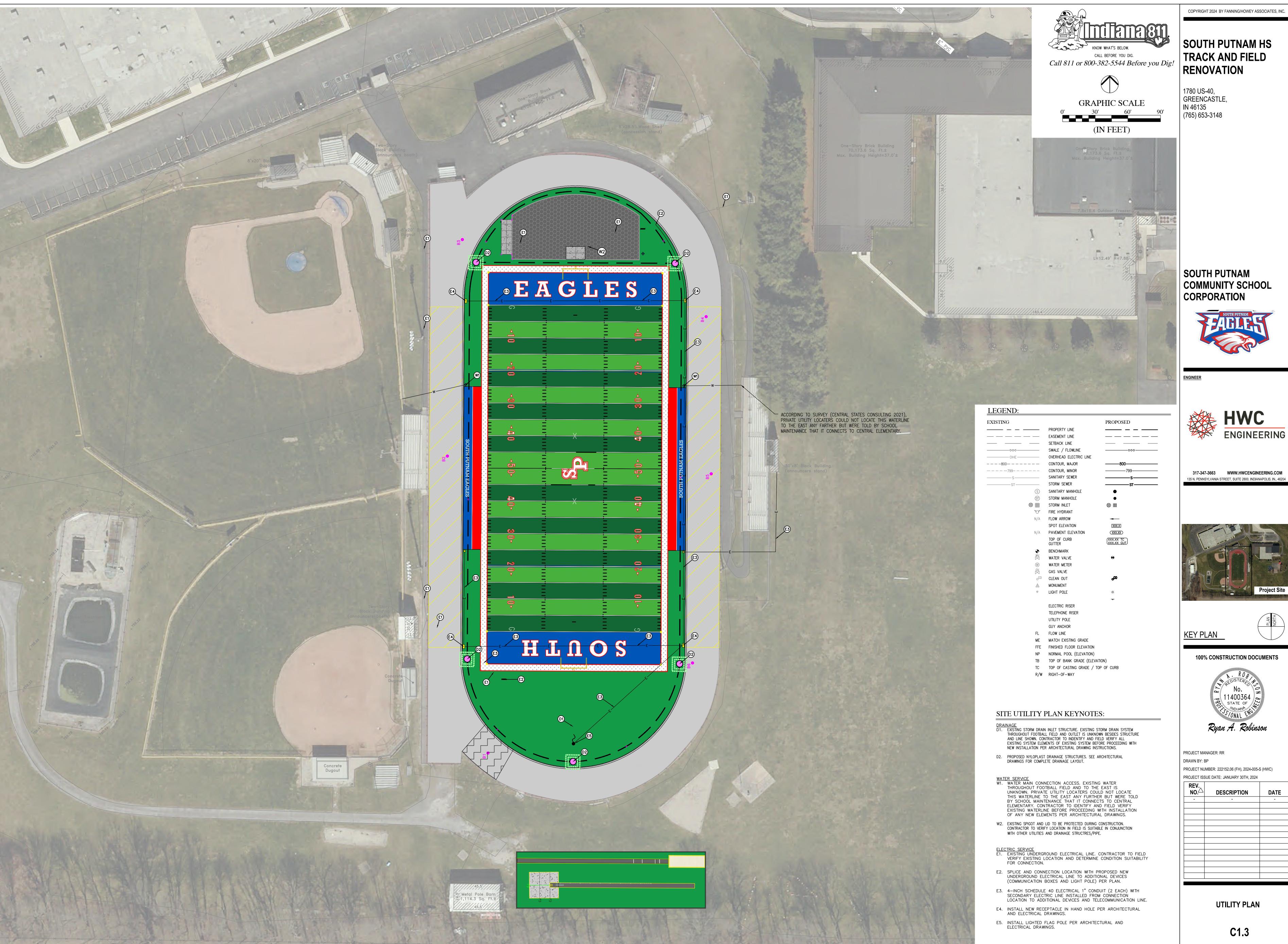




135 N. PENNSYLVANIA STREET, SUITE 2800, INDIANAPOLIS, IN., 46204



REV NO△	DESCRIPTION	DATE
-	-	-
•		





317-347-3663 WWW.HWCENGINEERING.COM





REV. NO.△	DESCRIPTION	DATE
-	-	-
		,



3. MAKE SURE THAT BORING DEPTHS REACH DOWN TO SUB-BASE MATERIAL

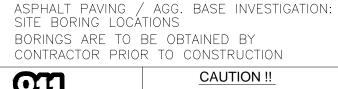
4. FILL BORE HOLE WITH FLOWABLE CONCRETE FILL TO BE FLUSH WITH EX. TRACK SURFACING. DO NOT LEAVE A TRIPPING HAZARD

5. MAKE SURE TO CLEAN AREA AFTER WORK HAS BEEN PERFORMED. CONTRACTOR IS TO LEAVE SITE AS FOUND -ALL DAMAGED SURFACES AND STRUCTURES ARE TO BE RETURNED TO PRE-CONSTRUCTION CONDITIONS PRIOR TO CONTRACTOR VACATING THE SITE

#### PROPOSED SITE LEGEND

SUBSIDING TRACK RENOVATION WITH NEW APPROVED SYNTHETIC TRACK SURFACING SYSTEM SEE SHT G1.00





Know what's below.

Call before you dig.

Call 4811 or 1-800-382-544 Before You Begin Any Digging Project.
Call 46 hours or 2 working days beliate of Indianal

It's Fast, It's Easy and it's the Law in the state of Indianal

LOCATIONS GIVEN ARE

APPROXIMATE AND ARE TO BE

SITE VERIFIED PRIOR TO THE START OF CONSTRUCTION.



DESCRIPTION

PROJECT MANAGER: DR

PROJECT NUMBER: 222152.06 PROJECT ISSUE DATE: 01/30/2024

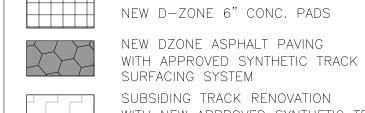
DRAWN BY: EB

REV. NO.

G0.00

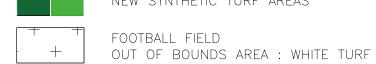
### PROPOSED SITE LEGEND

CONCRETE PAVING/PADS



SUBSIDING TRACK RENOVATION WITH NEW APPROVED SYNTHETIC TRACK SURFACING SYSTEM ALT FULL DEPTH TRACK RENOVATION WITH NEW APPROVED SYNTHETIC TRACK SURFACING SYSTEM









(6) NEW COMBOX/ELECTRICAL ACCESS POINTS

SEE ELECTRICAL DRAWINGS AND PLAN NOTES TYP

SEE DETAILS #1,2 SHT G4.00 FOR FURTHER INFORMATION

NYLOPLAST DRAIN STRUCTURE

- $\overline{m{\gamma}}$  (2 TOTAL) GOALPAK $m{@}$  COMBINATION FOOTBALL / SOCCER GOAL SYSTEM WITH SAFETY PADS (RED) - TO READ "EAGLES" IN (WHITE) LETTERING — BY SPORTSFIELD SPECIALTIES, OR APPROVED EQUAL. (DO NOT PROVIDE SOCCER GOAL) PROVIDE HIGH SCHOOL REGULATED FIELD GOALS WITH GOOSENECK AND REGUALTION POLES. REFER TO MANUFACTURERS SPECIFICATIONS FOR FURTHER CLARIFICATION ON TYPE AND INSTALL REQUIREMENTS
- 3\ SYNTHETIC TURF END ZONE ( BLUE )- TO MATCH SCHOOL BRANDING COLOR, OWNER TO HAVE FINAL COLOR SELECTION
- 14 INSTALL #3500 COMBOX AS SUPPLIED BY SPORTS FIELD SPECIALTIES, OR APPROVED EQUAL ENCASED IN CONC. PAVING -IN LOCATIONS AS NOTED AND AS DIRECTED BY OWNER/ARCHITECT. PROVIDE ONE COMBOX WITIHIN SYNTHETIC TURF AT TRACK FINISH LINE, RELAY POINTS AS SHOWN AND AT COACH/TEAM BOX LOCATIONS - PROVIDE LID/COVER WITH SYNTHETIC TURF -COMBOX LID/COVER FINISH GRADE IS TO BE FLUSH WITH FINISH GRADE OF SYNTHETIC TURF SURFACING SYSTEM, SEE E001 AND ES101 FOR FURTHER INFORMATION
- THELD TURF COLOR ALTERNATING PANELS AS SHOWN OF -(FOREST GREEN) AND (LIME GREEN ) — OWNER TO HAVE FINAL COLOR SELECTION TYP, SEE SHT G1.01 FOR GRAPHICAL REFERENCE
- (6) SOUTH PUTNAM HIGH SCHOOL : 'SOUTH' AND 'EAGLES' ENDZONE LETTERING OUTLINE (RED) WITH (WHITE ROCKWELL BOLD) LETTERING O.C., WITHIN ENDZONE, SEE SHT G1.02 FOR FURTHER INFORMATION, AND REFER TO SOUTH PUTNAM'S BRANDING REQUIREMENTS FOR FURTHER DETAILS
- 7 NEW WATER ACCESS POINTS (2) SET AT COAH/TEAM BOX AREAS (SEE PLANS) — INSTALL PER MANUFACTURES WRITTEN RECOMMENDATIONS TYP
- (8) SOUTH PUTNAM CENTER FIELD 'SP EAGLE' LOGO TO MATCH APPROVED MARKETING GRAPHIC COLORS FOR SOUTH PUTNAM HIGH SCHOOL - ACQUIRE FROM OWNER, SEE SHT G1.02 FOR FURTHER INFORMATION
- (9) COACH/TEAM BOX AREAS : COACH BOX (RED) , TEAM BOX (BLUE) SYNTHETIC TURF (TO MATCH SCHOOL COLOR) REFER TO SHTS G1.02 FOR FURTHER INFORMATION  $\langle 10 \rangle$  Existing scoreboard and supports to remain – site
- VERIFY AND PROTECT DURING CONSTRUCTION SEE ELECTRICAL DRAWINGS FOR FURTHER INFORMATION  $\langle 11 \rangle$  FOOTBALL NUMERALS AND MARKINGS, SEE DETAILS #2-4
- RESTRICTED AREA, REFER TO SHT G1.01 FOR FURTHER INFORMATION

- TURF AREAS OWNER IS TO HAVE FINAL CÓLOR SELECTION PRIOR TO CONSTRUCTION TYP
- DIRECTIONAL ARROWS OUTLINE (RED) WITH (WHITE) CENTER, REFER TO DETAILS #2-4 G1.01 FOR FURTHER INFORMATION  $\langle 15 \rangle$  kick off marks, see detail #3 sht G1.01
- $\langle 16 \rangle$  sideline and inbound lines, see detail #2 sht G1.01 (17) RELOCATED WATER ACCESS: RELOCATE AND PROVIDE A RECESSED WATER HOSE CONNECTION - PROVIDE BRASS COVER PLATE FLUSH WITH FG OF TURF SYSTEM - INSTALL PER MANUF. WRITTEN RECOMMENDATION
- CONCRETE LONG JUMP RUNWAYS/PIT (1 TOTAL), SEE DETAILS #10, 12, 13 SHT G4.00 (19) CONCRETE POLE VAULT RUNWAY AND PAD (1 TOTAL), SEE DETAIL 11 G4.00
- (20) HIGH JUMP 6" CONCRETE PAD PROVIDE CONTROL JOINTS WITHIN PAD AS NEEDED, PROVIDE EXPANSION JOINT AROUND PERIMETER TYP - SEE DETAILS #5, 6, 7, 8 SHT G4.00
- (21) NEW 1/2" THICK POLYURETHANE SYNTHETIC TRACK SURFACING SYSTEM / ASPHALT PAVING WITHIN NORTH DZONE AND HIGH JUMP APPROACH AREA, SEE DETAIL #3 SHT G4.00  $\langle a \rangle$  Existing grandstands (2+/-) and press box to remain

- PROTECT DURING CONSTRUCTION, SITE VERIFY EXISTING

- CONDITIONS PRIOR TO THE START OF CONSTRUCTION TYP 73\ TRACK RENOVATION SITE WIDE (BASE BID): CLEAN AND REPAIR CRACKS WITHIN EXISTING TRACK SURFACING PRIOR TO APPLYING A APPROVED POLYURETHANE BINDER TO SUBSIDING AND DELAMINATING BASEMAT AREAS PRIOR TO APPLYING NEW POLYURETHANE TRACK SURFACE WEAR COATS AND RUBBER BROADCAST (3 COATS EACH ) COACH/TEAM BOX AREAS (2) - SEE SHT G1.02 FOR FURTHER AND STRUCTURAL SPRAY (2 COATS) TYP. APPLY NEW TRACK COLOR SYSTEM TO ENTIRE TRACK ( GRAY ). PROVIDE NEW PAVEMENT MARKINGS AND EVENT MARKINGS WITHIN EXISTING TRACK TO MATCH EXISTING TRACK CONDITIONS - PROVIDE NEW REGULATION EXCHANGE ZONES WITH UPDATED MARKERS - ALL MARKINGS ARE TO ADHERE TO THE NATIONAL FEDERATION OF STATE HIGH SCHOOL ASSOCIATIONS (NFHS) STANDARDS & REQUIREMENTS. SITE VERIFY SITE CONDITIONS PRIOR TO CONSTRUCTION — CONTRACTOR IS TO SUBMIT TRACK LAYOUT PLAN FOR OWNER/ARCHITECT APPROVAL PRIOR TO THE START OF CONSTRUCTION TYP. SEE DETAILS #1, 3,
- 9 SHT G4.00 (24) (2) EXISTING TIME CLOCKS, TO BE RE-INSTALLED PER MANUFACTURERS WRITTEN RECOMMENDATIONS/STANDARDS -PROVIDE (2) NEW TIME CLOCK SUPPORT POST ( BLACK ) PVC COATED AND FOOTINGS — INSTALL FOOTINGS PER LOCAL AND STATE REGULATIONS - SEE ELECTRICAL DRAWING ES101 FOR FURTHER INFORMATION. PROVIDE (2) NEW PROTECTIVE PADS (RED) TO READ "EAGLES" IN (WHITE) LETTERING — BY SPORTSFIELD SPECIALTIES

- $\langle 25 \rangle$  track renovation: saw cut and remove subsiding area NOTED IN IT'S ENTIRETY - SITE VERIFY LOCATION PRIOR TO CONSTRUCTION AND REPORT ALL DISCREPANCIES TO CM AND ARCHITECT - ADD SUPPLEMENTAL AGGREGATE BASE COURSE TO EX. BASE AND COMPACT TO REQUIRED TOLERANCES SPECIFIED BY TRACK SURFACING MANUFACTURE AND PROJECT MANUAL PRIOR TO APPLYING NEW BASE COURSE AND SURFACE COURSE ASPHALT. ALLOW ASPHALT PAVING TO CURE 30 DAYS PRIOR TO APPLYING NEW APPROVED 3" POLYURETHANE TRACK SYSTEM , COLOR ( GRAY ) AND PAVEMENT MARKINGS PER NFHS STANDARDS
- $\langle 26 \rangle$  Existing paving and fencing to remain Typ
- $\langle 27 
  angle$  all existing lawn spaces to remain protect during CONSTRUCTION TYP (28) PERIMETER CURBING - 6"X10" CONCRETE CURBING, SEE DETAIL 1 SHT G4.00
- EXISTING ELECTRICAL LINES TO REMAIN SEE SHT GD1.00 AND ELECTRICAL DRAWINGS FOR FURTHER INFORMATION  $\overline{30}$  NEW NYLOPLAST STRUCTURES (5) AND PERIMITER 12" PERF.
- (31) TRACK RADIUS POINTS: 6" WIDE BY 10" DEEP CONCRETE  $^\prime$  curbing located at track "d" zones - provide. 40' UNLESS NOTED OTHERWISE — CURB TO BE INSTALLED PER TURF MANUFACTURES WRITTEN RECOMMENDATIONS, -EXISTING TRACK PAVING SURFACING TO REMAIN -CONTRACTOR IS TO REPAIR ALL DISTURBED AREAS TO REMAIN TYP. SEE DETAIL #1 G4.00 FOR FURTHER INFORMATION (32) 'SOUTH PUTNAM EAGLES' LETTERING (ROCKWELL) O.C. WITHIN

PROVIDE TURF CAP OVER STRUCTURE LIDS TYP.

- INFORMATION  $\langle \overline{33} \rangle$  Sawcut and remove 8"+/- or as needed of existing ASPHALT PAVING AND TRACK SURFACING FOR PLACEMENT OF NEW CONC. CURB. , SEE CIVIL SHT CO.1 FOR DEMOLITION PLAN. AT EX. NORTH D-ZONE - SAW CUT AND REMOVE ENTIRE DZONE ZONE PRIOR TO PROVIDING NEW 1/2" POLYURETHANE SYNTHETIC TRACK SURFACING AND PAINTED (WHITE) LANE LINE WITHIN INSIDE EDGE OF LANE ONE — PROVIDE TRACK SURFACING ACROSS 6" CURB @ RADIUS POINTS - INSTALL PER MANUF. WRITTEN RECOMMENDATION
- MANUF. RECOMMENDATIONS NEW FLAGPOLE AND UP LIGHTING: INSTALL PER MANUF. WRITTEN PRECOMMENDATION FOR INSTALLATION WITHIN SYNTHETIC TURF FIELD CONDITION - SEE DETAILS #1 SHT G1.01 AND ES101 ELECTRICAL DRAWINGS FOR FURTHER INFORMATION

 $\overline{\gamma_{34}}$  Provide USA blue 20 YRD Line Indicators – Install Per

- (36) GENERAL SITE NOTE FOR PROJECT SITE ; EXISTING SANITARY SYSTEM LINES AND MANHOLES IDENTIFIED OR NOT TO REMAIN TYP -PROTECT DURING CONSTRUCTION
- /77\ ALT BID; SOUTH PUTNAM EAGLE HEAD ENLARGED LOGO - MATCH COLORS SHOWN TO SP BRANDING GUIDELINES, SEE SHT G1.01 FOR FURTHER INFORMATION
- NEW 6" CONC. HIGH JUMP PAD, SEE DETAILS 5-8 SHT G4.00 (39) ALT BID: NEW 6" CONC.

NOTED IN THEIR ENTIRETY

AND REPORT ALL

TO EX. BASE AND

TRACK SURFACING

MANUFACTURE AND

30 DAYS PRIOR TO

APPLYING NEW APPROVED

1" POLYURETHANE TRACK

SYSTEM , TRACK SYSTSTEM

COLOR ( GRAY ) WITH

( WHITE ) PAVEMENT

STANDARDS

MARKINGS PER NFHS

- SPECTATOR PAD, SEE DETAILS 5-8 SHT G4.00 DRAIN MAINLINE — SEE SHT G2.00 FOR FURTHER INFORMATION. ALT. FULL DEPTH TRACK RENOVATION: SAW CUT AND REMOVE BOTH STRAIGHTAWAY SECTIONS
  - PRIOR TO CONSTRUCTION DISCREPANCIES TO CM AND ARCHITECT - ADD 3" DEPTH OF SUPPLEMENTAL AGGREGATE BASE COURSE COMPACT TO REQUIRED TOLERANCES SPECIFIED BY for any and all work required. The contractor or contractors are responsible to pay for PROJECT MANUAL PRIOR TO APPLYING NEW BASE COURSE AND SURFACE COURSE ASPHALT. ALLOW ASPHALT PAVING TO CURE

tractor or contractors must take particular care when excavating in and around existing utility lines and equip ment. Actual field locations of all the existing utilities are the contractors responsibilty and must be located either by the representive of the utility company or by a ments. When excavating around or over existing utilities, private underground utility locating company prior to the the contractor must notify the utility company so a re start of excavating. Verify minimum cover requirements by the utility contractor or contractors or agencies whomever utility companies or agencies whomever has jurisdication so not to cause damage.

current standards and specifications. Existing pavement, sidewalks curbs driveways, electrical transformer, ditches, drainage pipes and structures, fences, lawns, trees, bushes, mailboxes, signs, power poles etc., to remain shall be protected from damage by the contractor. Any damage during construction shall be restored, reconstructed or replaced by the contractor at his/her expense. All damages shall be restored or re-

All construction methods and materials must conform to

placed to at least their original condition. All areas where the existing pavement or pavements are damaged during construction from heavy traffic or equipment, fuel oil, oil, gasoline, etc., by the Contractor, Subcontractor, or Suppliers, shall be reconstructed

to it's original condition. expense all automobile and pedestrain traffic control devices required by Federal, State, County, City or Local Removal of the existing improvements are as noted on the plans. The materials removed from the site shall be disposed of in a proper and legal manner per Federal, contractor shall contact the A/E immediately. If any State, County, City, and or Local laws and ordinance. It is the responsibilty of the contractor or contractors to obtain all Federal, State, County, City, and Local permits

LOCATIONS GIVEN ARE

START OF CONSTRUCTION.

companies and departments 72 hours before construction is to start to verify any utilities that may be present on site. All verifications, locations, size and depths shall be made by the appropriate utility companies or depart presentive of the utility can be present during the excavation to instruct and observe during the excavation.

It is the responsibility of the contractor to inspect each day and remove all mud, dirt, gravel and loose materials tracked, dumped, spilled or wind blown from this site onto other sites, right of ways, public or private streets or roads, driveways, yards or sidewalks. The contractor must clean or pick up daily if necessary. The contractor shall reduce the airborne dust during the entire construction schedule. Water may be used for dust control.

The utilities indicated on these plans may not be a complete inventory of all the existing utilities present on and around this site. The locations and sizes of these utilities are approximate. This information was gathered or supplied from others and used by the architect and or engineer and may not be actual. The architect and or engineer may not be held liable for any incorrect or misleading utility information indicated,

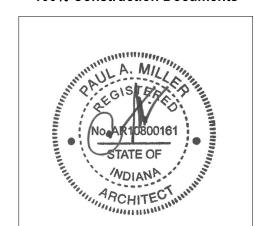
implied or not indicated on these plans. and elevations in the field before the start of construction. The contractor shall be responsible for all field dimensions and elevations during the entire construction schedule. If any discrepancies are found on the plans from actual field conditions the discrepancies are found from actual field conditions the contractor shall contact the A/E immediately for

All dimensions of pavements are to edge of finish pavement or face of curb unless otherwise noted. ALL ELECTRICAL BOXES, PEDESTALS, AND LIGHT POLE BASES ARE TO BE LOCATED OUT OF ALL STORM DRAINAGEWAYS AND OR SWALES TYP

## KEY PLAN

100% Construction Documents

**HOWEY** 



PROJECT MANAGER: DR DRAWN BY: EB

PROJECT NUMBER: 222152.06 PROJECT ISSUE DATE: 01/30/24

REV. NO.	DESCRIPTION	DATE

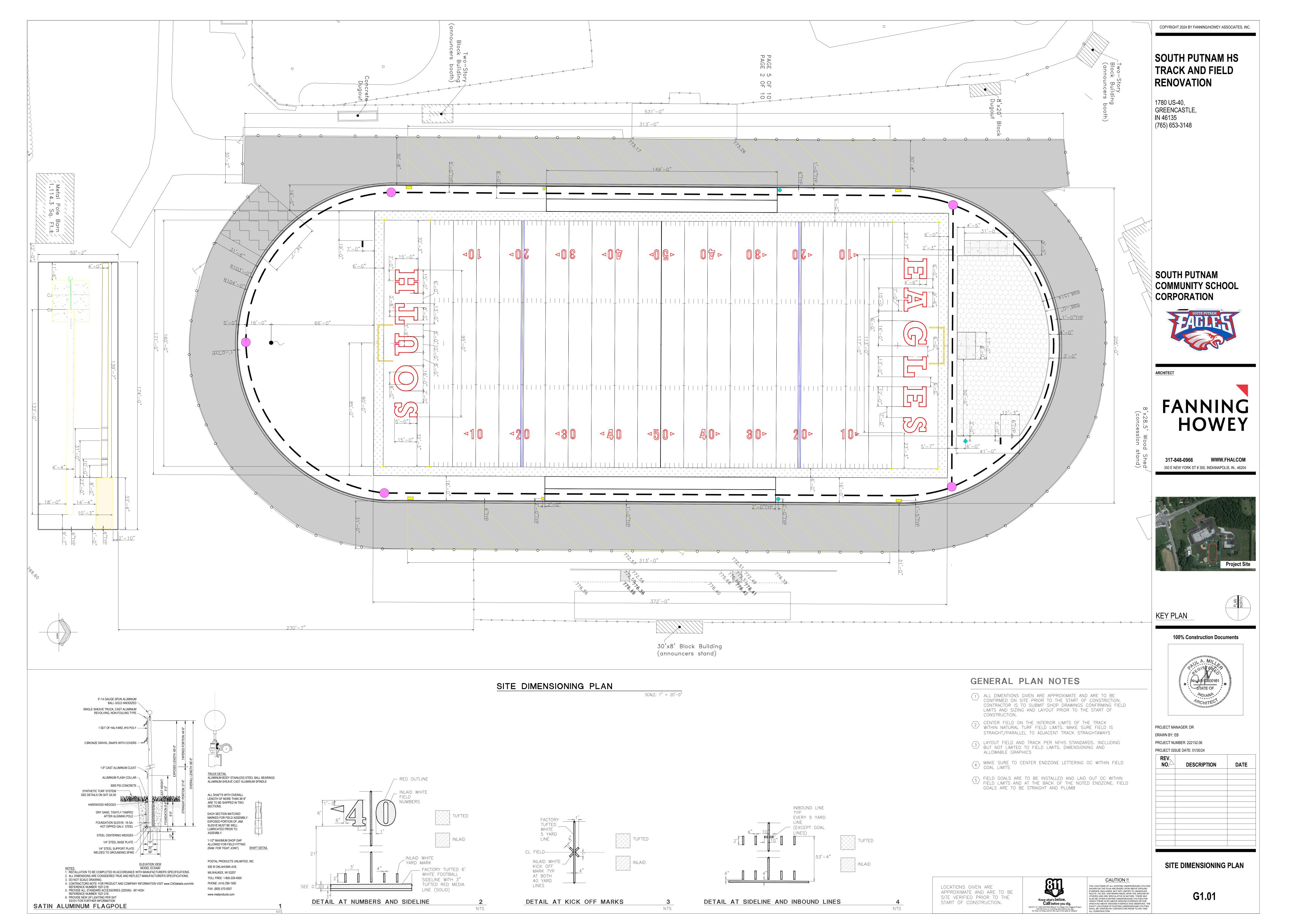
SITE LAYOUT / GRAPHIC PLAN

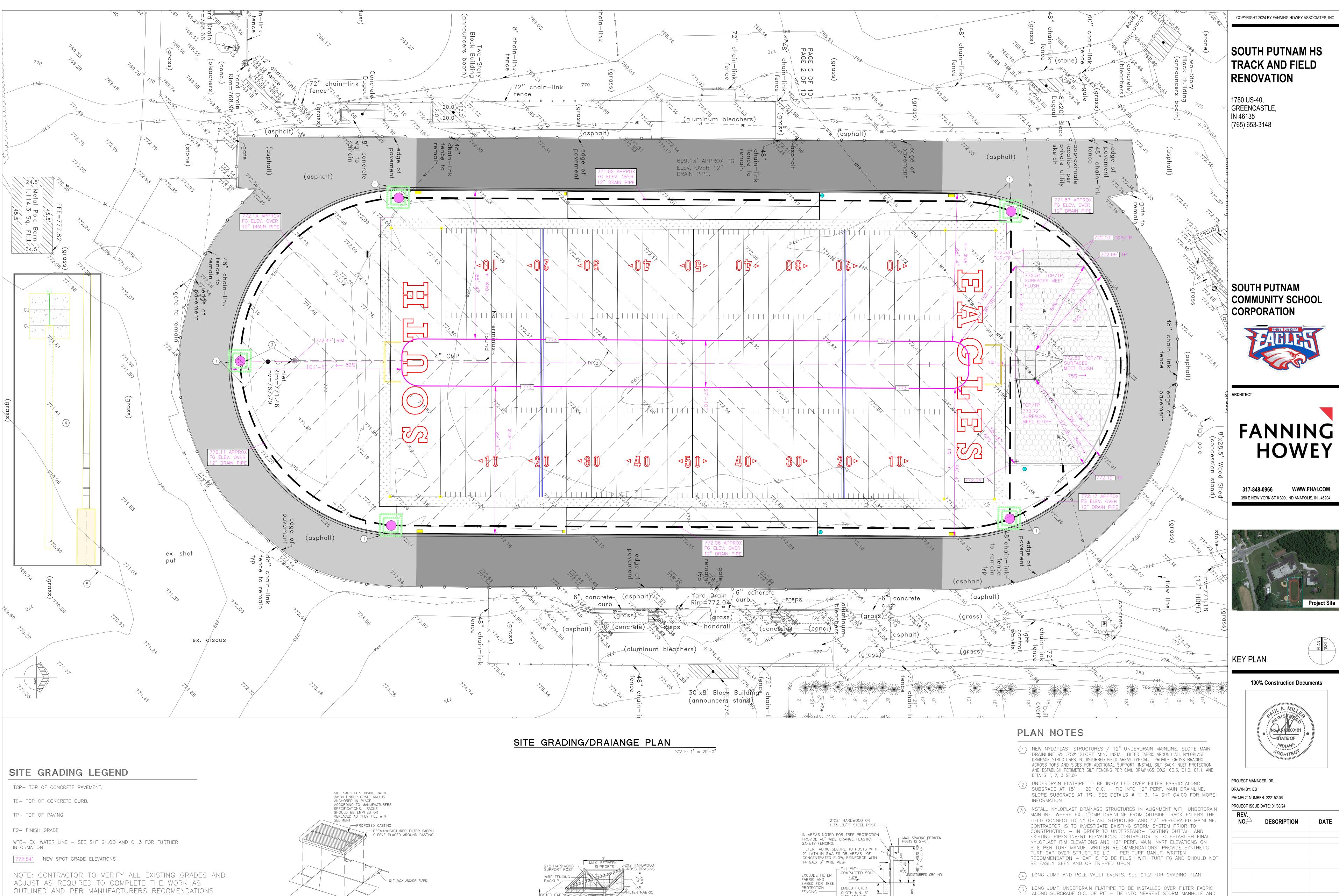
APPROXIMATE AND ARE TO BE SITE VERIFIED PRIOR TO THE

Know what's below.

CAUTION !! THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (INCLUDING, BUT NOT LIMITED TO, MANHOLES, INLETS, VALVES, AND MARKS MADE UPON THE GROUND BY OTHERS) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

Call before you dig.





PREMANUFACTURED FILTER

AROUND CASTING

INLET PROTECTION

FABRIC SLEEVE PLACED

1. INSPECT WEEKLY AND AFTER EACH STORM EVENT.

SILT FENCE

4. TAKE CARE NOT TO UNDERMINE THE ENTRENCHED FABRIC.

PROTECTION DETAIL

2. IF FABRIC IS TORN OR DETERIORATED, REPLACE SECTION IMMEDIATELY.

3. REMOVE SEDIMENT WHEN HEIGHT REACHES 1/3 OF OF THE HEIGHT OF THE FENCE OR IS CAUSING FABRIC TO BULGE.

5. AFTER DRAINAGE AREA IS STABILIZED, REMOVE FENCE AND SEDIMENT, BRING DISTURBED AREA TO GRADE AND STABILIZE IT.

MAINTENANCE:

➤ SILT SACK ANCHOR FLAPS

EXISTING INLET/CATCH BASIN

SILT SACK ASSEMBLY

# EXISTING STORM LINE

ADJUST AS REQUIRED TO COMPLETE THE WORK AS

AND ALL LOCAL ORDINANCES.

OF CONSTRUCTION

OUTLINED AND PER MANUFACTURERS RECOMENDATIONS

NOTE: CONTRACTOR TO TAKE EXTREME CAUTION WHEN

OR BE RELOCATED — TAKE EXTRA CAUTION NOT TO

SEVER LINES. COORDINATE ELECTRICAL AND PLUMBING

SCOPE OF WORK WITH ENGINEERS PRIOR TO THE START

WORKING AROUND OR ON THE EXISTING TRACK SURFACE

TO NOT DAMAGE EXISTING TRACK SURFACING. CONTRACTOR

IS TO TAKE EXTREME CAUTION WHEN EXCAVATING AROUND

EX. ELECTRICAL AND WATER LINES NOTED TO REMAIN AND

BACKUP /

MAINTENANCE: INSPECT THE FABRIC BARRIER AFTER STORM

EVENTS AND MAKE NEEDED REPAIRS IMMEDIATELY. REMOVE ACCUMULATED SEDIMENT TO PROVIDE STORAGE FOR THE NEXT STORM. AVOID DAMAGING OR UNDERCUTTING THE

FABRIC DURING SEDIMENT REMOVAL.

 $\left\langle 4
ight
angle$  long jump and pole vault events, see C1.2 for grading plan

LOCATIONS GIVEN ARE

APPROXIMATE AND ARE TO BE

SITE VERIFIED PRIOR TO THE

START OF CONSTRUCTION.

 $\langle 5 \rangle$  Long jump underdrain flatpipe to be installed over filter fabric ALONG SUBGRADE O.C. OF PIT - TIE INTO NEAREST STORM MANHOLE AND OR FIELD YARD DRAIN. SLOPE SUBGRADE AT 1%.. SEE DETAIL #10 SHT G4.00 FOR MORE INFORMATION AND CIVIL DRAWINGS C1.2-C1.3

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

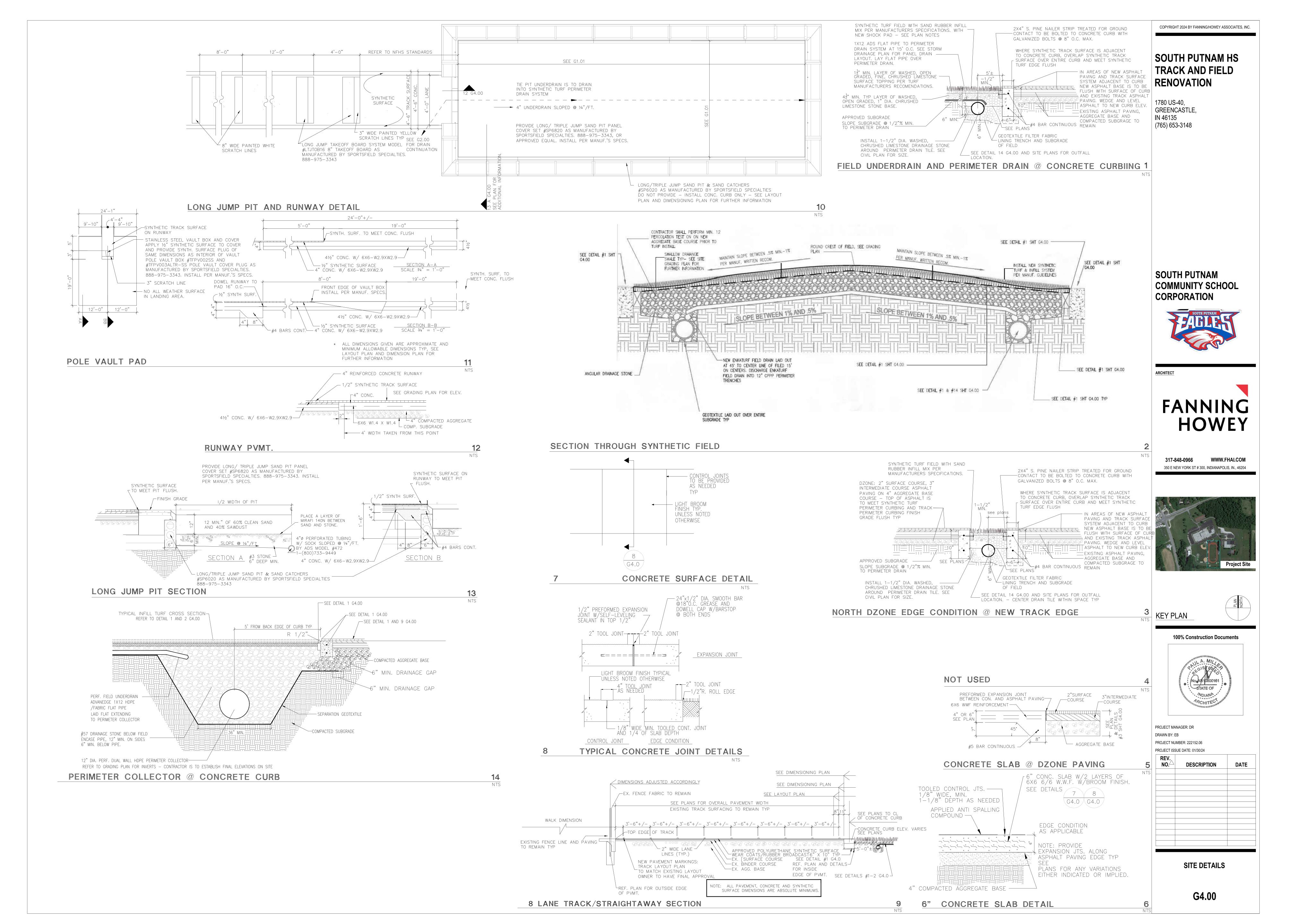
CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (INCLUDING, BUT NOT LIMITED TO, MANHOLES, INLETS, VALVES, AND MARKS MADE UPON THE GROUND BY OTHERS) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

SITE GRADING AND

**DRAINAGE PLAN** 

G2.00



#### LIGHTING CONTROLS

		CONI	IVOLO		
SYMBOL	MOUNTING	DIMMING TYPE	OCCUPANCY SENSOR TYPE	SWITCH/ BUTTONS	CONTROL DESCRIPTION
□ <sub>D1</sub>	WALL	0-10V	N/A	(1)	- (1) MANUAL SWITCH ON (TO SELECTED LIGHT LEVEL)/OFF. - (1) MANUAL LIGHT LEVEL WITH SLIDER.
D <sub>D2</sub>	WALL	0-10V	DUAL TECH.	(1)	- (1) MANUAL SWITCH ON (TO SELECTED LIGHT LEVEL)/OFF (1) MANUAL LIGHT LEVEL WITH SLIDER MANUAL ON / AUTO OFF.
□ <sub>D3</sub>	WALL	LINE VOLT.	N/A	(1)	- (1) MANUAL SWITCH ON (TO SELECTED LIGHT LEVEL)/OFF. - (1) MANUAL LIGHT LEVEL WITH SLIDER.
D <sub>DMX</sub>	WALL	DMX	N/A	MULTI.	- DMX COLOR CHANGING CONTROLLER. - NICOLAUDIE STICK-CU4.
\$ <sub>OS1</sub>	WALL	N/A	DUAL TECH.	(1)	- (1) MANUAL SWITCH ON/OFF. - MANUAL ON / AUTO OFF.
\$ <sub>OS2</sub>	WALL	N/A	DUAL TECH.	(2)	- (2) MANUAL SWITCH ON/OFF. - MANUAL ON / AUTO OFF.
	CEILING	N/A	DUAL TECH.	N/A	- AUTO-ON / AUTO-OFF - TWO RELAYS IN POWER PACK. - DISTRIBUTION COVERAGE AS REQUIRED FOR SPACE SIZE.
$\oplus$	CEILING	N/A	PIR	N/A	- MANUAL OR AUTO-ON / AUTO-OFF - HIGHBAY COVERAGE. - TWO RELAYS IN POWER PACK. - DISTRIBUTION COVERAGE AS REQUIRED FOR SPACE SIZE.
\$	WALL				SINGLE POLE SWITCH
<b>\$</b> <sub>3</sub>	WALL				THREE-WAY SWITCH
<b>\$</b> <sub>4</sub>	WALL				FOUR-WAY SWITCH
\$ <sub>P</sub>	WALL				SINGLE POLE SWITCH W/ PILOT LIGHT
\$ <sub>3P</sub>	WALL				THREE-WAY SWITCH WITH PILOT LIGHT
\$ <sub>K</sub>	WALL				KEY OPERATED SINGLE POLE SWITCH
\$ <sub>3K</sub>	WALL				KEY OPERATED THREE-WAY SWITCH

#### FIRE ALARM

WALL	CEILING	DESCRIPTION
MP		MANUAL PULL STATION: DOUBLE ACTION
∇ E	置	HORN
Ţ E	置	HORN/STROBE
V		VISUAL STROBE
V S		SPEAKER
▼ S		SPEAKER/STROBE
O B		BELL
B		BELL WITH INDICATOR
s E		SMOKE DETECTOR: PHOTOELECTRIC
H F		HEAT DETECTOR
□ <u> </u>	Н	DUCT DETECTOR - SUPPLY DUCT
S D====================================		DUCT DETECTOR - RETURN DUCT
R		DOOR HOLD RELEASE
FACP		CONTROL PANEL
FAAP		ANNUNCIATOR PANEL
NAC		NOTIFICATION APPLIANCE CONTROL PANEL
AM		ADDRESSABLE MODULE
CD		CELLULAR DIALER
FS		FLOW SWITCH
K		KNOX BOX
PS		PRESSURE SWITCH
PIV		POST VALVE INDICATOR
RD		REMOTE DIALER
RI		REMOTE INDICATOR
RT		REMOTE TEST
TS		TAMPER SWITCH

#### LIGHTING

SUBSCRIPTS FOR LIGHTING FIXTURES INDICATE THE FOLLOWING, U.O.N.  NL - NIGHT LIGHT, PANEL SWITCHED, U.O.N.		
© □	LIGHTING FIXTURE - TYPE AS INDICATED	
©	WALL MOUNTED FIXTURE - TYPE AS INDICATED	
	LIGHTING FIXTURE - TYPE AS INDICATED	
ф <b>ў</b>	POLE MOUNTED LIGHTING FIXTURE - TYPE AS INDICATED	
<del></del>	TRACK LIGHTING FIXTURE	
	EMERGENCY BATTERY WALL PACK LIGHTING FIXTURE - TYPE AS INDICATED	
	SHADING INDICATES EMERGENCY FIXTURE CONNECTED TO BATTERY INVERTER OR GENERATOR. CONNECT TO UNSWITCHED SOURCE IN ADDITION TO SWITCHING INDICATED	
<b>9</b>	EXIT LIGHT - WALL/CEILING MOUNTED - DIRECTIONAL ARROWS AS INDICATED, SHADING INDICATES ILLUMINATED FACE. CONNECT TO UNSWITCHED BRANCH CIRCUIT INDICATED	

## LINE SYMBOLS

LIGHT/SCREENED SOLID LINES INDICATE EXISTING TO REMAIN — — HEAVY DASHED LINES INDICATE EXISTING TO BE REMOVED ———— HEAVY CONTINUOUS LINES INDICATE NEW WORK

> NOT ALL INFORMATION ON THIS SHEET WILL BE USED IN THIS PROJECT

## **ABBREVIATIONS**

ON CENTER

OVERLOADS

**PUSH BUTTON** 

RECEPTACLE

RETURN FAN

SCHEDULE

SUPPLY FAN

SHUNT TRIP

SWITCHBOARD

TERMINAL BLOCK

SWITCH

**TYPICAL** 

WIRE

POTENTIAL TRANSFORMER

RECEPTACLE PANELBOARD

RIGID STEEL CONDUIT

SHUNT TRIP BREAKER

UNLESS OTHERWISE NOTED

VARIABLE FREQUENCY DRIVE

REMOTE CONTROL LIGHTING PANEL

POLE

PHASE

OL'S

PH/Ø

RCLP

RSC

STB

SW

TYP

SWBD

SCHED

RECEPT.

ABBRE	EVIATIONS	ELECTRICAL	RECEPTACLES
A	AMPERES	Φ	DUPLEX RECEPTACLE - NORMAL POWER
AC AF	ALTERNATING CURRENT AMPERES FRAME (BREAKER RATING)	#	BUT LEXTREGET FACEL - NORWALT OWER
AFF	ABOVE FINISH FLOOR	•	DUPLEX RECEPTACLE - EMERGENCY POWER
AHU	AIR HANDLING UNIT	"	
ASD AT	ADJUSTABLE SPEED DRIVE AMPERES TRIP (BREAKER SETTING)	<b> </b>	DUPLEX RECEPTACLE TYPE GFCI - NORMAL POWER
ATS	AUTOMATIC TRANSFER SETTING		
AUX	AUXILIARY	<b>#</b>	DUPLEX RECEPTACLE TYPE GFCI - EMERGENCY POWER
С	CONDUIT		
СВ	CIRCUIT BREAKER	#	QUADRAPLEX RECEPTACLE - NORMAL POWER
CKT CP	CIRCUIT CONTROL PANEL		
CPT	CONTROL PANEL  CONTROL POWER TRANSFORMER	•	QUADRAPLEX RECEPTACLE - EMERGENCY POWER
СТ	CURRENT TRANSFORMER		
DISC	DISCONNECT	#	QUADRAPLEX RECEPTACLE TYPE GFCI - NORMAL POWER
DL	DOUBLE LUGS		OUADDADI SV DEGEDTAQUE TVDE GEGU
DP	POWER DISTRIBUTION PANEL	#	QUADRAPLEX RECEPTACLE TYPE GFCI - EMERGENCY POWER
DWG	DRAWING		
EF	EXHAUST FAN	φ	SIMPLEX RECEPTACLE - NORMAL POWER
EG	EQUIPMENT GROUND		
ELEC EM/EMERG	ELECTRIC/ELECTRICAL EMERGENCY	$lackbox{}{f \Phi}$	SIMPLEX RECEPTACLE - EMERGENCY POWER
EMT	ELECTRICAL METALLIC TUBING		
EO	ELECTRICALLY OPERATED	φ	SPECIAL RECEPTACLE - NORMAL POWER
F	FUSE	'	
FA	FIRE ALARM	•	SPECIAL RECEPTACLE - EMERGENCY POWER
FB FDR	FLOOR BOX FEEDER	'	
FL	FLOOR		HINGTION BOY (DECESSED AMALL)
FLEX	FLEXIBLE	0	JUNCTION BOX (RECESSED/WALL)
FTL	FEED THRU LUGS		DIRECT CONNECTION TO EQUIPMENT
G	GROUND		BINCEST SCHINCETION TO EQUI MENT
GRND	GROUND	$\Phi_{x}$	RECEPTACLE DESIGNATIONS
HP	HORSEPOWER	Ψx	"X" INDICATED THE FOLLOWING:
HOA	HAND-OFF-AUTOMATIC		BLANK - 20A ,125VAC F - FLUSH IN FLOOR, 20A, 125VAC
JB	JUNCTION BOX		H - HORIZONTALLY MOUNTED, 20A, 125VAC IG - ISOLATED GROUND, 20A, 125VAC
			T - TAMPER RESISTANT, 20A, 125VAC S - SURFACE MOUNTED, 20A,125VAC
KV	KILOVOLTS		WP - WEATHERPROOF IN-USE, 20A, 125VAC X - MOUNTED IN EXISTING OUTLET BOX, 20A, 125VAC
KVA KVAR	KILOVOLTS-AMPERES KILOVOLTS-AMPERES-REACTIVE		
KW	KILOWATTS		CEILING DUPLEX RECEPTACLE - NORMAL POWER CIRCUIT
KWH	KILOWATT-HOURS	<b>(</b>	CEILING DUPLEX RECEPTACLE - EMERGENCY POWER CIRCUIT
LA	LIGHTNING ARRESTOR		
LSIG	LONG, SHORT, INSTANTANEOUS, GROUND FAULT TRIP SETTINGS		CEILING QUADRAPLEX RECEPTACLE - NORMAL POWER CIRCUIT
LP	LIGHTING PANELBOARD		CEILING QUADRAPLEX RECEPTACLE - EMERGENCY
Li	LIGHTING 17 HAZZEBO/MAB	<b>#</b>	POWER CIRCUIT
MAX	MAXIMUM	Ф	FLOOR BOX DUPLEX RECEPTACLE - NORMAL POWER
MCB MCC	MAIN CIRCUIT BREAKER MOTOR CONTROL CENTER		CIRCUIT
MECH	MECHANICAL	•	FLOOR BOX DUPLEX RECEPTACLE - EMERGENCY POWER CIRCUIT
MFS	MANUOLE		- SWERCONCOLL
MH MIN	MANHOLE MINIMUM		FLOOR BOX QUADRAPLEX RECEPTACLE - NORMAL POWER CIRCUIT
MISC	MISCELLANEOUS		
MLO MTD	MAIN LUGS ONLY MOUNTED		FLOOR BOX QUADRAPLEX RECEPTACLE - EMERGENCY POWER CIRCUIT
MTG	MOUNTING		
	NORMALLY OLD COTT		LINE ADJACENT DEVICE SYMBOL INDICATES
NC NEC	NORMALLY CLOSED  NATIONAL ELECTRICAL CODE		RECEPTACLE AT 2" ABOVE BACKSPLASH/COUNTERTOP
NF	NON-FUSED		TO BOTTOM OF DEVICE COORDINATE WITH CASEWORK.
NIC	NOT IN CONTRACT	FB	FLOOR BOX
NO NO.	NORMALLY OPEN NUMBER		
N.T.S.	NOT TO SCALE		
			OUDEAGE MOUNTED DAGENAY/MITH DEGESTAGES

## **EQUIMPMENT NAMING CONVENTION**

IN LOCATIONS INDICATED

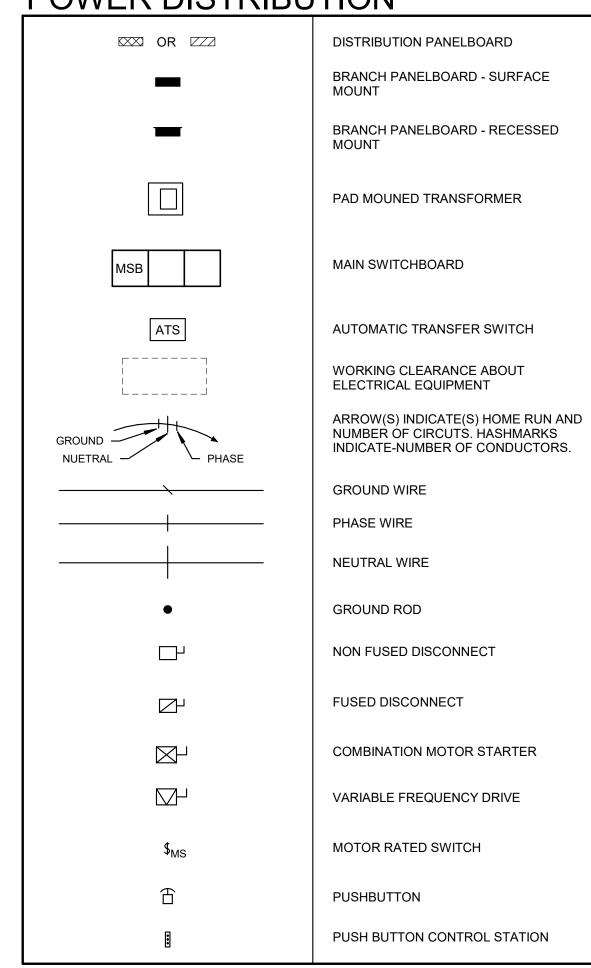
SURFACE-MOUNTED RACEWAY WITH RECEPTACLES

LQUINFINLIN I NAMING CONVEN
FLOOR NUMBER — SEQUENCIAL PANEL NUMBER B - BASEMENT 1 - 1ST FLOOR 2 - 2ND FLOOR  BLANK OR N - NORMAL C - CRITICAL E - EQUIPMENT G - GENERATOR L - LIFE SAFETY U - UPS
FEEDER & BRANCH CIRCUIT SCHEDULE (COPPER)
CONDUCTOR SIZE CONDUIT SIZE & QUANTITY PER CONDUIT
FEEDER/BRANCH PHASE & EQUIP/SERV 1P,1N,1G 2P,1N,1G 3P,1N,1G

FEEDER & BRANCH CIRCUIT SCHEDULE (COPPER)										
		CTOR SIZE	CONDUIT SIZE & QUANTITY			TTY				
		ONDUIT								
EDER/BRANCH		EQUIP/SERV				00000	000110	00 411 00		
IRCUIT LABEL	NEUTRAL	GROUND	2P,1G	3P,1G		3P,2N,1G		3P,1N,2G		
F20	12	12	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"		
F30	10	10	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"		
F40	8	10	3/4"	3/4"	1"	1"	1"	1"		
F50	6	10	1"	1"	1"	1-1/4"	1-1/4"	1"		
F60	4	10	1"	1"	1-1/4"	1-1/4"	1-1/4"	1-1/4"		
F70	4	8	1"	1-1/4"	1-1/4"	1-1/4"	1-1/2"	1-1/4"		
F80	3	8	1"	1-1/4"	1-1/4"	1-1/2"	1-1/2"	1-1/4"		
F90	2	8	1"	1-1/4"	1-1/2"	1-1/2	2"	1-1/2"		
F100	1	8	1-1/4"	1-1/2"	1-1/2"	2"	2"	2"		
F110	1	6	1-1/4"	1-1/2"	2"	2"	2-1/2"	2"		
F125	1/0	6	1-1/4"	1-1/2"	2"	2"	2-1/2"	2"		
F150	1/0	6	1-1/4"	1-1/2"	2"	2"	2-1/2"	2"		
F175	2/0	6	1-1/2"	2"	2"	2-1/2"	2-1/2"	2"		
F200	3/0	6	1-1/2"	2"	2"	2-1/2"	3"	2-1/2"		
F225	4/0	4	2"	2"	2-1/2"	3"		2-1/2"		
F250	250	4	2"	2-1/2"	3"	3"	]	3"		
F300	350	4	2"	2-1/2"	3"	3-1/2"	]	3"		
F350	500	3	2-1/2"	3"	3-1/2"	4"	1	3-1/2"		
F400	3/0	3	(2) 1-1/2"	(2) 2"	(2) 2-1/2"	(2) 2-1/2"	1	(2) 2-1/2"		
F450	4/0	2	(2) 2"	(2) 2"	(2) 2-1/2"	(2) 3"	1	(2) 2-1/2"		
F500	250	2	(2) 2"	(2) 2-1/2"	(2) 3"	(2) 3"	<b> </b>	(2) 3"		
F600	350	1	(2) 2-1/2"	(2) 3"	(2) 3"	(2) 3-1/2"	<b> </b>	(2) 3"		
F700	500	1/0	(2) 2-1/2"	(2) 3"	(2) 3-1/2"	(2) 4"	<b> </b>	(2) 3-1/2"		
F800	350	2/0	(3) 2-1/2"	(3) 3"	(3) 3"	(3) 3-1/2"	<b> </b>	(3) 3"		
F900	350	2/0	(3) 2-1/2"	(3) 3"	(3) 3"	(3) 3-1/2"				
F1000	500	2/0	(3) 2-1/2"	(3) 3"	(3) 3-1/2"	(3) 4"				
F1200	350	3/0	(4) 2-1/2"	(4) 3"	(4) 3"	(4) 3-1/2"	1			
F1600	500	4/0	(5) 3"	(5) 3"	(5) 3-1/2"	(5) 4"	1			
F2000	500	250	(6) 3"	(6) 3"	(6) 3-1/2"	(6) 4"	<b> </b>			
F2500	500	350	(7) 4"	(7) 3-1/2"	(7) 3-1/2"	(7) 4"	<b> </b>			
			<del></del>	1.,	1.7	<u> </u>	4 '	1		

F3000 500 500 (8) 4" (8) 4" (8) 4"

#### POWER DISTRIBUTION



(NOTES APPLY TO ALL ELECTRICAL DRAWINGS)

INSTALLATION.

#### **GENERAL SYMBOLS & ABBREVIATIONS**

WHERE DIFFERENT RECESSED ELECTRICAL DEVICES WITH THE SAME MOUNTING HEIGHTS ARE INDICATED SIDE-BY-SIDE, MOUNT THE DEVICES SO THAT THERE IS FOUR INCHES BETWEEN ADJACENT VERTICAL EDGES.

- WHERE ELECTRICAL DEVICES WITH DIFFERENT MOUNTING HEIGHTS ARE LOCATED IN THE SAME AREA ALIGN DEVICES VERTICALLY THROUGH THEIR CENTERLINES.
- INSTALL SEPARATE INDEPENDENT NEUTRAL CONDUCTORS FOR ALL 120V AND 277V CIRCUITS. DO NOT SHARE NEUTRALS.
- ALL EXIT FIXTURES AND FIXTURES INDICATED WITH "NL" SHALL BE UNSWITCHED. UNLESS OTHERWISE NOTED, PROVIDE FEEDERS AND BRANCH CIRCUITS WHICH HAVE AN AMPACITY EQUAL TO OR GREATER THAN THE CIRCUIT OVERCURRENT PROTECTIVE DEVICE RATING SERVING THE CIRCUIT. REFER TO CIRCUIT SIZING

SCHEDULE FOR SIZES OF FEEDERS AND BRANCH CIRCUITS.

- DIVISION 26 CONTRACTOR SHALL REFER TO LIFE SAFETY PLAN FOR FIRE-RATING REQUIREMENTS. DIVISION 26 CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING FIRE-RATED DEVICES/SEALS AS SHOWN ON ELECTRICAL DRAWINGS
- AND AS REQUIRED BASED ON LIFE SAFETY PLAN INFORMATION. PER NEC ARTICLE 110.26(A) AND 110.26(F) THE DEDICATED ELECTRICAL SPACE INCLUDES THE SPACE DEFINED BY EXTENDING THE FOOTPRINT OF THE ELECTRICAL EQUIPMENT (INCLUDING BUT NOT LIMITED TO SWITCHBOARDS, PANELBOARDS, TRANSFORMERS, MOTOR CONTROLLERS) FROM THE FLOOR TO A HEIGHT OF 6'-0" ABOVE THE HEIGHT OF THE EQUIPMENT OR TO THE STRUCTURAL CEILING, WHICH EVER IS LOWER. THE DEDICATED ELECTRICAL SPACE MUST BE CLEAR OF ANY PIPING, DUCTS, LEAK PROTECTION APPARATUS, OR EQUIPMENT FOREIGN TO THE ELECTRICAL INSTALLATION. PLUMBING, HEATING, VENTILATION, AND AIR-CONDITIONING PIPING, DUCTS, AND EQUIPMENT MUST BE INSTALLED OUTSIDE THE WIDTH AND DEPTH ZONE. CONTRACTOR SHALL MAKE SURE NO PIPING OR DUCT WORK IS INSTALLED ABOVE THE ELECTRICAL EQUIPMENT. COORDINATE THESE REQUIREMENTS WITH ALL OTHER TRADES PRIOR TO
- ALL WORK SHALL CONFORM TO OR EXCEED THE MINIMUM REQUIREMENTS OF THE CURRENT ADOPTED AND APPLICABLE ANSI/NFPA 70 WITH STATE AMENDMENTS, ENERGY CODE, ANSI/IEEE C2, AND ALL FEDERAL, STATE, LOCAL, AND MUNICIPAL CODES AND ORDINANCES. THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH THE DIRECTIONS OF ALL AUTHORITIES HAVING JURISDICTION.
- REFER TO THE ARCHITECTURAL DRAWINGS FOR CEILING WORK BY THE GENERAL CONTRACTOR. COORDINATE ALL ELECTRICAL WORK WITH THE GENERAL
- CONTRACTOR. THE ELECTRICAL CONTRACTOR SHALL PROVIDE PENETRATIONS THROUGH ALL FLOORS, WALLS, CEILINGS, AND OTHER CONSTRUCTION ELEMENTS REQUIRED TO COMPLETE HIS WORK. PROVIDE PROPER FIRE SAFEING FOR ALL PENETRATIONS MADE. PROVIDE APPROPRIATE SEALANT ( I.E. FIRESAFEING) TO MAINTAIN CONTRUCTION INTEGRITY FOR ANY PENETRATIONS THROUGH FLOORS, STRUCTURAL CEILING, AND FIRE WALLS.
- ALL FEEDER NEUTRAL / GROUNDED CONDUCTORS SHALL BE CONSIDERED CURRENT CARRYING. DERATE / ADJUST MULTIPLE CONDUCTORS IN A RACEWAY IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
- INSTALL ALL CONDUITS, RACEWAYS, AND CABLE TRAY FOR MAXIMUM HEAD CLEARANCE IN MECHANICAL AREAS.
- NEW DEVICES SHALL MATCH EXISTING DEVICES AND COVERPLATES.
- CEILING MOUNTED DEVICES TO REMAIN SHALL BE SUPPORTED FROM

EFFECTIVE AND EFFICIENT OVERALL INSTALLATION.

- STRUCTURE DURING CONSTRUCTION AND REINSTALLED IN NEW CEILING. COORDINATE ALL ELECTRICAL WORK WITH ALL OTHER TRADES TO ENSURE

COPYRIGHT 2024 BY FANNING/HOWEY ASSOCIATES, INC.

## SOUTH PUTNAM **HS TRACK AND FIELD** RENOVATION

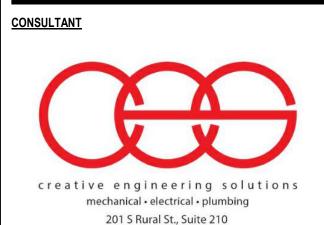
1780 US-40 GREENCASTLE, IN 46135

**SOUTH PUTNAM COMMUNITY SCHOOL** CORPORATION



<u>ARCHITECT</u>



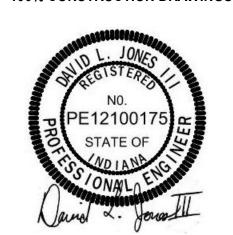


Indianapolis, IN 46201 • 463-777-8182

www.creativeng.net

KEY PLAN

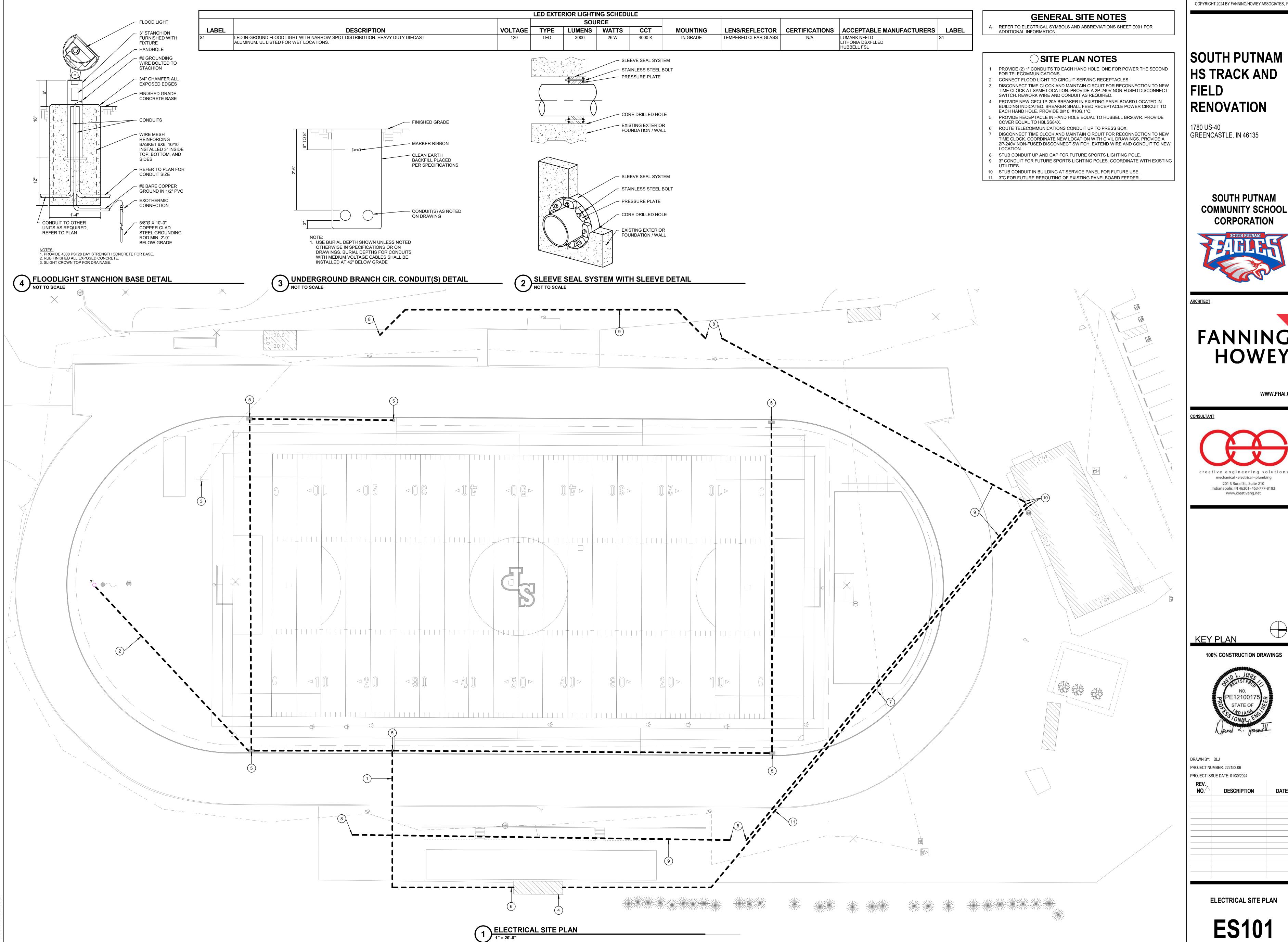
**100% CONSTRUCTION DRAWINGS** 



DRAWN BY: Author PROJECT NUMBER: 222152.06 PROJECT ISSUE DATE: 01/30/2024

REV. NO.	DESCRIPTION	DATE
-		

**ELECTRICAL SYMBOLS AND ABBREVIATIONS** 









NO.	DESCRIPTION	DATE