FINAL ENGINEERING PLANS

FRANKLIN INDUSTRIAL

JIM BLACK RD. & MCCLAIN DR.
FRANKLIN, IN 46131

Indiana Utilities Protection Service
Call 811 before you dig

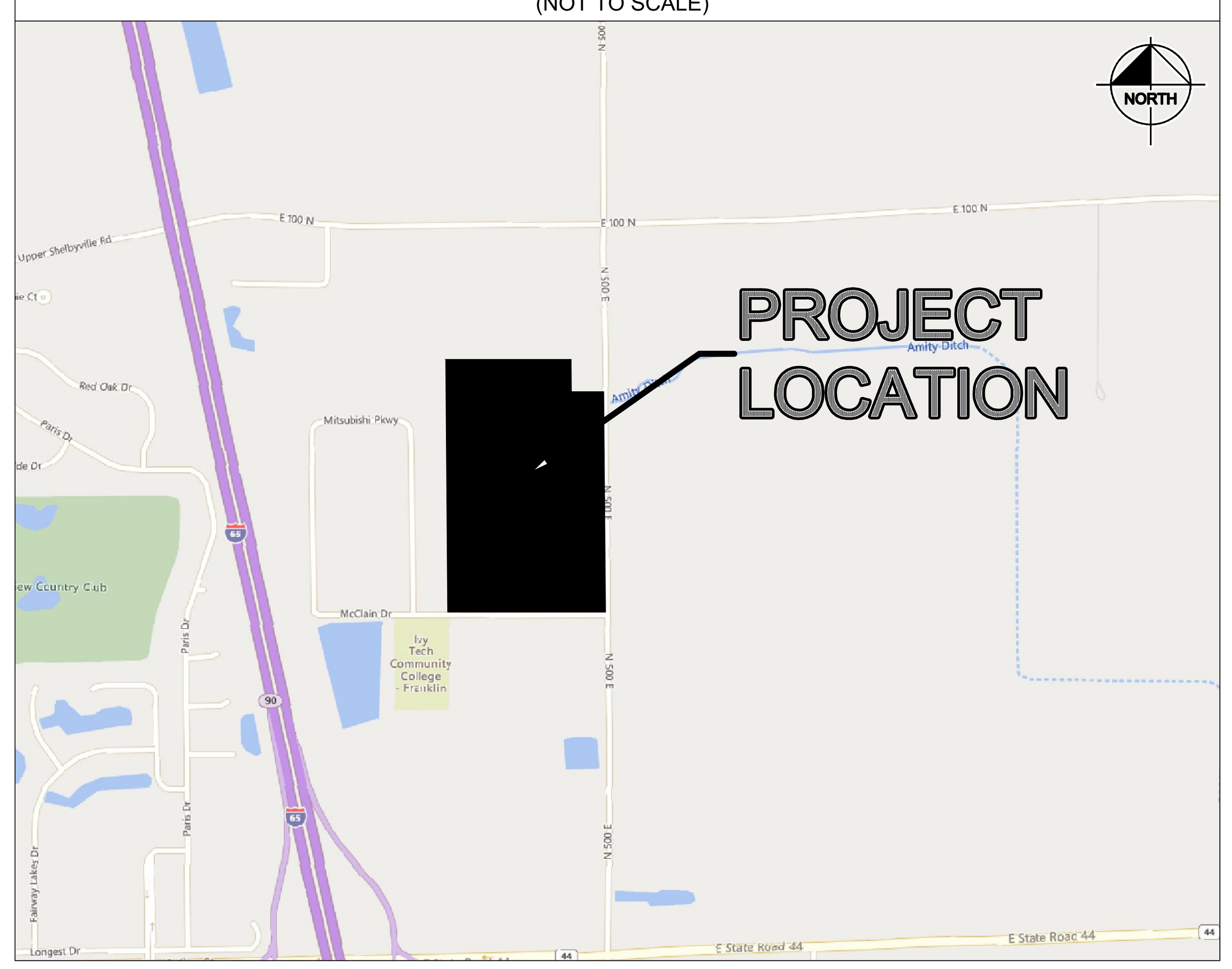
UTILITY AND GOVERNING AGENCY CONTACTS

SERVICE / JURISDICTION	COMPANY / DEPT.	ADDRESS	PHONE NUMBER	CONTACT
STORM SEWER & SANITARY SEWER	CITY OF FRANKLIN DEPARTMENT OF PUBLIC WORKS	796 SOUTH STATE STREET, FRANKLIN, IN 46131	(317) 736-3640	SALLY BROWN
WATER	INDIANA AMERICAN WATER COMPANY	555 EAST COUNTY LINE ROAD, GREENWOOD, IN 46143	(317) 831-3385 EXT. 2	TROY BRYANT
FIRE DEPARTMENT	CITY OF FRANKLIN	1800 THORNBURG LANE, FRANKLIN, IN 46131	(317) 736-3650	BRYNE PURSIFULL
NATURAL GAS	CENTERPOINT ENERGY	600 INDUSTRIAL DRIVE, FRANKLIN, IN 46131	(866) 203-4284	DAVID SHERRY
ELECTRICITY	JOHNSON COUNTY REMC	750 INTERNATIONAL DRIVE, FRANKLIN, IN 46131	(317) 736-6174	CHUCK BAILEY
TELEPHONE / COMMUNICATIONS	CENTURYLINK	1147 MORTON STREET, FRANKLIN, IN 46131	(317) 736-4863	JOHN MEYERS
STREETS	CITY OF FRANKLIN DEPARTMENT OF PUBLIC WORKS	796 SOUTH STATE STREET, FRANKLIN, IN 46131	(317) 736-3660	
PLANNING AND ZONING	CITY OF FRANKLIN DEPARTMENT OF PLANNING AND ENGINEERING	70 E MONROE STREET, FRANKLIN, IN 46131	(877) 736-3631	JOANNA MYERS MARK RICHARDS

PROJECT TEAM

ROLE	COMPANY	ADDRESS	PHONE NUMBER	CONTACT
DEVELOPER/OWNER	THE PETERSON COMPANY, LLC	7132 ZIONSVILLE RD., INDIANAPOLIS, IN 46268		LARRY D. SIEGLER
CIVIL ENGINEER	KIMLEY-HORN & ASSOCIATES, INC.	250 E. 96TH ST., STE 580, INDIANAPOLIS, IN 46240	(317) 218-9560	BILL BUTZ, P.E.
ENVIRONMENTAL ENGINEER	EARTH SOURCE, INC.	14921 HAND RD., FORT WAYNE, IN 46818	(260) 489-8511	ERIC P. ELLINGSON, SPWS
LANDSCAPE ARCHITECT	KIMLEY-HORN & ASSOCIATES, INC.	250 E. 96TH ST., STE 580, INDIANAPOLIS, IN 46240	(317) 218-9560	MICHELE DYER, PLA
LAND SURVEYOR	KUHN & GUSTAFSON LAND SURVEYING	PO BOX 70, ZIONSVILLE, IN 46077	(317) 654-8829	BRADY KUHN, P.S.

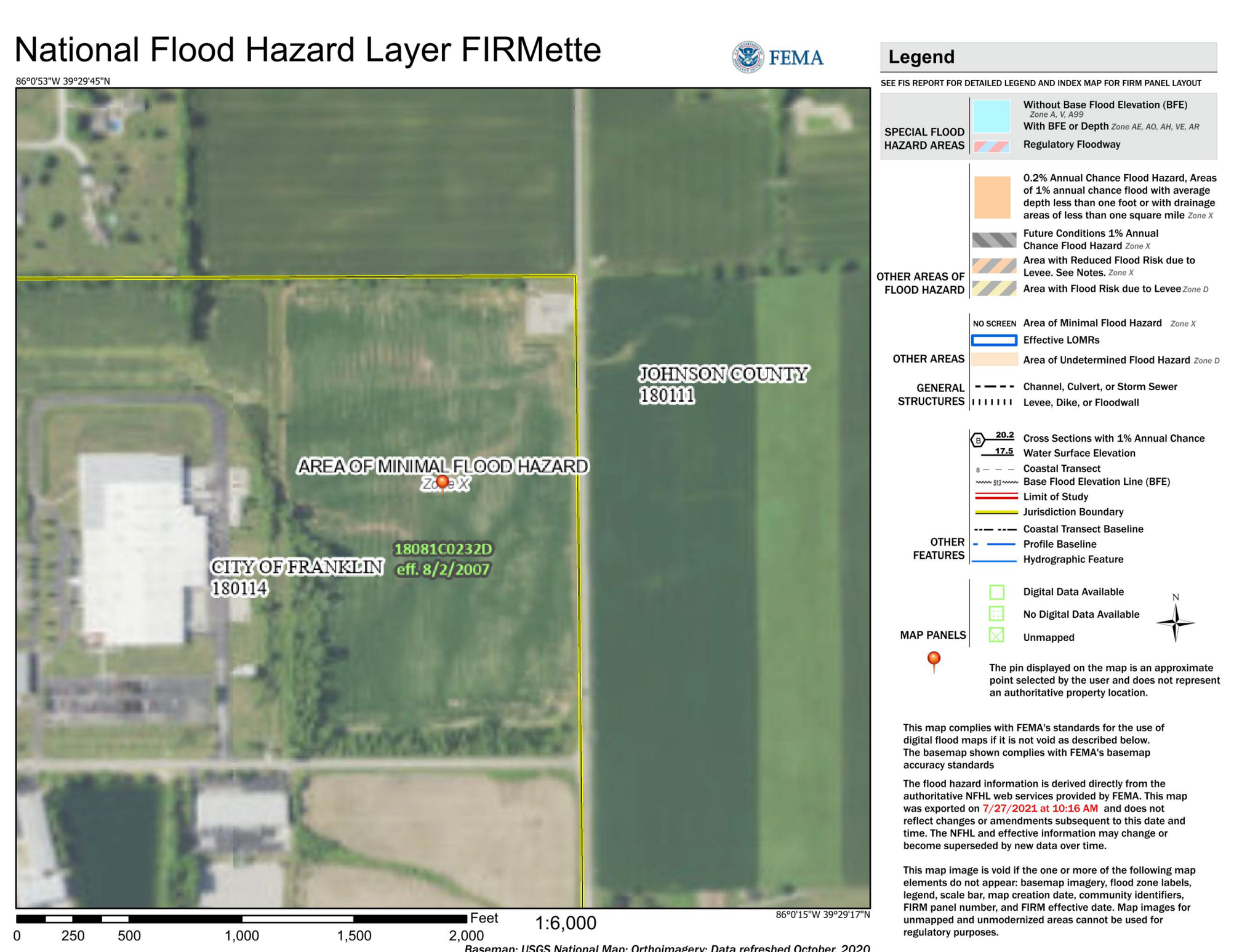
LOCATION MAP
(NOT TO SCALE)



JOHNSON COUNTY

CONSTRUCTION OF A ±539,668 SF INDUSTRIAL BUILDING FOR THE PETERSON COMPANY, LLC ON ±35.86 AC. PROJECT IS IN SECTION 18 OF T12N, R5E, JOHNSON COUNTY, INDIANA

National Flood Hazard Layer FIRMette



LEGAL DESCRIPTION

A PART OF THE NORTHEAST QUARTER OF SECTION 18, TOWNSHIP 12 NORTH, RANGE 5 EAST, JOHNSON COUNTY, INDIANA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID NORTHEAST QUARTER; THENCE SOUTH 00 DEGREES 28 MINUTES 24 SECONDS EAST (ASSUMED BEARING) ON AND ALONG THE EAST LINE OF SAID NORTHEAST QUARTER 208.71 FEET TO THE SOUTHEAST CORNER OF THE LAND OF HOOSIER ENERGY RURAL ELECTRIC COOPERATIVE INC AS DESCRIBED IN INSTRUMENT NO. 96033264 IN THE OFFICE OF THE RECORDER OF JOHNSON COUNTY, INDIANA AND THE PLACE OF BEGINNING; THENCE CONTINUING SOUTH 00 DEGREES 28 MINUTES 24 SECONDS EAST ON AND ALONG THE EAST LINE OF SAID NORTHEAST QUARTER 1420.57 FEET TO A MAG NAIL WITH WASHER STAMPED "K&G LS FIRM 0141" ON THE NORTH LINE OF A 60 FOOT RIGHT OF WAY AS DESCRIBED IN INSTRUMENT NUMBER 9600312 IN SAID RECORDER'S OFFICE; THENCE SOUTH 89 DEGREES 59 MINUTES 28 SECONDS WEST ALONG SAID RIGHT OF WAY LINE 1016.69 FEET TO THE EAST LINE OF THE LAND OF MITSUBISHI HEAVY INDUSTRIES AMERICA INC. AS DESCRIBED IN INSTRUMENT NO. 2021–010329 IN SAID RECORDER'S OFFICE; THENCE NORTH 00 DEGREES 25 MINUTES 45 SECONDS WEST 1629.52 FEET TO THE NORTH LINE OF SAID NORTHEAST QUARTER; THENCE SOUTH 89 DEGREES 59 MINUTES 40 SECONDS EAST ON AND ALONG THE NORTH LINE OF SAID NORTHEAST QUARTER 806.72 FEET TO A REBAR WITH CAP STAMPED S0407 AT THE NORTHWEST CORNER OF THE LAND OF HOOSIER ENERGY RURAL ELECTRIC COOPERATIVE INC AS DESCRIBED IN INSTRUMENT NO. 96033264 IN SAID RECORDER'S OFFICE; THENCE SOUTH 00 DEGREES 28 MINUTES 24 SECONDS EAST 208.75 FEET TO A REBAR WITH CAMP STAMPED S0407 AT THE SOUTHEAST CORNER OF SAID INSTRUMENT NO. 96033264; THENCE NORTH 89 DEGREES 59 MINUTES 43 SECONDS EAST ALONG THE SOUTH LINE OF SAID INSTRUMENT NO. 96033264 A DISTANCE OF 208.71 FEET TO THE PLACE OF BEGINNING, CONTAINING 37.00 ACRES, MORE OR LESS.

Sheet List Table

REVISIONS | No. | DATE | BY

Kimley-Horn
© 2021 KIMLEY-HORN AND ASSOCIATES, INC.
250 EAST 96TH STREET, SUITE 580,
INDIANAPOLIS, IN 46240
PHONE: 317-218-9560
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: AMM
DRAWN BY: CPP
CHECKED BY: WAB

NOT APPROVED FOR CONSTRUCTION
9/9/2021

PETERSON

TITLE SHEET

FRANKLIN INDUSTRIAL
JIM BLACK RD. & MCCLAIN DR., FRANKLIN, IN

ORIGINAL ISSUE: 9/9/2021
KHA PROJECT NO. 170024027
SHEET NUMBER
C0.0

GENERAL NOTES

1. THE MUNICIPALITY REQUIREMENTS AND THE LATEST INDIANA DEPARTMENT OF TRANSPORTATION (INDOT) STANDARD SPECIFICATIONS INCLUDING CHANGES SHALL GOVERN ALL CONSTRUCTION ITEMS THAT ARE A PART OF THIS PLAN UNLESS OTHERWISE NOTED. WHEN CONFLICTS ARISE BETWEEN ABOVE LISTED SPECIFICATIONS, THE MORE STRINGENT SHALL TAKE PRECEDENCE.

2. STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, AND RECURRING SPECIAL PROVISIONS, CONSTRUCTION PLANS, AND SUBSEQUENT DETAILS ARE ALL TO BE CONSIDERED AS PART OF THE CONTRACT. INCIDENTAL ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THIS WORK MAY NOT BE SPECIFICALLY NOTED, BUT ARE CONSIDERED A PART OF THIS CONTRACT.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THE UTILITY COMPANIES LOCATE THEIR FACILITIES IN THE FIELD PRIOR TO CONSTRUCTION AND SHALL ALSO BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF THESE FACILITIES. THE ENGINEER DOES NOT WARRANT THE LOCATION OF ANY EXISTING UTILITIES SHOWN ON THE PLAN. THE CONTRACTOR SHALL CALL INDIANA UTILITIES PROTECTION SERVICE (811 OR 1.800.362.2764) AND THE MUNICIPALITY FOR UTILITY LOCATIONS.

4. NO CONSTRUCTION PLANS SHALL BE USED FOR CONSTRUCTION UNLESS SPECIFICALLY MARKED "FOR CONSTRUCTION" PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AFFECTING THE WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IN ADDITION, THE CONTRACTOR MUST VERIFY THE SURVEYOR'S LINE AND GRADE STAKES. IF THERE ARE ANY DISCREPANCIES WITH WHAT IS SHOWN ON THE CONSTRUCTION PLANS, HE/SHE MUST IMMEDIATELY REPORT THEM TO THE SURVEYOR OR ENGINEER BEFORE DOING ANY WORK. OTHERWISE, THE CONTRACTOR ASSUMES FULL RESPONSIBILITY. IN THE EVENT OF DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, SPECIFICATIONS, AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSIONS OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTION, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT THE CONTRACTOR'S OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTIONS ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.

5. NOTIFICATION OF COMMENCING CONSTRUCTION:

5.1. THE CONTRACTOR SHALL NOTIFY AFFECTED GOVERNMENTAL AGENCIES IN WRITING AT LEAST THREE FULL WORKING DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL NOTIFY, AS NECESSARY, ALL TESTING AGENCIES, THE MUNICIPALITY, AND THE OWNER SUFFICIENTLY IN ADVANCE OF CONSTRUCTION.

5.2. FAILURE OF THE CONTRACTOR TO ALLOW PROPER NOTIFICATION TIME WHICH RESULTS IN THE TESTING COMPANIES TO BE UNABLE TO VISIT THE SITE AND PERFORM TESTING WILL CAUSE THE CONTRACTOR TO SUSPEND THE OPERATION TO BE TESTED UNTIL THE TESTING AGENCY CAN SCHEDULE TESTING OPERATIONS. COST OF SUSPENSION OF WORK SHALL BE BORNE BY THE CONTRACTOR.

6. ALL CONTRACTORS SHALL KEEP ACCESS AVAILABLE AT ALL TIMES FOR ALL EMERGENCY TRAFFIC, AS DIRECTED BY THE MUNICIPALITY.

7. ALL PROPOSED GRADES SHOWN ON PLANS ARE FINISHED SURFACE ELEVATIONS, UNLESS NOTED OTHERWISE.

8. THE CONTRACTOR SHALL PRESERVE ALL CONSTRUCTION STAKES UNTIL THEY ARE NO LONGER NEEDED. ANY STAKES DESTROYED OR DISTURBED BY THE CONTRACTOR PRIOR TO THEIR USE SHALL BE RESET BY THE SURVEYOR AT THE CONTRACTOR'S EXPENSE.

9. ALL FRAMES AND LIDS FOR STORM AND SANITARY SEWERS, VALVE VAULT COVERS, FIRE HYDRANTS, AND B-BOXES ARE TO BE ADJUSTED TO MEET FINISHED GRADE. THIS ADJUSTMENT IS TO BE MADE BY THE SEWER AND WATER CONTRACTOR, AND THE COST IS TO BE CONSIDERED INCIDENTAL. THESE ADJUSTMENTS TO FINISHED GRADE WILL NOT ALLEVIATE THE CONTRACTOR FROM ANY ADDITIONAL ADJUSTMENTS AS REQUIRED BY THE MUNICIPALITY UPON FINAL INSPECTION OF THE PROJECT. FINAL GRADES MAY BE DETERMINED BY THE MUNICIPALITY AND MAY VARY FROM PLAN GRADE.

10. ANY EXISTING SIGNS, LIGHT STANDARDS, AND UTILITY POLES THAT INTERFERE WITH CONSTRUCTION OPERATIONS AND ARE NOT NOTED ON THE PLANS FOR DISPOSAL SHALL BE REMOVED AND RESET BY THE CONTRACTOR AT HIS/HER OWN EXPENSE, AS DIRECTED BY THE ENGINEER. ANY DAMAGE TO THESE ITEMS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS/HER OWN EXPENSE TO THE SATISFACTION OF THE OWNER. ANY SIGNS NOT REQUIRED TO BE RESET SHALL BE DELIVERED TO THE RESPECTIVE OWNERS.

11. REMOVAL OF SPECIFIED ITEMS, INCLUDING BUT NOT LIMITED TO, PAVEMENT, SIDEWALK, CURB, CURB AND GUTTER, CULVERTS, ETC., SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE. THE CONTRACTOR IS RESPONSIBLE FOR ANY PERMITS REQUIRED FOR SUCH DISPOSAL.

12. ANY FIELD TILES ENCOUNTERED SHALL BE INSPECTED BY THE MUNICIPALITY. THE DRAIN TILE SHALL BE CONNECTED TO THE STORM SEWER SYSTEM AND A RECORD KEPT BY THE CONTRACTOR OF THE LOCATIONS AND TURNED OVER TO THE MUNICIPALITY UPON COMPLETION OF THE PROJECT. THE COST OF THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT, AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

13. BEFORE ACCEPTANCE, ALL WORK SHALL BE INSPECTED BY THE MUNICIPALITY, AS NECESSARY.

14. EASEMENTS FOR THE EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITHIN PUBLIC RIGHT-OF-WAYS ARE SHOWN ON THE PLANS ACCORDING TO AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF THESE UTILITY LINES AND THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT WITH LOCATIONS OF THE NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.

15. OWNER SHALL OBTAIN EASEMENTS AND APPROVAL OF PERMITS NECESSARY TO FACILITATE CONSTRUCTION OF THE PROPOSED UTILITIES. THE CONTRACTOR, HOWEVER, SHALL FURNISH ALL REQUIRED BONDS AND EVIDENCE OF INSURANCE NECESSARY TO SECURE THESE PERMITS AND EASEMENTS.

16. THE CONTRACTORS SHALL PLAN THEIR WORK BASED ON THEIR OWN BORINGS, EXPLORATIONS, AND OBSERVATIONS TO DETERMINE SOIL CONDITIONS AT THE LOCATION OF THE PROPOSED WORK.

17. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SAFETY ON THE JOB PER OSHA REGULATIONS.

18. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROVIDE PROPER BARRICADING, WARNING DEVICES, AND THE SAFE MANAGEMENT OF TRAFFIC WITHIN THE AREA OF CONSTRUCTION. ALL SUCH DEVICES AND THEIR INSTALLATION SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS, LATEST EDITION, AND IN ACCORDANCE WITH THE MUNICIPAL ORDINANCES.

19. THE CONTRACTOR SHALL COLLECT AND REMOVE ALL CONSTRUCTION DEBRIS, EXCESS MATERIALS, TRASH, OIL AND GREASE RESIDUE, MACHINERY, TOOLS, AND OTHER MISCELLANEOUS ITEMS WHICH WERE NOT PRESENT PRIOR TO PROJECT COMMENCEMENT AT NO ADDITIONAL EXPENSE TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ANY AND ALL PERMITS NECESSARY FOR THE HAULING AND DISPOSAL REQUIRED FOR CLEANUP, AS DIRECTED BY THE ENGINEER OR OWNER. BURNING ON THE SITE IS NOT PERMITTED.

20. NO UNDERGROUND WORK SHALL BE COVERED UNTIL IT HAS BEEN APPROVED BY THE MUNICIPALITY. APPROVAL TO PROCEED MUST BE OBTAINED FROM THE MUNICIPALITY PRIOR TO INSTALLING PAVEMENT BASE, BINDER, AND SURFACE, AND PRIOR TO POURING ANY CONCRETE AFTER FORMS HAVE BEEN SET, AS NECESSARY.

21. ALL EXISTING UTILITIES OR IMPROVEMENTS, INCLUDING WALKS, CURBS, PAVEMENT, AND PARKWAYS DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE PROMPTLY RESTORED TO THEIR RESPECTIVE ORIGINAL CONDITION. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT UNLESS A PAY ITEM IS LISTED ON THE BID LIST.

22. AT THE CLOSE OF EACH WORKING DAY AND AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS.

23. TREES NOT MARKED FOR REMOVAL SHALL BE CONSIDERED AS DESIGNATED TO BE SAVED AND SHALL BE PROTECTED, AS PER MUNICIPAL STANDARDS.

24. LIMB PRUNING SHALL BE PERFORMED UNDER THE SUPERVISION OF AN APPROVED LANDSCAPE ARCHITECT, FORESTER, OR ARBORIST AND SHALL BE UNDERTAKEN IN A TIMELY FASHION SO AS NOT TO INTERFERE WITH CONSTRUCTION. ALL LIMBS, BRANCHES, AND OTHER DEBRIS RESULTING FROM THIS WORK SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR AT HIS/HER OWN EXPENSE. ALL CUTS OVER ONE (1) INCH IN DIAMETER SHALL BE PAINTED WITH AN APPROVED TREE PAINT.

25. WHERE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER, EXISTING DRAINAGE STRUCTURES AND PIPE SHALL BE CLEANED OF DEBRIS AND PATCHED AS NECESSARY TO ASSURE INTEGRITY OF THE STRUCTURE. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE MERGED INTO THE CONTRACT UNIT PRICE EACH FOR STRUCTURES AND CONTRACT UNIT PRICE PER LINEAL FOOT FOR STORM SEWERS, WHICH SHALL BE PAYMENT IN FULL FOR CLEANING, PATCHING, REMOVAL, AND DISPOSAL OF DEBRIS AND DIRT. DRAINAGE STRUCTURES AND STORM SEWERS CONSTRUCTED AS PART OF THIS PROJECT SHALL BE MAINTAINED BY THE CONTRACTOR AT HIS EXPENSE. NO EXTRA PAYMENT WILL BE MADE FOR CLEANING STRUCTURES OR STORM SEWERS CONSTRUCTED AS PART OF THIS PROJECT.

26. HYDRANTS SHALL NOT BE FLUSHED DIRECTLY ONTO THE ROAD SUBGRADES. WHENEVER POSSIBLE, HOSES SHALL BE USED TO DIRECT THE WATER INTO LOT AREAS OR THE STORM SEWER SYSTEM, IF AVAILABLE. DAMAGE TO THE ROAD SUBGRADE OR LOT GRADING DUE TO EXCESSIVE WATER SATURATION AND/OR EROSION FROM HYDRANT FLUSHING, OR FROM LEAKS IN THE WATER DISTRIBUTION SYSTEM, WILL BE REPAIRED BY THE CONTRACTOR FLUSHING OR USING THE HYDRANT AT THE CONTRACTOR'S OWN EXPENSE. LEAKS IN THE WATER DISTRIBUTION SYSTEM SHALL BE THE RESPONSIBILITY OF THE WATER MAIN CONTRACTOR AND SHALL BE REPAIRED AT HIS EXPENSE.

27. AFTER THE STORM SEWER SYSTEM HAS BEEN CONSTRUCTED, THE CONTRACTOR SHALL PLACE EROSION CONTROL AT LOCATIONS INDICATED BY THE ENGINEER. THE PURPOSE OF THE EROSION CONTROL WILL BE TO MINIMIZE THE AMOUNT OF SILTATION THAT NORMALLY WOULD ENTER THE STORM SEWER SYSTEM FROM ADJACENT AND/OR UPSTREAM DRAINAGE AREAS.

28. THE TRENCHES FOR PIPE INSTALLATION SHALL BE KEPT DRY AT ALL TIMES DURING PIPE PLACEMENT. APPROPRIATE FACILITIES TO MAINTAIN THE DRY TRENCH SHALL BE PROVIDED BY THE CONTRACTOR, AND THE COST OF SUCH SHALL BE INCIDENTAL TO THE UNIT PRICE BID FOR THE ITEM. PLANS FOR THE SITE DEWATERING, IF EMPLOYED, SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER PRIOR TO IMPLEMENTATION. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR DEWATERING DURING CONSTRUCTION UNLESS APPROVED IN WRITING BY THE OWNER.

29. EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH IDEM REGULATIONS AND STANDARDS FOR SOIL EROSION AND SEDIMENTATION CONTROL AND SHALL BE MAINTAINED BY THE CONTRACTOR AND REMAIN IN PLACE UNTIL A SUITABLE GROWTH OF GRASS, ACCEPTABLE TO THE ENGINEER, HAS DEVELOPED.

EROSION CONTROL NOTES

1. CONSTRUCTION ENTRANCE SHALL BE LOCATED SO AS TO PROVIDE THE LEAST AMOUNT OF DISTURBANCE TO THE FLOW OF TRAFFIC IN AND OUT OF THE SITE. ADDITIONALLY, CONSTRUCTION ENTRANCE SHALL BE LOCATED TO COINCIDE WITH THE PHASING OF THE PAVEMENT REPLACEMENT.

2. POST CONSTRUCTION STORM WATER POLLUTION CONTROL MEASURES INCLUDE STABILIZATION BY PERMANENT PAVING, DRAINAGE SYSTEM STRUCTURE, OR LANDSCAPING.

3. TEMPORARY AND PERMANENT STABILIZATION PRACTICES AND BMP'S SHALL BE INSTALLED AT THE EARLIEST POSSIBLE TIME DURING THE CONSTRUCTION SEQUENCE. AS AN EXAMPLE, PERIMETER SILT FENCE SHALL BE INSTALLED BEFORE COMMENCEMENT OF ANY GRADING ACTIVITIES. OTHER BMP'S SHALL BE INSTALLED AS SOON AS PRACTICABLE AND SHALL BE MAINTAINED UNTIL FINAL SITE STABILIZATION IS ATTAINED. CONTRACTOR SHALL ALSO REFERENCE CIVIL AND LANDSCAPE PLANS SINCE PERMANENT STABILIZATION IS PROVIDED BY LANDSCAPING, THE BUILDING(S), AND SITE PAVING.

4. BMP'S HAVE BEEN LOCATED AS INDICATED IN THESE PLANS IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES IN ORDER TO MINIMIZE SEDIMENT TRANSFER. FOR EXAMPLE: SILT FENCES LOCATED AT TOE OF SLOPE AND INLET PROTECTION FOR INLETS RECEIVING SEDIMENT FROM SITE RUN-OFF

DEMOLITION NOTES

1. THE INTENT OF THE DEMOLITION PLAN IS TO DEPICT EXISTING FEATURES THAT ENCUMBER THE PROPOSED CONSTRUCTION AREA AND ARE SCHEDULED FOR REMOVAL. SOME INCIDENTAL ITEMS MAY HAVE BEEN INADVERTENTLY OMITTED FROM THE PLAN. THE CONTRACTOR IS ENCOURAGED TO THOROUGHLY INSPECT THE SITE AS WELL AS REVIEW THE PLANS AND SPECIFICATIONS PRIOR TO SUBMITTING PRICING. CONTRACTOR WILL NOT RECEIVE ADDITIONAL COMPENSATION FOR INCIDENTAL ITEMS NOT SHOWN ON THE DEMOLITION PLAN.

2. THE LOCATIONS OF EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO COMMENCING ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR ONSITE LOCATIONS OF EXISTING UTILITIES AND FIELD VERIFY ALL UNDERGROUND UTILITIES.

3. THE CONTRACTOR SHALL MAINTAIN ALL UTILITY SERVICES TO THE EXISTING BUILDING AT ALL TIMES. UTILITY SERVICES SHALL NOT BE INTERRUPTED WITHOUT APPROVAL FROM THE CONSTRUCTION MANAGER.

4. CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY DEMOLITION PERMITS.

5. THE CONTINUOUS ACCESS SHALL BE MAINTAINED FOR THE TRUCKS AT ALL TIMES DURING DEMOLITION OF THE EXISTING FACILITIES.

6. CONTRACTOR MAY LIMIT SAW-CUT AND PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE IT IS REQUIRED AS SHOWN ON THESE CONSTRUCTION PLANS BUT IF ANY DAMAGE IS INCURRED ON ANY OF THE SURROUNDING PAVEMENT, ETC., THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL AND REPAIR.

7. THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES OR PRIOR TO ANY FURTHER DEMOLITION. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.

8. THE CONTRACTOR SHALL USE DUE CARE IN HAULING DEBRIS FROM SITE TO ENSURE THE SAFETY OF THE PUBLIC.

9. DAMAGE TO ALL EXISTING CONDITIONS TO REMAIN WILL BE REPLACED AT CONTRACTOR'S EXPENSE.

10. CONTRACTOR SHALL LIMIT ALL DEMOLITION ACTIVITIES TO THOSE AREAS DELINEATED ON THE CONSTRUCTION DRAWINGS UNLESS OTHERWISE DIRECTED BY THE CONSTRUCTION MANAGER.

11. CONTRACTOR IS RESPONSIBLE FOR CONTROLLING AIRBORNE DUST AND POLLUTANTS BY USING WATER SPRINKLING OR OTHER SUITABLE MEANS OF CONTROL.

12. CONTRACTOR TO USE CARE IN HANDLING DEBRIS FROM SITE TO ENSURE THE SAFETY OF THE PUBLIC. HAUL ROUTE TO BE CLOSELY MONITORED FOR DEBRIS OR MATERIALS TRACKED ONTO ADJOINING ROADWAYS, ETC. ROADWAYS AND WALKWAYS TO BE CLEARED DAILY OR AS NECESSARY TO MAINTAIN PUBLIC SAFETY.

13. DEWATERING SHOULD BE ANTICIPATED AND INCLUDED. DEWATERING SHALL BE DONE IN ACCORDANCE WITH LOCAL AND REGIONAL REQUIREMENTS.

EARTHWORK NOTES

1. GENERAL

1.1. ALL EARTHWORK OPERATIONS TO CONFORM TO GEOTECHNICAL RECOMMENDATIONS IN THE GEOTECHNICAL REPORT.

1.2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE SOIL AND GROUNDWATER CONDITIONS AT THE SITE.

1.3. ANY QUANTITIES IN THE BID PROPOSAL ARE INTENDED AS A GUIDE FOR THE CONTRACTOR'S USE IN DETERMINING THE SCOPE OF THE COMPLETED PROJECT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALL MATERIAL QUANTITIES AND APPRISE HIMSELF/HERSELF OF ALL SITE CONDITIONS. THE CONTRACT PRICE SUBMITTED BY THE CONTRACTOR SHALL BE CONSIDERED AS LUMP SUM FOR THE COMPLETE PROJECT. NO CLAIMS FOR EXTRA WORK WILL BE RECOGNIZED.

1.4. THE CONTRACTOR WILL NOTE THAT THE ELEVATIONS SHOWN ON THE CONSTRUCTION PLANS ARE FINISHED GRADE AND SUBGRADE ELEVATIONS (AS NOTED) AND THAT PAVEMENT THICKNESS, TOPSOIL, ETC., MUST BE ACCOUNTED FOR.

1.5. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION AND PREVENT STORMWATER FROM RUNNING INTO OR STANDING IN EXCAVATED AREAS. THE FAILURE TO PROVIDE PROPER DRAINAGE WILL NEGATE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT THEREOF. FINAL GRADES SHALL BE PROTECTED AGAINST DAMAGE FROM EROSION, SEDIMENTATION, AND TRAFFIC.

1.6. PLANS FOR THE SITE DEWATERING, IF EMPLOYED, SHALL BE SUBMITTED AND APPROVED PRIOR TO IMPLEMENTATION. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR DEWATERING DURING CONSTRUCTION.

1.7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF THE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES. THE INITIAL ESTABLISHMENT OF EROSION CONTROL PROCEDURES AND THE PLACEMENT OF SILT AND FILTER FENCING, ETC., TO PROTECT ADJACENT PROPERTY, ETC., SHALL OCCUR BEFORE GRADING BEGINS.

1.8. PRIOR TO COMMENCEMENT OF GRADING ACTIVITIES, THE CONTRACTOR SHALL ERECT A CONSTRUCTION FENCE AROUND ANY TREE DESIGNATED TO BE PRESERVED. SAID FENCE SHALL BE PLACED IN A CIRCLE CENTERED AROUND THE TREE, THE DIAMETER OF WHICH SHALL BE SUCH THAT THE ENTIRE DRIP ZONE (EXTENT OF FURTHEST EXTENDING BRANCHES) SHALL BE WITHIN THE FENCE LIMITS. THE EXISTING GRADE WITHIN THE FENCED AREA SHALL NOT BE DISTURBED.

1.9. IF LANDSCAPE PLANTINGS ARE WITHIN OR ADJACENT TO AREAS WHERE LIME STABILIZATION OCCURS, CONTRACTOR SHALL FULLY REMOVE SOIL CONTAINING LIME STABILIZATION AND REPLACE WITH HIGH QUALITY PLANTING SOIL.

2. TOPSOIL EXCAVATION INCLUDES:

2.1. EXCAVATION OF TOPSOIL AND OTHER STRUCTURALLY UNSUITABLE MATERIALS WITHIN THOSE AREAS THAT WILL REQUIRE EARTH EXCAVATION OR COMPACTED EARTH FILL MATERIAL. EXISTING VEGETATION SHALL BE REMOVED PRIOR TO STRIPPING TOPSOIL OR FILLING AREAS.

2.2. PLACEMENT OF EXCAVATED MATERIAL IN OWNER-DESIGNATED AREAS FOR FUTURE USE WITHIN AREAS TO BE LANDSCAPED AND THOSE AREAS NOT REQUIRING STRUCTURAL FILL MATERIAL. PROVIDE NECESSARY EROSION CONTROL MEASURES FOR STOCKPILE.

2.3. TOPSOIL STOCKPILED FOR RESPREAD SHALL BE FREE OF CLAY AND SHALL NOT CONTAIN ANY OF THE TRANSITIONAL MATERIAL BETWEEN THE TOPSOIL AND CLAY. THE TRANSITIONAL MATERIAL SHALL BE USED IN NON-STRUCTURAL FILL AREAS OR DISPOSED OF OFF-SITE.

2.4. TOPSOIL RESPREAD SHALL INCLUDE HAULING AND SPREADING OF TOPSOIL DIRECTLY OVER AREAS TO BE LANDSCAPED WHERE SHOWN ON THE PLANS OR AS DIRECTED BY THE OWNER.

3. EARTH EXCAVATION INCLUDES:

3.1. EXCAVATION OF SUBSURFACE MATERIALS WHICH ARE SUITABLE FOR USE AS STRUCTURAL FILL. THE EXCAVATION SHALL BE TO WITHIN A TOLERANCE OF 0.1 FEET OF THE PLAN SUBGRADE ELEVATIONS WHILE MAINTAINING PROPER DRAINAGE. THE TOLERANCE WITHIN PAVEMENT AREAS SHALL BE SUCH THAT THE EARTH MATERIALS SHALL "BALANCE" DURING THE FINE GRADING OPERATION.

3.2. PLACEMENT OF SUITABLE MATERIALS SHALL BE WITHIN THOSE AREAS REQUIRING STRUCTURAL FILL IN ORDER TO ACHIEVE THE PLAN SUBGRADE ELEVATIONS TO WITHIN A TOLERANCE OF 0.1 FEET. THE FILL MATERIALS SHALL BE PLACED IN LOOSE LIFTS THAT SHALL NOT EXCEED EIGHT (8) INCHES IN THICKNESS, AND THE WATER CONTENT SHALL BE ADJUSTED IN ORDER TO ACHIEVE REQUIRED COMPACTION.

3.3. STRUCTURAL FILL MATERIAL MAY BE PLACED WITHIN THOSE PORTIONS OF THE SITE NOT REQUIRING STRUCTURAL FILL, WITHIN SIX (6) INCHES OF THE PLAN FINISHED GRADE ELEVATION. IN AREAS REQUIRING STRUCTURAL FILL, HOWEVER, THIS MATERIAL SHALL NOT BE PLACED OVER TOPSOIL OR OTHER UNSUITABLE MATERIALS UNLESS SPECIFICALLY DIRECTED BY A SOILS ENGINEER WITH THE CONCURRENCE OF THE OWNER.

3.4. COMPACTION OF SUITABLE MATERIALS SHALL BE TO AT LEAST 93% OF THE MODIFIED PROCTOR DRY DENSITY WITHIN PROPOSED PAVEMENT AREAS, SIDEWALK, ETC. COMPACTION SHALL BE AT LEAST 95% OF THE MODIFIED PROCTOR WITHIN PROPOSED BUILDING PAD AREAS OR AS RECOMMENDED BY THE GEOTECHNICAL REPORT.

4. UNSUITABLE MATERIAL: UNSUITABLE MATERIALS SHALL BE CONSIDERED MATERIAL THAT IS NOT SUITABLE FOR THE SUPPORT OF PAVEMENT AND BUILDING CONSTRUCTION, AND IS ENCOUNTERED BELOW NORMAL TOPSOIL DEPTHS AND THE PROPOSED SUBGRADE ELEVATION. THE DECISION TO REMOVE SAID MATERIAL AND TO WHAT EXTENT SHALL BE MADE BY THE GEOTECHNICAL ENGINEER OR SOILS TESTING AGENCY WITH THE CONCURRENCE OF THE OWNER.

5. MISCELLANEOUS. THE CONTRACTOR SHALL:

5.1. SPREAD AND COMPACT UNIFORMLY TO THE DEGREE SPECIFIED ALL EXCESS TRENCH SPOIL AFTER COMPLETION OF THE UNDERGROUND IMPROVEMENTS.

5.2. SCARIFY, DISC, AERATE, AND COMPACT, TO THE DEGREE SPECIFIED, THE UPPER TWELVE (12) INCHES OF THE SUITABLE SUBGRADE MATERIAL IN ALL AREAS THAT MAY BE SOFT DUE TO EXCESS MOISTURE CONTENT. THIS APPLIES TO CUT AREAS AS WELL AS FILL AREAS.

5.3. PROVIDE WATER TO ADD TO DRY MATERIAL IN ORDER TO ADJUST THE MOISTURE CONTENT FOR THE PURPOSE OF ACHIEVING THE SPECIFIED COMPACTION.

5.4. BACKFILL THE CURB AND GUTTER AFTER ITS CONSTRUCTION AND PRIOR TO THE PLACEMENT OF THE BASE COURSE MATERIAL.

6. TESTING AND FINAL ACCEPTANCE

6.1. THE CONTRACTOR SHALL PROVIDE AS A MINIMUM A FULLY LOADED SIX-WHEEL TANDEM AXLE TRUCK FOR PROOF ROLLING THE PAVEMENT SUBGRADE PRIOR TO THE PLACEMENT OF THE CURB AND GUTTER AND THE BASE MATERIAL. THIS SHALL BE WITNESSED BY THE GEOTECHNICAL ENGINEER OR SOILS TESTING AGENCY AND THE OWNER. (SEE PAVING SPECIFICATION.)

6.2. ANY UNSUITABLE AREA ENCOUNTERED AS A RESULT OF PROOF ROLLING SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL OR OTHERWISE CORRECTED AND APPROVED BY THE GEOTECHNICAL ENGINEER OR SOILS TESTING AGENCY.

PAVING NOTES

1. GENERAL

1.1. PAVING WORK INCLUDES FINAL SUBGRADE SHAPING, PREPARATION, AND COMPACTION; PLACEMENT OF SUBBASE OR BASE COURSE MATERIALS; BITUMINOUS INTERMEDIATE AND/OR SURFACE COURSES; FORMING, FINISHING, AND CURING CONCRETE PAVEMENT, CURBS, AND WALKS; AND FINAL CLEAN-UP AND ALL RELATED WORK.

2. SUBGRADE PREPARATION

2.1. EARTHWORK FOR PROPOSED PAVEMENT SUBGRADE SHALL BE FINISHED TO WITHIN 0.1 FOOT, PLUS OR MINUS, OF PLAN ELEVATION. THE CONTRACTOR SHALL SATISFY HIMSELF THAT THE SUBGRADE HAS BEEN PROPERLY PREPARED AND THAT THE FINISH TOP SUBGRADE ELEVATION HAS BEEN GRADED WITHIN TOLERANCES ALLOWED IN THESE SPECIFICATIONS, UNLESS THE CONTRACTOR ADVISES THE ENGINEER IN WRITING PRIOR TO FINE GRADING FOR BASE COURSE CONSTRUCTION. IT IS UNDERSTOOD THAT HE/SHE HAS APPROVED AND ACCEPTS THE RESPONSIBILITY FOR THE SUBGRADE.

2.2. AFTER STRIPPING TO THE PROPOSED SUBGRADE LEVEL, THE BUILDING AND PARKING AREA SHOULD BE PROOF-ROLLED WITH A TANDEM AXLE DUMP TRUCK OR SIMILAR HEAVY RUBBER TIRED VEHICLE TYPICALLY WITH AN AXIAL LOAD GREATER THAN NINE (9) TONS OR MEETING SPECIFICATIONS OUTLINED IN INDOT CMS ITEM 204 FOR ROADWAY SUBGRADE COMPACTION AND PROOF-ROLLING.

2.3. MAXIMUM DEFLECTION ALLOWED IN ISOLATED AREAS MAY BE ONE (1) INCH IF NO DEFLECTION OCCURS OVER THE MAJORITY OF THE AREA.

2.4. PRIOR TO THE CONSTRUCTION OF THE CURB AND GUTTER AND THE PLACEMENT OF THE BASE MATERIAL, THE PAVEMENT AREA SHALL BE FINE-GRADED TO WITHIN 0.04 FEET (1/2 INCH) OF FINAL SUBGRADE ELEVATION, TO A POINT TWO (2) FEET BEYOND THE BACK OF THE CURB, SO AS TO ENSURE THE PROPER THICKNESS OF PAVEMENT COURSES. NO CLAIMS FOR EXCESS QUANTITY OF BASE MATERIALS DUE TO IMPROPER SUBGRADE PREPARATION WILL BE HONORED.

2.5. PRIOR TO PLACEMENT OF THE BASE COURSE, THE SUBGRADE SHALL BE APPROVED BY THE TESTING ENGINEER.

3. CONCRETE WORK

3.1. ALL EXTERIOR CONCRETE SHALL BE PORTLAND CEMENT CONCRETE CLASS S1 OR PV. CONCRETE SHALL BE A MINIMUM OF SIX (6) BAG MIX AND SHALL DEVELOP A MINIMUM OF 4,000 PSI COMPRESSIVE STRENGTH AT TWENTY-EIGHT (28) DAYS. ALL CONCRETE SHALL BE BROOM-FINISHED PERPENDICULAR TO THE DIRECTION OF TRAVEL.

3.2. CONCRETE CURB AND/OR COMBINATION CURB AND GUTTER SHALL BE OF THE TYPE SHOWN ON THE PLANS. THE CONTRACTOR IS CAUTIONED TO REFER TO THE CONSTRUCTION STANDARDS AND THE PAVEMENT CROSS SECTION TO DETERMINE THE GUTTER FLAG THICKNESS AND THE AGGREGATE BASE COURSE THICKNESS BENEATH THE CURB AND GUTTER. PRE-MOLDED FIBER EXPANSION JOINTS, WITH TWO 3/4-INCH BY 18-INCH EPOXY-COATED STEEL DOWEL BARS, SHALL BE GREASED AND FITTED WITH METAL EXPANSION TUBES. SAWED OR FORMED CONTRACTION JOINTS SHALL BE PROVIDED AT NO GREATER THAN TEN TO TWENTY-FIVE FOOT INTERVALS BETWEEN EXPANSION JOINTS. NO HONEY-COMBING OF THE CURB AND GUTTER WILL BE ACCEPTED.

3.3. CURBS SHALL BE DEPRESSED AT LOCATIONS WHERE PUBLIC WALKS INTERSECT CURB LINES AND OTHER LOCATIONS, AS DIRECTED, FOR THE PURPOSE OF PROVIDING ACCESSIBILITY.

3.4. THE CURBS SHALL BE BACKFILLED AFTER THEIR CONSTRUCTION AND PRIOR TO THE PLACEMENT OF THE BASE COURSE.

3.5. CONCRETE SIDEWALK SHALL BE IN ACCORDANCE WITH THE ABOVE AND THE PLANS. PROVIDE SCORED JOINTS AT MAXIMUM 6-FOOT INTERVALS AND 1/2-INCH PRE-MOLDED FIBER EXPANSION JOINTS AT 20-FOOT MAXIMUM INTERVALS AND ADJACENT TO CONCRETE CURBS, DRIVEWAYS, FOUNDATIONS, AND OTHER STRUCTURES.

3.6. CONCRETE DRIVEWAY APRONS SHALL BE IN ACCORDANCE WITH THE ABOVE AND THE PLANS. PROVIDE 6-INCH BY 6-INCH NO. 6 WELDED WIRE MESH IN ALL DRIVEWAYS. PROVIDE 1/2-INCH PRE-MOLDED FIBER EXPANSION JOINT ADJACENT TO CURBS AND CONCRETE SIDEWALKS. PROVIDE SAWED OR FORMED CONTRACTIONS JOINT AT MID-POINT AND 15-FOOT MAXIMUM.

3.7. STANDARD REINFORCED CONCRETE PAVEMENT SHALL BE IN ACCORDANCE WITH THE ABOVE AND THE PLANS. SAWED OR FORMED CONTRACTION EXPANSION JOINTS SHALL BE AS SHOWN ON THE PLANS.

3.8. CONCRETE CURING AND PROTECTION SHALL BE PER INDOT STANDARDS. TWO (2) COATS OF INDOT APPROVED CURING AGENT SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES.

3.9. THE COST OF AGGREGATE BASE OR SUBBASE UNDER CONCRETE WORK SHALL BE INCLUDED IN THE COST OF THE RESPECTIVE CONCRETE ITEM.

4. FLEXIBLE PAVEMENT

4.1. THE PAVEMENT MATERIALS FOR BITUMINOUS STREETS, PARKING LOTS, AND DRIVE AISLES SHALL BE AS DETAILED ON THE PLANS. UNLESS OTHERWISE SHOWN ON THE PLANS, THE FLEXIBLE PAVEMENTS SHALL CONSIST OF AGGREGATE BASE, ASPHALT INTERMEDIATE COURSE TYPE 2, AND ASPHALT SURFACE COURSE TYPE 1, OF THE THICKNESS AND MATERIALS SPECIFIED ON THE PLANS. THICKNESSES SPECIFIED SHALL BE CONSIDERED TO BE THE MINIMUM COMPACTED THICKNESS.

4.2. ALL TRAFFIC SHALL BE KEPT OFF THE COMPLETED AGGREGATE BASE UNTIL THE INTERMEDIATE COURSE IS LAID.

4.3. PRIOR TO PLACEMENT OF THE SURFACE COURSE, THE INTERMEDIATE COURSE SHALL BE CLEANED AND TACK-COATED IF DUSTY OR DIRTY. ALL DAMAGED AREAS IN THE INTERMEDIATE COURSE, BASE, OR CURB SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER PRIOR TO LAYING THE SURFACE COURSE. THE CONTRACTOR SHALL PROVIDE WHATEVER EQUIPMENT AND STAFF NECESSARY, INCLUDING THE USE OF POWER BROOMS IF REQUIRED BY THE OWNER, TO PREPARE THE PAVEMENT FOR APPLICATION OF THE SURFACE COURSE. THE TACK COAT SHALL BE UNIFORMLY APPLIED TO THE BINDER COURSE AT A RATE OF 0.05 TO 0.10 GALLONS PER SQUARE YARD. TACK COAT SHALL BE AS PER INDOT STANDARDS.

4.4. SEAMS IN SURFACE AND BASE COURSES SHALL BE STAGGERED A MINIMUM OF 6 INCHES.

5. TESTING AND FINAL ACCEPTANCE.

5.1. THE CONTRACTOR SHALL FOLLOW THE QUALITY CONTROL TESTING PROGRAM FOR CONCRETE AND PAVEMENT MATERIALS ESTABLISHED BY THE ENGINEER.

5.2. PRIOR TO PLACEMENT OF THE BITUMINOUS CONCRETE SURFACE COURSE, THE CONTRACTOR, WHEN REQUIRED BY THE MUNICIPALITY, SHALL OBTAIN SPECIMENS OF THE INTERMEDIATE COURSE WITH A CORE DRILL WHERE DIRECTED, FOR THE PURPOSE OF THICKNESS VERIFICATION.

5.3. WHEN REQUIRED BY THE MUNICIPALITY, THE CONTRACTOR SHALL OBTAIN SPECIMENS OF THE FULL DEPTH BITUMINOUS CONCRETE PAVEMENT STRUCTURE WITH A CORE DRILL WHERE DIRECTED IN ORDER TO CONFIRM THE PLAN THICKNESS. DEFICIENCIES IN THICKNESS SHALL BE ADJUSTED FOR BY THE METHOD REQUIRED BY INDOT STANDARDS.

5.4. FINAL ACCEPTANCE OF THE TOTAL PAVEMENT INSTALLATION SHALL BE SUBJECT TO THE TESTING AND CHECKING REQUIREMENTS CITED ABOVE.

5.5. ALL MATERIAL AND CONSTRUCTION SHALL CONFORM TO THE MUNICIPAL CODE. WHEN CONFLICTS ARISE BETWEEN MUNICIPAL CODE, AND GENERAL NOTES, THE MORE STRINGENT SHALL TAKE PRECEDENCE.

SIGNING AND PAVEMENT MARKING NOTES

1. ALL SIGNING AND PAVEMENT MARKING SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE INDIANA DEPARTMENT OF TRANSPORTATION (INDOT) STANDARDS.

2. SIGNS: SIGNS SHALL BE CONSTRUCTED OF 0.080-INCH THICK FLAT ALUMINUM PANELS WITH REFLECTORIZED LEGEND ON THE FACE. LEGEND SHALL BE IN ACCORDANCE WITH THE MUTCD.

3. POSTS: SIGN POSTS SHALL BE NEW GALVANIZED STEEL PIPE IN ACCORDANCE WITH ASTM A 53 OR ASTM F 1083. USE STANDARD WEIGHT, SCHEDULE 40 PIPE PER THE INDOT STANDARDS.

4. SIGNS AND POSTS SHALL BE INSTALLED IN ACCORDANCE WITH INDOT STANDARDS.

5. PAVEMENT MARKINGS: ALL PAVEMENT MARKINGS IN THE ROADWAY LIMITS, SUCH AS STOP LINES, CENTERLINES, CROSSWALKS, AND DIRECTIONAL ARROWS, SHALL BE REFLECTORIZED THERMOPLASTIC HOT ROLLED INTO PAVEMENT OR PAINT PER INDOT STANDARDS.

6. PAVEMENT MARKINGS ON BIKE PATHS, PARKING LOT STALLS, AND SIMILAR "LOW-WEAR" APPLICATIONS, SHALL BE PAINT IN ACCORDANCE WITH INDOT STANDARDS.

7. COLOR, WIDTH, STYLE, AND SIZE OF ALL MARKINGS SHALL BE IN ACCORDANCE WITH THE MUTCD AND MUNICIPAL CODE.

8. THERMOPLASTIC MARKINGS SHALL BE INSTALLED WHEN THE PAVEMENT TEMPERATURE IS 55 DEGREES FAHRENHEIT AND RISING. PAINT MARKINGS MAY BE INSTALLED WHEN THE AIR TEMPERATURE IS 50 DEGREES FAHRENHEIT AND RISING.

SANITARY SEWER NOTES

1. ALL UNSUITABLE MATERIALS SHALL BE REMOVED BELOW THE PROPOSED SANITARY SEWER AND REPLACED WITH COMPACTED CRUSHED GRAVEL OR STONE, AS PER INDOT STANDARDS.

2. ALL TRENCHES BENEATH PROPOSED OR EXISTING UTILITIES, PAVEMENTS, ROADWAYS, SIDEWALKS, AND FOR A DISTANCE OF THREE (3) FEET ON EITHER SIDE OF SAME, AND/OR WHERE SHOWN ON THE PLANS, SHALL BE BACKFILLED WITH MATERIAL THAT HAS BEEN TREATED AND COMPACTED TO 95% OF STD. PROCTOR MAXIMUM DAY DENSITY.

3. ALL SANITARY SEWERS ARE TO BE CONSTRUCTED USING A LASER INSTRUMENT TO MAINTAIN LINE AND GRADE.

4. CONNECTIONS TO EXISTING SANITARY SEWER SYSTEM SHALL NOT BE DONE UNTIL AUTHORIZED BY THE MUNICIPALITY.

5. WATERMAINS SHALL BE SEPARATED FROM SANITARY SEWERS AND STORM SEWERS IN ACCORDANCE WITH INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT REQUIREMENTS, AS SPECIFIED IN THE STANDARDS FOR WATER AND SEWER CONSTRUCTION IN INDIANA.

6. NO WATER LINE SHALL BE PLACED IN THE SAME TRENCH AS A SEWER LINE, EXCEPT UNDER SPECIAL CIRCUMSTANCES AND THEN ONLY UNDER THE FOLLOWING RULES:

6.1. IF NECESSARY PERMISSION SHALL BE OBTAINED FROM THE MUNICIPALITY IN WRITING PRIOR TO BEGINNING CONSTRUCTION.

6.2. THE BOTTOM OF A WATER LINE SHALL BE INSTALLED ON A SHELF A MINIMUM OF 18 INCHES ABOVE THE TOP OF THE SEWER AND 18 INCHES HORIZONTALLY AWAY FROM THE EDGE OF THE SEWER.

7. ALL PIPE CONNECTION OPENINGS SHALL BE PRECAST WITH RESILIENT RUBBER WATER-TIGHT SLEEVES. THE BOTTOM OF THE MANHOLE SHALL HAVE A CONCRETE BENCH POURED TO FACILITATE SMOOTH FLOWS.

8. FRAMES AND LIDS: ALL SANITARY SEWER MANHOLE FRAMES AND LIDS SHALL BE PER DETAIL SHEET, UNLESS OTHERWISE NOTED ON THE PLANS AND DETAILS. THE LIDS SHALL HAVE RECESSED (CONCEALED) PICK HOLE AND BE SELF-SEALING WITH AN "O" RING GASKET. THE JOINTS BETWEEN THE FRAME AND CONCRETE SECTION SHALL BE SEALED WITH A BUTYL ROPE.

9. A MAXIMUM OF TWELVE (12) INCHES OF CONCRETE-ADJUSTING RINGS SHALL BE USED TO ADJUST FRAME ELEVATIONS. RINGS SHALL BE SEALED TOGETHER WITH BUTYL ROPE.

10. CLEANING: ALL MANHOLES AND PIPES SHALL BE THOROUGHLY CLEANED OF DIRT AND DEBRIS, AND ALL VISIBLE LEAKAGE ELIMINATED, BEFORE FINAL INSPECTION AND ACCEPTANCE.

11. TESTING: DEFLECTION, AIR, AND LEAKAGE TESTING WILL BE REQUIRED. THE PROCEDURE AND ALLOWABLE TESTING LIMITS SHALL BE IN ACCORDANCE WITH THE TEN STATE STANDARDS.

12. TESTING THE ALIGNMENT/STRAIGHTNESS SHALL BE IN ACCORDANCE WITH MUNICIPAL STANDARDS.

13. TELEVISING: IF REQUIRED BY THE MUNICIPALITY, ALL SANITARY SEWERS SHALL BE TELEVISED, AND A COPY OF THE TAPE AND A WRITTEN REPORT SHALL BE SUBMITTED AND REVIEWED BY THE MUNICIPALITY BEFORE FINAL ACCEPTANCE. THE REPORT SHALL INCLUDE STUB LOCATION AS WELL AS A DESCRIPTION OF ALL DEFECTS, WATER LEVEL, LEAKS, AND LENGTHS. IDENTIFY MANHOLE TO MANHOLE BOTH VERBALLY AND ON-SCREEN USING MANHOLE NUMBERS FROM APPROVED PLANS. ORDER OF WRITTEN REPORT SHALL BE THE SAME AS THE VIDEOTAPES.

14. TEST RESULTS: IF THE SANITARY SEWER INSTALLATION FAILS TO MEET THE TEST REQUIREMENTS SPECIFIED, THE CONTRACTOR SHALL DETERMINE THE CAUSE OR CAUSES OF THE DEFECT AND REPAIR, OR REPLACE ALL MATERIALS AND WORKMANSHIP, AS MAY BE NECESSARY TO COMPLY WITH THE TEST REQUIREMENTS.

15. CERTIFICATION: CONTRACTOR SHALL SUBMIT CERTIFIED COPIES OF ALL REPORTS OF TESTS CONDUCTED BY AN INDEPENDENT LABORATORY BEFORE INSTALLATION OF PVC PLASTIC PIPE. TESTS SHALL BE CONDUCTED IN ACCORDANCE WITH STANDARD METHOD OF TEST FOR "EXTERNAL LOADING PROPERTIES OF PLASTIC PIPE BY PARALLEL PLATE LOADING." ASTM STANDARDS D-2241, AS APPROPRIATE FOR THE PIPE, TO BE USED. TESTS SHALL ALSO BE CONDUCTED TO DEMONSTRATE JOINT PERFORMANCE AT FIVE (5) PERCENT MAXIMUM DIAMETRIC DEFLECTION OF THE SPIGOT.

16. IF CONFLICT ARISES BETWEEN MUNICIPAL STANDARDS AND SANITARY SEWER NOTES, THE MORE STRINGENT SHALL APPLY.

17. ALL SANITARY SEWER LINES SHALL BE PVC MEETING ASTM D-3034 STANDARDS AND JOINTS MEETING ASTM D-3212. ALL SANITARY MANHOLES TO BE CONCRETE AND MEET MANHOLE DESIGN SPECIFICATION OF ASTM C-478 AND JOINT SPECIFICATIONS OF ASTM C-443. SANITARY SEWER LINES THAT ARE PROPOSED AT A DEPTH 15 FEET OR GREATER SHALL BE DUCTILE IRON CLASS 51 PIPE.

STORM SEWER NOTES

1. STORM SEWER PIPE: ALL STORM SEWER PIPE SHALL BE RCP, UNLESS OTHERWISE NOTED ON THE PLANS, IN ACCORDANCE WITH THE FOLLOWING:

PLAN CODE	MATERIAL
12"-66"	RCP REINFORCED CONCRETE PIPE (ASTM C-76)
< 12"	PVC SDR-35, ASTM D-3034

REFER TO PLANS FOR PIPE SIZES.

FOR PIPE SIZES 12" TO 54" WITH COVER BETWEEN 1'-3', USE SEWER CLASS III CONCRETE PIPE. FOR COVER GREATER THAN 3' BUT LESS THAN 9', USE CLASS II CONCRETE PIPE. FOR COVER BETWEEN 9'-13', USE CLASS III CONCRETE PIPE. FOR PIPE SIZES GREATER THAN 54" WITH COVER BETWEEN 1'-9', USE CLASS II CONCRETE PIPE. FOR COVER GREATER THAN 9' BUT LESS THAN 13', USE CLASS III CONCRETE PIPE.

2. BAND-SEAL OR SIMILAR COUPLING SHALL BE USED WHEN JOINING STORM SEWER PIPES OF DISSIMILAR MATERIALS.

3. ALL FOOTING DRAIN DISCHARGE PIPES AND DOWN SPOUTS SHALL DISCHARGE TO THE GROUND/STORM SEWER SYSTEM.

4. CONSTRUCTION: ALL STORM SEWERS ARE TO BE CONSTRUCTED USING A LASER INSTRUMENT TO MAINTAIN LINE AND GRADE.

5. COVER: THE CONTRACTOR SHALL MAINTAIN AT LEAST TWO (2) FEET OF COVER OVER THE TOP OF SHALLOW PIPES AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL MOUND OVER ANY PIPES THAT HAVE LESS THAN TWO (2) FEET OF COVER DURING CONSTRUCTION UNTIL THE AREA IS FINAL GRADED OR PAVED.

6. STRUCTURES: MANHOLE, CATCH BASIN, AND INLET BOTTOMS SHALL BE PRECAST CONCRETE SECTIONAL UNITS OR MONOLITHIC CONCRETE. MANHOLES AND CATCH BASINS SHALL BE A MINIMUM OF FOUR (4) FEET IN DIAMETER UNLESS OTHERWISE SPECIFIED ON THE PLANS. STRUCTURE JOINTS SHALL BE SEALED WITH "O" RING OR BUTYL ROPE. A MAXIMUM OF TWELVE (12) INCHES OF ADJUSTING RINGS SHALL BE USED.

7. A CONCRETE BENCH TO DIRECT FLOWS SHALL BE CONSTRUCTED IN THE BOTTOM OF ALL INLETS AND MANHOLES.

8. THE FRAME, GRATE, AND/OR CLOSED LID SHALL BE CAST IRON OF THE STYLE SHOWN ON THE PLANS.

9. CLEANING: THE STORM SEWER SYSTEM SHALL BE THOROUGHLY CLEANED PRIOR TO FINAL INSPECTION AND TESTING.

10. MANHOLES, CATCH BASINS, INLETS, FRAMES, GRATES, AND OTHER STRUCTURES SHALL BE CONSTRUCTED OF THE TYPE, STYLE, AND SIZE AS SET FORTH WITH THE ORDINANCES AND STANDARDS OF THE MUNICIPALITY.

11. ALL MATERIAL AND CONSTRUCTION SHALL CONFORM TO THE MUNICIPAL CODE. WHEN CONFLICTS ARISE BETWEEN MUNICIPAL CODE AND GENERAL NOTES, THE MORE STRINGENT SHALL TAKE PRECEDENCE.

12. WHEN NOTED ON PLANS OR APPROVED BY ENGINEER, HIGH-DENSITY POLYETHYLENE PIPE (HDPE) IN GENERAL CONFORMANCE WITH ASTM F2648 / F2648M MAY BE UTILIZED.

WATERMAIN NOTES

1. ALL WATER LINE MATERIALS AND INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE CURRENT RULES AND REGULATIONS OF THE MUNICIPALITY UTILITIES DEPARTMENT.

2. PIPE MATERIALS: WATERMAINS SHALL BE CONSTRUCTED OF AWWA C900 OR AWWA C905 PLASTIC PIPE AND SHALL BE CLASS 150 UNLESS OTHERWISE INDICATED ON THE PLANS. ONE COUPLING WITH TWO RUBBER GASKETS SHALL BE FURNISHED WITH EACH LENGTH OF PIPE. IT SHALL BE THE SAME MATERIAL AND BY THE SAME MANUFACTURER AS THE PIPE AND CONFORM TO ASTM D3139. RUBBER GASKETS SHALL CONFORM TO ASTM F477.

3. TESTING OF THE PIPE AND COUPLINGS SHALL BE MADE IN ACCORDANCE WITH AWWA C900. REGARDLESS OF THE PLACE OF MANUFACTURE, ALL PIPE SHALL BE TESTED WITHIN THE CONTINENTAL UNITED STATES.

4. PRESSURE RATING: THE PIPE SHALL BE DR 14 FOR FIRE PROTECTION MAINS AND DR 18 FOR WATER MAINS.

5. JOINTS: JOINTS SHALL BE BELL END OR COUPLING PUSH-ON TYPE. THE PUSH-ON JOINT AND JOINT COMPONENTS SHALL MEET THE REQUIREMENTS FOR ASTM D-3139, JOINT FOR PLASTIC PRESSURE PIPE, USING FLEXIBLE ELASTOMERIC SEALS. THE JOINT SHALL BE DESIGNED SO AS TO PROVIDE FOR THE THERMAL EXPANSION AND CONTRACTION EXPERIENCED WITH A TOTAL TEMPERATURE CHANGE OF 75 DEGREES F IN EACH JOINT OF PIPE. THE LUBRICANT SHALL HAVE NO DETERIORATING EFFECTS ON THE GASKET OR THE PIPE. GASKETS SHALL MEET ALL APPLICABLE REQUIREMENTS OF ANSI STANDARD A21.11.

6. FITTINGS: ALL FITTINGS SHALL BE OF DUCTILE IRON WITH GASKETS, GLANDS AND T-HEAD BOLTS WITH NUTS. DUCTILE IRON FITTINGS SHALL CONFORM TO ANSI/AWWA C110/A21.10, 350 POUNDS PER SQUARE INCH (PSI) PRESSURE RATING REQUIREMENTS. ALL FITTINGS SHALL BE CEMENT MORTAR LINED CONFORMING TO ANSI/AWWA C104/A21.4 AND SHALL BE COATED OUTSIDE WITH A BITUMINOUS COATING OR FUSION-BONDED EPOXY. FITTINGS SHALL HAVE DISTINCTLY CAST INTO THE PIPE EXTERIOR THE PRESSURE RATING AND LETTERS "DI" OR "DUCTILE". ALL DUCTILE IRON FITTINGS ACCEPTABLE TO THE UTILITY SHALL BE RATED AT A MINIMUM OF 70-50-05 (KSI TENSILE STRENCHT-KSI YIELD STRENGTH-PERCENT ELONGATION), IN ACCORDANCE WITH ANSI/AWWA C110 STANDARDS REGARDING STRENGTH OF MATERIALS.

7. FITTING JOINTS SHALL BE OF THE STANDARD MECHANICAL JOINT TYPE CONFORMING TO ANSI/AWW C111/A21.11 OR PUSH JOINT TYPE CONFORMING TO ANSI/AWWA C111/A21.11. ALL GASKETS, GLANDS AND T-HEAD BOLTS SHALL BE IN ACCORDANCE WITH AWWA C111/A21.11.

8. POLYETHYLENE ENCASEMENT: HIGH DENSITY CROSS-LAMINATED POLYETHYLENE ENCASEMENT MATERIALS SHALL BE USED FOR DUCTILE IRON PIPE AND FITTINGS. THE HIGH DENSITY CROSS-LAMINATED POLYETHYLENE TUBE MATERIAL SHALL CONFORM TO ANSI/AWWA C105 WITH A MINIMUM THICKNESS OF 4 MILS.

9. VALVES: GATE VALVES SHALL BE USED ON ALL WATERMAINS. ALL VALVES SHALL TURN COUNTER-CLOCKWISE TO OPEN. VALVES SHALL BE IRON BODY RESILIENT WEDGE GATE VALVES WITH BRONZE-MOUNTED SEATS AND NON-RISING STEMS CONFORMING TO AWWA C-509. THE VALVES SHALL HAVE MECHANICAL JOINTS.

10. WHERE WATERMAINS AND SERVICES CROSS PROPOSED OR EXISTING STREETS, BACKFILL SHALL BE COMPACTED GRANULAR MATERIAL EXTENDING AT LEAST 5 FEET BEYOND THE BACK OF CURB OR EDGE OF PAVEMENT.

11. PROVIDE AND INSTALL FOUR MEGALUG JOINT RESTRAINTS AT EACH JOINT FROM THE MAINLINE TEE TO THE AUXILIARY VALVE AND BETWEEN THE AUXILIARY VALVE AND THE HYDRANT BARREL.

12. THE BREAK FLANGE AND ALL BELOW-GRADE FITTING SHALL HAVE STAINLESS STEEL NUTS AND BOLTS.

13. CORPORATION STOPS: CORPORATION STOPS SHALL BE BRONZE BODY KEY STOPS CONFORMING TO AWWA C-800 AND SHALL INCLUDE "J" BEND, TAILPIECE, AND COMPRESSION FITTINGS. SIZE AND LOCATION AS SHOWN ON THE PLANS.

14. MAXIMUM DEFLECTION AT PIPE JOINTS SHALL BE IN ACCORDANCE WITH PIPE MANUFACTURER'S CURRENT RECOMMENDATIONS AND AWWA SPECIFICATIONS.

15. BEDDING: ALL WATERMAINS SHALL BE BEDDED ON FIRM GROUND, WITH BELLHOLES EXCAVATED SO THAT THE PIPE HAS AN EVEN BEDDING FOR ITS ENTIRE LENGTH.

16. GRANULAR BEDDING MATERIAL OR GRANULAR BACKFILL MATERIAL SHALL BE CAREFULLY PLACED TO TWELVE (12) INCHES OVER THE TOP OF THE PIPE BEFORE FINAL BACKFILLING AND COMPACTION.

17. A MINIMUM DEPTH OF COVER OF FIFTY-FOUR (54) INCHES SHALL BE MAINTAINED OVER THE WATER LINES. THE MAXIMUM COVER SHALL BE SEVENTY-TWO (72) INCHES, EXCEPT AT SPECIAL CROSSINGS.

18. "MEGA-LUG" RETAINER GLANDS AND THRUST BLOCKING SHALL BE INSTALLED ON WATERMAINS AT ALL BENDS, FITTINGS, TEES, ELBOWS, ETC. "MEGA-LUG" RESTRAINED JOINTS ARE REQUIRED ON ALL VALVES AND ALL FITTINGS.

19. HORIZONTAL SEPARATION

19.1. WATERMAINS SHALL BE LAID AT LEAST TEN (10) FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED DRAIN, STORM SEWER, SANITARY SEWER, OR SEWER SERVICES CONNECTION.

19.2. WATERMAINS MAY BE LAID CLOSER THAN TEN (10) FEET TO A SEWER LINE WHEN:

19.2.1. LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF TEN (10) FEET;

19.2.2. THE WATERMAIN INVERT IS AT LEAST EIGHTEEN (18) INCHES ABOVE THE CROWN OF THE SEWER;

19.2.3. THE WATERMAIN IS EITHER IN A SEPARATE TRENCH OR IN THE SAME TRENCH ON AN UNDISTURBED EARTH SHELF LOCATED TO ONE SIDE OF THE SEWER.

19.3. BOTH THE WATERMAIN AND DRAIN OR SEWER SHALL BE CONSTRUCTED WITH PIPE EQUIVALENT TO WATERMAIN STANDARDS OF CONSTRUCTION WHEN IT IS IMPOSSIBLE TO MEET (1) OR (2) ABOVE. THE DRAIN OR SEWER SHALL BE PRESSURE-TESTED TO THE MAXIMUM EXPECTED SURCHARGE HEAD BEFORE BACKFILLING.

20. VERTICAL SEPARATION

20.1. ALL SERVICE PIPES SHALL BE BURIED AT LEAST FIFTY-FOUR (54) INCHES DEEP IN THE GROUND.

20.2. A WATERMAIN SHALL BE LAID SO THAT ITS INVERT IS EIGHTEEN (18) INCHES ABOVE THE CROWN OF THE DRAIN OR SEWER WHENEVER WATERMAINS CROSS STORM SEWERS, SANITARY SEWERS, OR SEWER SERVICE CONNECTIONS. THE VERTICAL SEPARATION SHALL BE MAINTAINED FOR THAT PORTION OF THE WATERMAIN LOCATED WITHIN TEN (10) FEET HORIZONTALLY OF ANY SEWER OR DRAIN CROSSED. A LENGTH OF WATERMAIN PIPE SHALL BE CENTERED OVER THE SEWER TO BE CROSSED WITH JOINTS EQUIDISTANT FROM THE SEWER OR DRAIN.

20.3. BOTH THE WATERMAINS AND SEWER SHALL BE CONSTRUCTED WITH PIPE EQUIVALENT TO WATERMAIN STANDARDS OF CONSTRUCTION WHEN:

20.3.1. IT IS IMPOSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION, AS DESCRIBED IN (1) ABOVE;

20.3.2. OR THE WATERMAIN PASSES UNDER A SEWER OR DRAIN.

20.4. A VERTICAL SEPARATION OF EIGHTEEN (18) INCHES BETWEEN THE INVERT OF THE SEWER OR DRAIN AND THE CROWN OF THE WATERMAIN SHALL BE MAINTAINED WHERE A WATERMAIN CROSSES UNDER A SEWER. SUPPORT THE SEWER OR DRAIN LINES TO PREVENT SETTLING AND BREAKING THE WATERMAIN.

20.5. CONSTRUCTION SHALL EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE NORMAL DISTANCE FROM THE WATERMAIN TO THE SEWER OR DRAIN LINE IS AT LEAST TEN (10) FEET.

21. ALL WATERMAINS SHALL BE PRESSURE-TESTED FOR A MIN. OF 2 HOURS AT 150 PSI, FLUSHED, AND DISINFECTED IN ACCORDANCE WITH AWWA AND MUNICIPAL SPECIFICATIONS. EACH VALVE SECTION SHALL BE PRESSURE-TESTED FOR A MINIMUM OF ONE (1) HOUR. ALLOWABLE LEAKAGE IS PER THE MUNICIPAL STANDARDS. AT NO TIME IS THERE TO BE ANY VISIBLE LEAKAGE FROM THE WATERMAIN.

22. IDEM WATERMAIN NOTES

22.1. ALL WATERLINES SHALL BE AWWA APPROVED.

22.2. THE NORMAL WORKING PRESSURE IN THE WATERLINES WILL NOT BE LESS THAN 35 PSI.

22.3. INDIVIDUAL BOOSTER PUMPS WILL NOT BE ALLOWED FOR ANY INDIVIDUAL SERVICE.

22.4. ALL FIRE HYDRANTS SHALL BE AWWA APPROVED.

WARNING: CONTRACTOR TO VERIFY PRESENCE AND EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.

No.	REVISIONS	DATE	BY

Kimley»Horn

250 EAST 96TH STREET, SUITE 580,
INDIANAPOLIS, IN 46240
PHONE: 317-218-9560
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: AMM
DRAWN BY: CPP
CHECKED BY: WAB

NOT APPROVED FOR CONSTRUCTION

9/9/2021

PETERSON

GENERAL SPECIFICATIONS

FRANKLIN INDUSTRIAL
JIM BLACK RD. & MCCLAIN DR., FRANKLIN, IN

ORIGINAL ISSUE: 9/9/2021
KHA PROJECT NO. 170024027
SHEET NUMBER
C1.0

DEMOLITION NOTES

GENERAL DEMOLITION NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF THE EXISTING STRUCTURES, RELATED UTILITIES, PAVING, AND ANY OTHER EXISTING IMPROVEMENTS AS NOTED.
2. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS.
3. THE GENERAL CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES TO THE ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASES OF THIS PROJECT.
4. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.
5. IF DEMOLITION OR CONSTRUCTION ON SITE WILL INTERFERE WITH THE ADJACENT PROPERTY OWNER'S TRAFFIC FLOW, THE CONTRACTOR SHALL COORDINATE WITH ADJACENT PROPERTY OWNER, TO MINIMIZE THE IMPACT ON TRAFFIC FLOW. TEMPORARY RE-ROUTING OF TRAFFIC IS TO BE ACCOMPLISHED BY USING INDOT APPROVED TRAFFIC BARRICADES, BARRELS, AND/OR CONES. TEMPORARY SIGNAGE AND FLAGMEN MAY BE ALSO NECESSARY.
6. CONTRACTOR SHALL NOT DEMOLISH ANYTHING OUTSIDE THE OWNERS LEASE/PROPERTY LINE UNLESS SPECIFICALLY MENTIONED ON THIS SHEET.
7. QUANTITIES DEPICTED ON THIS SHEET SHALL SERVE AS A GUIDE ONLY. CONTRACTOR TO VERIFY ALL DEMOLITION QUANTITIES.
8. PRIOR TO BIDDING AND CONSTRUCTION, CONTRACTOR TO REFER TO OWNER PROVIDED PHASE I ENVIRONMENTAL SITE ASSESSMENT AND ASBESTOS REPORT FOR SITE SPECIFIC CONDITIONS AND CONSIDERATIONS.
9. CONTRACTOR SHALL BEGIN CONSTRUCTION OF ANY LIGHT POLE BASES FOR RELOCATED LIGHT FIXTURES AND RELOCATION OF ELECTRICAL SYSTEM AS SOON AS DEMOLITION BEGINS. CONTRACTOR SHALL BE AWARE THAT INTERRUPTION OF POWER TO ANY LIGHT POLES OR SIGNS SHALL NOT EXCEED 24 HOURS
10. EROSION CONTROL MUST BE ESTABLISHED PRIOR TO ANY WORK ON SITE INCLUDING DEMOLITION. REFER TO THE EROSION CONTROL SHEET.
11. REFER TO GEOTECHNICAL REPORT PROVIDED BY OTHERS FOR ALL SUBSURFACE INFORMATION.

DEMOLITION NOTES

THE EXTENT OF SITE DEMOLITION WORK IS AS SHOWN ON THE CONTRACT DOCUMENTS AND AS SPECIFIED HEREIN. SEE ARCHITECTURAL DRAWINGS FOR LIMITS AND PROPER DEMOLITION OF EXISTING BUILDING. FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND SERVICE NECESSARY TO COMPLETE THE WORK. DEMOLITION INCLUDES, BUT IS NOT LIMITED TO, REMOVAL AND DISPOSAL OFFSITE OF THE FOLLOWING ITEMS:

- SIDEWALK AND ON-SITE PAVEMENT
- BUILDINGS, FOUNDATIONS, AND SUPPORTING WALLS AND SLABS
- DEBRIS AND FOUNDATIONS FROM ALL DEMOLISHED STRUCTURES
- ALL PAVEMENT TO BE REMOVED ADJACENT TO PAVEMENT THAT IS TO REMAIN SHALL BE SAWCUT FULL DEPTH AT THE EDGES PRIOR TO REMVAL TO OBTAIN A "CLEAN" JOINT WHERE IT ABUTS NEW CURB OR PAVEMENT.

CONTRACTOR MUST RECEIVE APPROVAL FROM CIVIL ENGINEER AND GEOTECHNICAL ENGINEER FOR THE MATERIAL TYPE AND USE IF CONTRACTOR DESIRES TO REUSE DEMOLISHED SITE PAVEMENT AS STRUCTURAL FILL.

DISPOSAL OF DEMOLISHED MATERIALS

REMOVE FROM SITE DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM DEMOLITION OPERATIONS. BURNING OF REMOVED MATERIALS FROM DEMOLISHED STRUCTURES WILL NOT BE PERMITTED ON SITE. TRANSPORT MATERIALS REMOVED FROM DEMOLISHED STRUCTURES AND DISPOSE OF OFF SITE IN A LEGAL MANNER.

LANDSCAPE PROTECTION AND REMOVAL

SEE LANDSCAPE PLANS FOR INFORMATION ON LANDSCAPE AND TREE PROTECTION, PRESERVATION AND REMOVAL.

UTILITY SERVICES

EXISTING UTILITIES, WHICH DO NOT SERVICE STRUCTURES BEING DEMOLISHED, ARE TO BE KEPT IN SERVICE AND PROTECTED AGAINST DAMAGE DURING DEMOLITION OPERATIONS. CONTRACTOR SHALL ARRANGE FOR SHUT-OFF OF UTILITIES SERVING STRUCTURES TO BE DEMOLISHED. CONTRACTOR IS RESPONSIBLE FOR TURNING OFF, DISCONNECTING, AND SEALING INDICATED UTILITIES BEFORE STARTING DEMOLITION OPERATIONS. EXISTING UTILITIES TO BE ABANDONED ARE TO BE CAPPED AT BOTH ENDS AND FILLED WITH FLOWABLE FILL OR APPROVED EQUAL. ALL UNDERGROUND UTILITIES TO BE REMOVED ARE TO BE BACKFILLED WITH ENGINEERED FILL OR SELECT EXCAVATED MATERIAL, AS APPROVED BY THE GEOTECHNICAL ENGINEER, TO 95% OF MODIFIED PROCTOR DENSITY WITHIN PAVED AREAS AND TO 90% OF MODIFIED PROCTOR DENSITY FOR GREEN SPACE AREAS, IN ACCORDANCE WITH THE EARTHWORK SPECIFICATIONS. ALL PRIVATE UTILITIES (ELECTRIC, CABLE, TELEPHONE, FIBER OPTIC, GAS) SHALL BE REMOVED AND RELOCATED PER THE UTILITY OWNER AND THE LOCAL MUNICIPALITY'S REQUIREMENTS.

UTILITY PROTECTION

UNDERGROUND UTILITIES SHOWN ARE BASED ON ATLASES AND AVAILABLE INFORMATION PRESENTED AT THE TIME OF SURVEY. CONTRACTOR SHOULD CALL INDIANA 811 (811 OR 800-382-5544) TO COORDINATE FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES BEFORE ORDERING MATERIALS OR COMMENCING CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES IMMEDIATELY. CONTRACTOR SHALL LOCATE AND PROTECT EXISTING UNDERGROUND AND OVERHEAD UTILITIES DURING CONSTRUCTION. UTILITY PROTECTION SHALL BE COORDINATED WITH THE RESPECTIVE UTILITY OWNER AND AS DIRECTED BY THE GOVERNING MUNICIPALITY. DAMAGED CABLES/CONDUITS SHALL BE REPLACED IMMEDIATELY. ALL EXISTING STRUCTURES TO REMAIN SHALL BE PROTECTED THROUGHOUT THE CONSTRUCTION PROCESS. ALL DAMAGED STRUCTURES SHALL BE REPLACED IN-KIND AND THEIR REPLACEMENT COST SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. PROPER NOTIFICATION TO THE OWNERS OF THE EXISTING UTILITIES SHALL BE MADE AT LEAST 48 HOURS BEFORE CONSTRUCTION COMMENCES.

POLLUTION CONTROLS

USE WATER SPRINKLING, TEMPORARY ENCLOSURES, AND OTHER SUITABLE METHODS TO LIMIT DUST AND DIRT RISING AND SCATTERING IN THE AIR TO THE LOWEST LEVEL. COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION. SEE EROSION CONTROL SHEETS FOR FURTHER EROSION CONTROL REQUIREMENTS.

FILLING BASEMENTS AND VOIDS

COMPLETELY FILL BELOW-GRADE AREAS AND VOIDS RESULTING FROM DEMOLITION OF STRUCTURES TO THE FINAL LINES AND GRADES SHOWN ON THE CONTRACT DOCUMENTS. BACKFILL MATERIAL SHALL BE INDOT APPROVED CRUSHED LIMESTONE OR APPROVED EQUAL. USE SATISFACTORY SOIL MATERIALS CONSISTING OF STONE, GRAVEL AND SAND, FREE FROM DEBRIS, TRASH, FROZEN MATERIALS, ROOTS AND OTHER ORGANIC MATTER. PRIOR TO PLACEMENT OF FILL MATERIALS, ENSURE THAT AREAS TO BE FILLED ARE FREE OF STANDING WATER, FROST, FROZEN MATERIAL, TRASH AND DEBRIS. PLACE FILL MATERIALS IN HORIZONTAL LAYERS NOT EXCEEDING 9" IN LOOSE DEPTH. COMPACT EACH LAYER AT OPTIMUM MOISTURE CONTENT OF FILL MATERIAL TO 95% OF MODIFIED PROCTOR DENSITY UNLESS SUBSEQUENT EXCAVATION FOR NEW WORK IS REQUIRED.

SITE NOTES

1. ALL DIMENSIONS REFER TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
2. BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
3. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS TO VERIFY ALL BUILDING DIMENSIONS, DOOR LOCATIONS, PRIOR TO ORDERING MATERIALS.
4. RADII ADJACENT TO PARKING STALL AND NOT DIMENSIONED ON THIS PLAN SHALL BE 5-FEET, TYPICAL.
5. REFER TO ARCHITECTURAL PLANS FOR MONUMENT SIGN DETAILS. SEE MEP PLANS FOR SITE ELECTRICAL DRAWINGS.
6. ALL PROPOSED ON-SITE STRIPING SHALL BE PAINTED UNLESS OTHERWISE NOTED.

EROSION CONTROL NOTES

TEMPORARY EROSION CONTROL NOTES

1. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN.
2. ANY MAJOR VARIATION IN MATERIALS OR LOCATIONS OF CONTROLS OR FENCES FROM THOSE SHOWN ON THE APPROVED PLANS WILL REQUIRE A REVISION AND MUST BE APPROVED BY THE REVIEWING ENGINEER, ENVIRONMENTAL SPECIALIST, OR ARBORIST AS APPROPRIATE. MAJOR REVISIONS MUST BE APPROVED BY THE PLANNING AND DEVELOPMENT DEPARTMENT AND THE DRAINAGE UTILITY DEPARTMENT. MINOR CHANGES OR ADDITIONAL CONTROL MEASURES TO BE MADE AS FIELD REVISIONS TO THE EROSION AND SEDIMENTATION CONTROL PLAN MAY BE REQUIRED BY THE ENVIRONMENTAL INSPECTOR DURING THE COURSE OF CONSTRUCTION TO CORRECT CONTROL INADEQUACIES AT NO ADDITIONAL COST TO THE OWNER.
3. CONTRACTOR SHALL PLACE EROSION CONTROL BLANKET (NORTH AMERICAN GREEN S150 OR APPROVED EQUAL) ON ALL SITE AREAS WITH SLOPES GREATER THAN 4:1, AND IN THE BOTTOM AND SIDE SLOPES OF ALL SWALES.
4. PRIOR TO FINAL ACCEPTANCE, HAUL ROADS AND WATERWAY CROSSINGS CONSTRUCTED FOR TEMPORARY CONTRACTOR ACCESS MUST BE REMOVED, ACCUMULATED SEDIMENT REMOVED FROM THE WATERWAY AND THE AREA RESTORED TO THE ORIGINAL GRADE AND REVEGETATED. ALL LAND CLEARING SHALL BE DISPOSED OF IN APPROVED SPOIL DISPOSAL SITES.
5. PERMANENT, FINAL PLANT COVERING OR STRUCTURES SHALL BE INSTALLED PRIOR TO FINAL ACCEPTANCE.
6. ALL CONTROL DEVICES THAT FUNCTION SIMILARLY TO SILT FENCE OR FIBER ROLLS MUST BE REPAIRED, REPLACED OR SUPPLEMENTED WITH EFFECTIVE CONTROLS WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES ONE-THIRD THE HEIGHT OF THE DEVICE. THESE REPAIRS MUST BE MADE WITHIN 24 HOURS OF THE RAINFALL EVENT OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.
7. ALL SEDIMENT DELTAS AND DEPOSITS MUST BE REMOVED FROM SURFACE WATERS, DRAINAGE WAYS, CATCH BASINS AND OTHER DRAINAGE SYSTEMS. ALL AREAS WHERE SEDIMENT REMOVAL RESULTED IN EXPOSED SOIL MUST BE RESTABILIZED. THE REMOVAL AND STABILIZATION MUST TAKE PLACE IMMEDIATELY, BUT NO MORE THAN 7 DAYS AFTER THE RAINFALL EVENT UNLESS PRECLUDED BY LEGAL, REGULATORY OR PHYSICAL ACCESS CONSTRAINTS. ALL REASONABLE EFFORTS MUST BE USED TO OBTAIN ACCESS. ONCE ACCESS IS OBTAINED, REMOVAL AND STABILIZATION MUST TAKE PLACE IMMEDIATELY, BUT NO MORE THAN 7 DAYS LATER. CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL APPROPRIATE AUTHORITIES AND RECEIVING THE APPLICABLE PERMITS PRIOR TO CONDUCTING ANY WORK.
8. ACCUMULATIONS OF TRACKED AND DEPOSITED SEDIMENT MUST BE REMOVED FROM OFF-SITE PAVED SURFACES WITHIN 24 HOURS OR SOONER IF REQUIRED. SEDIMENT TRACKING MUST BE MINIMIZED BY THE APPROPRIATE MANAGEMENT PRACTICE, LIKE A DEDICATED SITE EXIT WITH AN AGGREGATE SURFACE OR DESIGNATED OFFSITE PARKING AREA. CONTRACTOR IS RESPONSIBLE FOR STREET SWEEPING AND/OR SCRAPING IF YOUR PRACTICES ARE NOT ADEQUATE TO PREVENT SEDIMENT FROM BEING TRACKED FROM THE SITE.
9. SURFACE WATERS, DRAINAGE DITCHES AND CONVEYANCE SYSTEMS MUST BE INSPECTED FOR SEDIMENT DEPOSITS.
10. PUMPING SEDIMENT LADEN WATER INTO ANY STORMWATER FACILITY THAT IS NOT DESIGNATED TO BE A SEDIMENT TRAP, DRAINAGEWAY, OR OFFSITE AREA EITHER DIRECTLY OR INDIRECTLY WITHOUT FILTRATION IS PROHIBITED.
11. SOIL STOCKPILES SHALL NOT BE LOCATED IN A DRAINAGEWAY, FLOOD PLAIN AREA OR A DESIGNATED BUFFER, UNLESS OTHERWISE APPROVED, UNDER SPECIFIC CONDITIONS TO BE ESTABLISHED BY THE DIRECTOR OR ADMINISTRATOR.
12. STOCKPILES TO REMAIN IN PLACE FOR MORE THAN THREE DAYS SHALL BE PROVIDED WITH SESC MEASURES. MATERIAL IS TO BE HAULED OFF IMMEDIATELY AND LEGALLY IF NO STOCKPILE IS TO REMAIN IN PLACE.
13. ALL TEMPORARY SESC MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED.TRAPPED SEDIMENT AND OTHER DISTURBED SOILS RESULTING FROM TEMPORARY MEASURES SHALL BE PROPERLY DISPOSED OF PRIOR TO PERMANENT STABILIZATION.
14. WATER REMOVED FROM TRAPS, BASINS, AND OTHER WATER HOLDING DEPRESSIONS OR EXCAVATIONS MUST FIRST PASS THROUGH A SEDIMENT CONTROL AND/OR FILTRATION DEVICE. WHEN DEWATERING DEVICES ARE USED, DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION.

GRADING NOTES

1. CONTRACTOR TO VERIFY ALL EXISTING TOPOGRAPHY AND STRUCTURES ON THE SITE AND IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING WORK.
2. ALL PAVEMENT SPOT GRADE ELEVATIONS AND RIM ELEVATIONS WITHIN OR ALONG CURB AND GUTTER REFER TO EDGE OF PAVEMENT ELEVATIONS UNLESS OTHERWISE NOTED.
3. ALL ELEVATIONS SHOWN DEPICT FINISHED GRADE OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED. GENERAL CONTRACTOR TO COORDINATE WITH EXCAVATION, LANDSCAPE AND PAVING SUBCONTRACTORS REGARDING TOPSOIL THICKNESS FOR LANDSCAPE AREAS AND PAVEMENT SECTION THICKNESS FOR PAVED AREAS TO PROPERLY ENSURE ADEQUATE CUT TO ESTABLISH SUBGRADE ELEVATIONS.
4. NO EARTHEN SLOPE SHALL BE GREATER THAN 3:1, UNLESS OTHERWISE NOTED.
5. MAXIMUM SLOPE IN ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL NOT EXCEED 2.0% IN ALL DIRECTIONS.
6. MAXIMUM RUNNING SLOPE SHALL NOT EXCEED 5% AND CROSS SLOPE SHALL NOT EXCEED 2% ON ALL SIDEWALKS AND ACCESSIBLE ROUTES UNLESS OTHERWISE NOTED.
7. WHEN NATURAL FLOW OF DRAINAGE IS AWAY FROM CURB, CONTRACTOR TO INSTALL REVERSE GUTTER PITCH.
8. MATCH EXISTING ELEVATIONS AT THE PROPERTY LIMITS.
9. ALL STOOPS OR PEDESTRIAN EGRESS POINTS FROM THE BUILDING(S) SHALL BE NO GREATER THAN 2% FOR THE FIRST 5'.

UTILITY NOTES

GENERAL UTILITY NOTES

1. ALL WATER LINES SHALL BE PVC C900 DR-14 OR DUCTILE IRON CL 350.
2. ALL SANITARY SEWER LINES SHALL BE PVC MEETING, ASTM D-3034 SDR 26 EXCEPT FOR SANITARY SEWER THAT CROSSES ABOVE WATER MAIN, THIS PIPE SHALL BE AWWA C900 (UNLESS WATER MAIN CASING IS UTILIZED). PROVIDE 36" MINIMUM COVER (PER IDEM).
3. CONTRACTOR SHALL COORDINATE ANY DISRUPTIONS TO EXISTING UTILITY SERVICES WITH ADJACENT PROPERTY OWNERS.
4. ALL ELECTRIC AND TELEPHONE EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE DESIGNATED UTILITY COMPANIES.
5. CONSTRUCTION SHALL NOT START ON ANY PUBLIC UTILITY SYSTEM UNTIL WRITTEN APPROVAL HAS BEEN RECEIVED BY THE ENGINEER FROM THE APPROPRIATE GOVERNING AUTHORITY AND CONTRACTOR HAS BEEN NOTIFIED BY THE ENGINEER.
6. CONTRACTOR TO CALL INDIANA 811 (811 OR 800-382-5544) TO COORDINATE FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES BEFORE ORDERING MATERIALS OR COMMENCING CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES IMMEDIATELY.
7. PRIOR TO THE CONSTRUCTION OF OR CONNECTION TO ANY STORM DRAIN, SANITARY SEWER, WATER MAIN OR ANY OTHER UTILITIES, THE CONTRACTOR SHALL EXCAVATE, VERIFY AND CALCULATE ALL POINTS OF CONNECTION AND ALL UTILITY CROSSINGS AND INFORM THE ENGINEER AND THE OWNER/ DEVELOPER OF ANY CONFLICT OR REQUIRED DEVIATIONS FROM THE PLAN. NOTIFICATION SHALL BE MADE A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION. THE ENGINEER AND ITS CLIENTS SHALL BE HELD HARMLESS IN THE EVENT THAT THE CONTRACTOR FAILS TO MAKE SUCH NOTIFICATION. THE MUNICIPALITY SHALL BE NOTIFIED OF ANY AND ALL CHANGES TO THE DESIGN PLANS.
8. CONTRACTOR SHALL COMPLY COMPLETELY WITH THE LATEST STANDARDS OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING AND OTHER MEANS OF PROTECTION. THIS IS TO INCLUDE, BUT NOT LIMITED FOR ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH PERFORMANCE CRITERIA AS REQUIRED BY OSHA.
9. CONTRACTOR TO AVOID DISRUPTION OF ANY ADJACENT TENANT'S TRAFFIC OPERATIONS DURING INSTALLATION OF UTILITIES.
10. ALL DIMENSIONS ARE TO CENTERLINE OF PIPE OR CENTER OF MANHOLE UNLESS NOTED OTHERWISE.
11. SEE ARCHITECTURAL AND MEP PLANS FOR EXACT UTILITY CONNECTION LOCATIONS AT BUILDING.
12. LIGHT POLES SHOWN FOR COORDINATION PURPOSES ONLY AND DO NOT REPRESENT ACTUAL SIZE. SEE SITE LIGHTING PLANS BY OTHERS FOR MORE INFORMATION.
13. SEE DETAILS FOR LOCATING STORM STRUCTURES WITHIN THE CURB LINE.
14. STORMWATER FACILITIES MUST BE FUNCTIONAL BEFORE BUILDING CONSTRUCTION BEGINS.

Indiana Utilities Protection Service

Call 811 before you dig

EXISTING LEGEND

STORM INLET	PS PARKING SPACE
CURB INLET	H/C PARKING SPACE
(S) SANITARY SEWER MANHOLE (SSMH)	TRAFFIC SIGNAL POLE
(D) STORM DRAIN MANHOLE (SDMH)	LIGHT POLE
(T) TELEPHONE MANHOLE (TMH)	TREE
RIGHT OF WAY MONUMENT	MAILBOX
WATER VALVE	MONITOR WELL
POWER POLE	
POWER METER	
TELEPHONE BOX/PEDESTAL	
(E) ELECTRICAL MANHOLE	

FIB	UNDERGROUND FIBER OPTIC
CBL	UNDERGROUND CABLE
[E]	UNDERGROUND ELECTRIC
• • • •	DITCH FLOWLINE
SD	STORM DRAIN
SS	SEWER LINE
GAS	GAS LINE
W	WATER LINE

BENCHMARKS

TEMPORARY SITE BENCHMARKS:
(LOCATIONS SHOWN ON SURVEY)

SBM #1 TOP NORTH-NORTHEAST FLANGE BOLT, ON FIRE HYDRAINT ALONG SOUTH SIDE OF MCCLAIN DRIVE, LOCATED 525' MORE OR LESS WEST OF THE INTERSECTION OF MCCLAIN DRIVE AND C.R. 500 EAST.
ELEVATION=736.35 (NAVD 1988)

SBM #2 TOP NORTH-NORTHWEST FLANGE BOLT ON FIRE HYDRAINT LOCATED IN NORTHWEST QUADRANT OF INTERSECTION OF MCCLAIN DRIVE AND C.R. 500 EAST.
ELEVATION=734.43 (NAVD 1998)

SBM #3 RAILROAD SPIKE IN POWER POLE ALONG EAST SIDE OF C.R. 500 EAST, LOCATED 1,055' MORE OR LESS NORTH OF THE INTERSECTION OF MCCLAIN DRIVE AND C.R. 500 EAST.
ELEVATION=730.48 (NAVD 1988)

NO.	REVISIONS	DATE	BY

Kimley»Horn
© 2021 KIMLEY-HORN AND ASSOCIATES, INC.
250 EAST 96TH STREET, SUITE 580,
INDIANAPOLIS, IN 46240
PHONE: 317-208-2500
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED | DESIGNED BY: AMM | DRAWN BY: CPP | CHECKED BY: WAB

WILLIAM A. BIGGERSTAFF — REGISTERED PROFESSIONAL ENGINEER — STATE OF INDIANA — 10800015
NOT APPROVED FOR CONSTRUCTION
9/9/2021

PETERSON

GENERAL NOTES

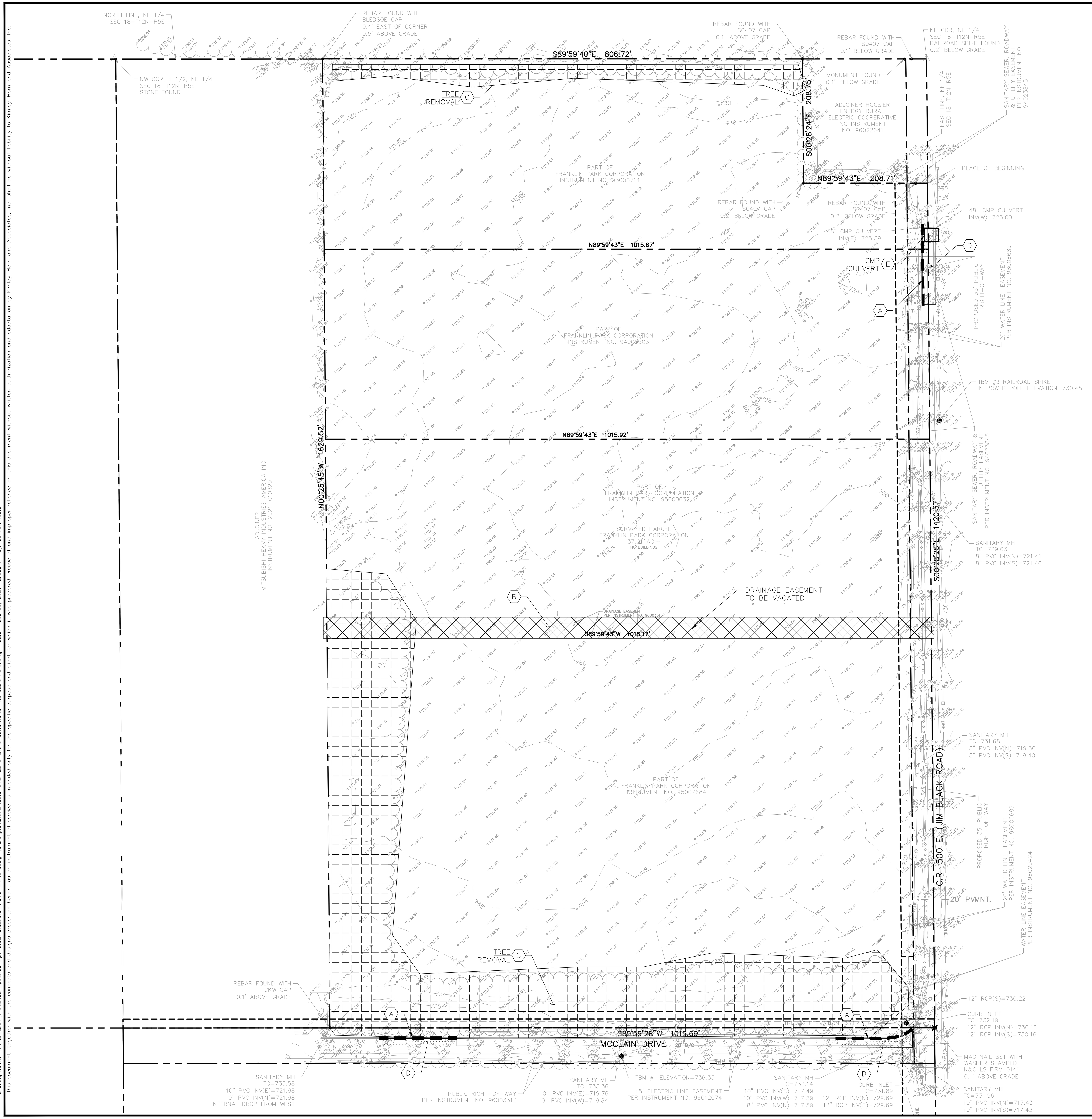
FRANKLIN INDUSTRIAL
JIM BLACK RD. & MCCLAIN DR., FRANKLIN, IN

ORIGINAL ISSUE: 9/9/2021

KHA PROJECT NO. 170024027

SHEET NUMBER

C1.1



DEMOLITION LEGEND

A		SAWCUT LINE
B		DRAINAGE EASEMENT TO BE VACATED
C		TREE REMOVAL
D		ASPHALT 1.5" MILL
E		ITEM TO REMAIN, PROTECT THROUGHOUT DURATION OF CONSTRUCTION

EXISTING LEGEND

- STORM INLET
- CURB INLET
- SANITARY SEWER MANHOLE (SSMH)
- STORM DRAIN MANHOLE (SDMH)
- TELEPHONE MANHOLE (TMH)
- RIGHT OF WAY MONUMENT
- WATER VALVE
- POWER POLE
- POWER METER
- TELEPHONE BOX/PEDESTAL
- ELECTRICAL MANHOLE
- PS PARKING SPACE
- H/C PARKING SPACE
- TRAFFIC SIGNAL POLE
- LIGHT POLE
- TREE
- MAILBOX
- MONITOR WELL

FIB	UNDERGROUND FIBER OPTIC
CBL	UNDERGROUND CABLE
[E]	UNDERGROUND ELECTRIC
	DITCH FLOWLINE
SD	STORM DRAIN
SS	SEWER LINE
GAS	GAS LINE
W	WATER LINE

GENERAL PLAN NOTES

REFER TO GENERAL NOTES SHEET FOR MORE INFORMATION INCLUDING THE FOLLOWING: (EXISTING LEGEND, BENCHMARK INFORMATION, AND SPECIFIC GENERAL PLAN NOTES.)

No. | REVISIONS | DATE | BY

SCALE: AS NOTED
DESIGNED BY: AMM
DRAWN BY: CPP
CHECKED BY: WAB

Kimley»Horn
©2021 KIMLEY-HORN AND ASSOCIATES, INC.
250 EAST 96TH STREET, SUITE 580, INDIANAPOLIS, IN 46240
PHONE: 317-218-9560
WWW.KIMLEY-HORN.COM

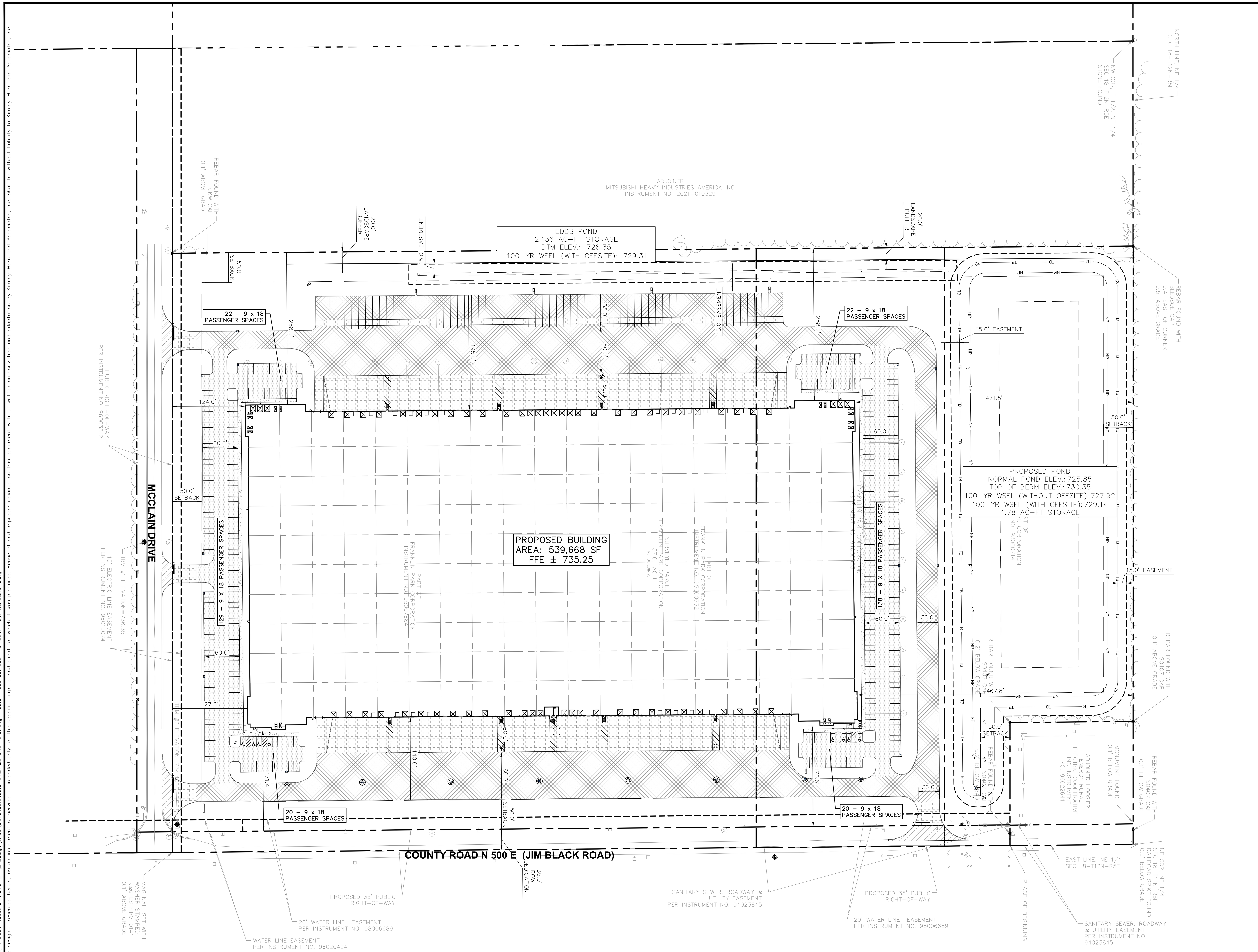
WILLIAM A. B... REGISTERED PROFESSIONAL ENGINEER INDIANA
NOT APPROVED FOR CONSTRUCTION
9/9/2021

PETERSON

OVERALL EXISTING CONDITIONS AND DEMO PLAN

FRANKLIN INDUSTRIAL
JIM BLACK RD. & MCCLAIN DR., FRANKLIN, IN

ORIGINAL ISSUE: 9/9/2021
KHA PROJECT NO. 170024027
SHEET NUMBER
C2.0



Indiana Utilities Protection Service
Call 811 before you dig

NORTH

GRAPHIC SCALE IN FEET
0 40' 80' 160'

PAVING & CURB LEGEND

[pattern]	STANDARD DUTY ASPHALT PAVEMENT SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
[pattern]	HEAVY DUTY ASPHALT PAVEMENT SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
[pattern]	RIGHT OF WAY PAVEMENT SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
[pattern]	CONCRETE SIDEWALK SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
[pattern]	HEAVY DUTY CONCRETE PAVEMENT SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
[line]	STANDARD CONCRETE CURB

SITE SUMMARY

SITE ZONING	=	IG
SITE ACREAGE (AFTER ROW DEDICATION)	=	35.86 AC.±
BUILDING AREA	=	539,668 SF
BUILDING HEIGHT	=	45.5' FT
PARKING SPACES (STANDARD) REQUIRED	=	PROVIDED SPACES
PARKING SPACES (ACCESSIBLE) REQUIRED	=	PROVIDED SPACES
EST. MAX # OF EMPLOYEES ON LARGEST SHIFT	=	351 PEOPLE
PARKING SPACES (STANDARD) PROVIDED	=	343 SPACES
PARKING SPACES (ACCESSIBLE) PROVIDED	=	8 SPACES
TOTAL PARKING SPACES PROVIDED	=	351 SPACES
PROPOSED TRAILER SPACES	=	66 SPACES

EXISTING LEGEND

- STORM INLET
- CURB INLET
- SANITARY SEWER MANHOLE (SSMH)
- STORM DRAIN MANHOLE (SDMH)
- TELEPHONE MANHOLE (TMH)
- RIGHT OF WAY MONUMENT
- WATER VALVE
- POWER POLE
- POWER METER
- TELEPHONE BOX/PEDESTAL
- ELECTRICAL MANHOLE
- PS PARKING SPACE
- H/C PARKING SPACE
- TRAFFIC SIGNAL POLE
- LIGHT POLE
- TREE
- MAILBOX
- MONITOR WELL

FIB	UNDERGROUND FIBER OPTIC
CBL	UNDERGROUND CABLE
(E)	UNDERGROUND ELECTRIC
••••	DITCH FLOWLINE
SD	STORM DRAIN
SS	SEWER LINE
GAS	GAS LINE
W	WATER LINE

BENCHMARKS

TEMPORARY SITE BENCHMARKS:
(LOCATIONS SHOWN ON SURVEY)

SBM #1 TOP NORTH–NORTHEAST FLANGE BOLT, ON FIRE HYDRAINT ALONG SOUTH SIDE OF MCCLAIN DRIVE, LOCATED 525' MORE OR LESS WEST OF THE INTERSECTION OF MCCLAIN DRIVE AND C.R. 500 EAST.
ELEVATION=736.35 (NAVD 1988)

SBM #2 TOP NORTH–NORTHWEST FLANGE BOLT ON FIRE HYDRAINT LOCATED IN NORTHWEST QUADRANT OF INTERSECTION OF MCCLAIN DRIVE AND C.R. 500 EAST.
ELEVATION=734.43 (NAVD 1998)

SBM #3 RAILROAD SPIKE IN POWER POLE ALONG EAST SIDE OF C.R. 500 EAST, LOCATED 1,055' MORE OR LESS NORTH OF THE INTERSECTION OF MCCLAIN DRIVE AND C.R. 500 EAST.
ELEVATION=730.48 (NAVD 1988)

GENERAL PLAN NOTES

REFER TO GENERAL NOTES SHEET FOR MORE INFORMATION INCLUDING THE FOLLOWING: (EXISTING LEGEND, BENCHMARK INFORMATION, AND SPECIFIC GENERAL PLAN NOTES.)

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2021 KIMLEY-HORN AND ASSOCIATES, INC.
250 EAST 96TH STREET, SUITE 580,
INDIANAPOLIS, IN 46240
PHONE: 317-218-9560
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: AMM
DRAWN BY: CPP
CHECKED BY: WAB

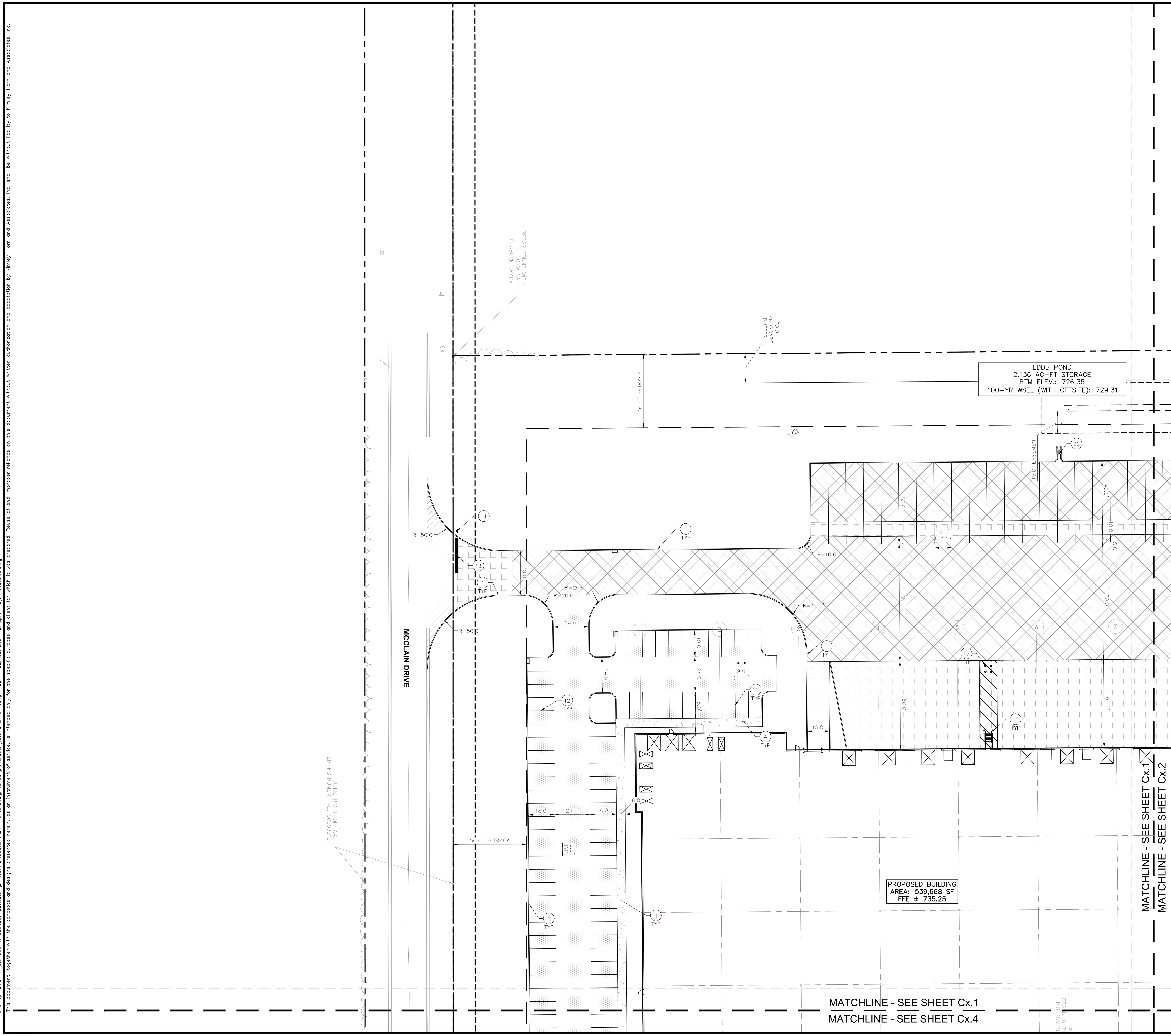
WILLIAM A. B... REGISTERED PROFESSIONAL ENGINEER INDIANA
NOT APPROVED FOR CONSTRUCTION
9/9/2021

PETERSON

OVERALL SITE PLAN

FRANKLIN INDUSTRIAL
JIM BLACK RD. & MCCLAIN DR., FRANKLIN, IN

ORIGINAL ISSUE: 9/9/2021
KHA PROJECT NO. 170024027
SHEET NUMBER
C3.0



Indiana Utilities Protection Service
Call 811 before you dig

NORTH

GRAPHIC SCALE IN FEET
0 15' 30' 60'

PAVING & CURB LEGEND

- STANDARD DUTY ASPHALT PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- HEAVY DUTY ASPHALT PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- RIGHT OF WAY PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- CONCRETE SIDEWALK — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- HEAVY DUTY CONCRETE PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- STANDARD CONCRETE CURB

KEY NOTES

1. CONCRETE CURB, TYP. (SEE DETAILS)
2. DEPRESSED CURB (SEE DETAILS)
3. CONCRETE SIDEWALK, TYP. (SEE DETAILS)
4. CONCRETE CURB AND WALK (SEE DETAIL) (5' FROM FACE OF CURB)
5. CONCRETE CURB AND GUTTER (SEE DETAILS)
6. CONNECT TO EXISTING PAVEMENT, SIDEWALK, CURB, TYP.
7. CONCRETE PARKING BUMPER TYP. (SEE DETAILS)
8. ACCESSIBLE PAVEMENT MARKINGS, TYP. (SEE DETAILS)
9. ACCESSIBLE PARKING SIGN, TYP. (SEE PLAN FOR VAN LOCATION) (MUTCD R7-8, SEE DETAILS)
10. ACCESSIBLE RAMP (SEE DETAILS)
11. 2' WIDE TACTILE WARNING STRIP
12. 4" WIDE PAINTED WHITE SOLID LINE, TYP.
13. 24" WIDE STOP BAR, TYP. (SEE DETAILS)
14. STOP SIGN, TYP. (MUTCD R1-1, SEE DETAILS)
15. BOLLARD, TYP. (SEE DETAILS)
16. TRASH COMPACTOR AND ENCLOSURE (SEE ARCHITECTURAL PLANS FOR DETAILS)
17. TRANSFORMER PAD (SEE ARCHITECTURAL PLANS FOR DETAILS)
18. MONUMENT SIGN (SEE ARCHITECTURAL PLANS FOR DETAILS)
19. LIGHT POLES SHOWN FOR COORDINATION ONLY (SEE SITE LIGHTING PLAN)
20. BIKE RACK (SEE LANDSCAPE PLAN FOR DETAILS)
21. 2' CURB TURNOUT (SEE DETAILS)
22. 3-FT TRANSITION CURB

GENERAL PLAN NOTES

REFER TO GENERAL NOTES SHEET FOR MORE INFORMATION INCLUDING THE FOLLOWING: (EXISTING LEGEND, BENCHMARK INFORMATION, AND SPECIFIC GENERAL PLAN NOTES.)

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2021 KIMLEY-HORN AND ASSOCIATES, INC.
250 EAST 96TH STREET, SUITE 580,
INDIANAPOLIS, IN 46240
PHONE: 317-218-9560
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: AMM
DRAWN BY: CPP
CHECKED BY: WAB

WILLIAM A. BU... REGISTERED PROFESSIONAL ENGINEER, INDIANA — NOT APPROVED FOR CONSTRUCTION
9/9/2021

PETERSON

SITE PLAN

FRANKLIN INDUSTRIAL
JIM BLACK RD. & MCCLAIN DR., FRANKLIN, IN

ORIGINAL ISSUE: 9/9/2021
KHA PROJECT NO. 170024027
SHEET NUMBER
C3.1

Indiana Utilities Protection Service
Call 811 before you dig

NORTH

GRAPHIC SCALE IN FEET
0 15' 30' 60'

ADJOINER
MITSUBISHI HEAVY INDUSTRIES AMERICA INC
INSTRUMENT NO. 2021-010329

MATCHLINE - SEE SHEET Cx.2
MATCHLINE - SEE SHEET Cx.3

15.0' EASEMENT

20.0' LANDSCAPE BUFFER

N00°25'45"W 1629.52'

EDDB POND
2.136 AC-FT STORAGE
BTM ELEV.: 726.35
100-YR WSEL (WITH OFFSITE): 729.31

50.0' SETBACK

40.0'
10.0'
5.0'
80.0'
60.0'
12.0' (TYP.)
35.0'
R=10.0'
R=40.0'
R=20.0'
R=3.0'
9.0' (TYP.)
18.0'
24.0'
6.0'
15.0'

PROPOSED BUILDING
AREA: 539,668 SF
FFE ± 735.25

MATCHLINE - SEE SHEET Cx.1
MATCHLINE - SEE SHEET Cx.2

MATCHLINE - SEE SHEET Cx.2
MATCHLINE - SEE SHEET Cx.5

S89°43'E 1015.92'

PAVING & CURB LEGEND

- STANDARD DUTY ASPHALT PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- HEAVY DUTY ASPHALT PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- RIGHT OF WAY PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- CONCRETE SIDEWALK — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- HEAVY DUTY CONCRETE PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- STANDARD CONCRETE CURB

KEY NOTES

1. CONCRETE CURB, TYP. (SEE DETAILS)
2. DEPRESSED CURB (SEE DETAILS)
3. CONCRETE SIDEWALK, TYP. (SEE DETAILS)
4. CONCRETE CURB AND WALK (SEE DETAIL) (5' FROM FACE OF CURB)
5. CONCRETE CURB AND GUTTER (SEE DETAILS)
6. CONNECT TO EXISTING PAVEMENT, SIDEWALK, CURB, TYP.
7. CONCRETE PARKING BUMPER TYP. (SEE DETAILS)
8. ACCESSIBLE PAVEMENT MARKINGS, TYP. (SEE DETAILS)
9. ACCESSIBLE PARKING SIGN, TYP. (SEE PLAN FOR VAN LOCATION) (MUTCD R7-8, SEE DETAILS)
10. ACCESSIBLE RAMP (SEE DETAILS)
11. 2' WIDE TACTILE WARNING STRIP
12. 4" WIDE PAINTED WHITE SOLID LINE, TYP.
13. 24" WIDE STOP BAR, TYP. (SEE DETAILS)
14. STOP SIGN, TYP. (MUTCD R1-1, SEE DETAILS)
15. BOLLARD, TYP. (SEE DETAILS)
16. TRASH COMPACTOR AND ENCLOSURE (SEE ARCHITECTURAL PLANS FOR DETAILS)
17. TRANSFORMER PAD (SEE ARCHITECTURAL PLANS FOR DETAILS)
18. MONUMENT SIGN (SEE ARCHITECTURAL PLANS FOR DETAILS)
19. LIGHT POLES SHOWN FOR COORDINATION ONLY (SEE SITE LIGHTING PLAN)
20. BIKE RACK (SEE LANDSCAPE PLAN FOR DETAILS)
21. 2' CURB TURNOUT (SEE DETAILS)
22. 3-FT TRANSITION CURB

GENERAL PLAN NOTES

REFER TO GENERAL NOTES SHEET FOR MORE INFORMATION INCLUDING THE FOLLOWING: (EXISTING LEGEND, BENCHMARK INFORMATION, AND SPECIFIC GENERAL PLAN NOTES.)

NO.	REVISIONS	DATE	BY

Kimley»Horn
© 2021 KIMLEY-HORN AND ASSOCIATES, INC
250 EAST 96TH STREET, SUITE 580,
INDIANAPOLIS, IN 46240
PHONE: 317-218-0540
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED | DESIGNED BY: AMM | DRAWN BY: CPP | CHECKED BY: WAB

WILLIAM A. BLOCK
REGISTERED
PROFESSIONAL ENGINEER
STATE OF INDIANA
NOT APPROVED FOR CONSTRUCTION
9/9/2021

PETERSON

SITE PLAN

FRANKLIN INDUSTRIAL
JIM BLACK RD. & MCCLAIN DR., FRANKLIN, IN

ORIGINAL ISSUE: 9/9/2021
KHA PROJECT NO. 170024027
SHEET NUMBER
C3.2

MATCHLINE - SEE SHEET Cx.2

MATCHLINE - SEE SHEET Cx.3

EDDB POND
2.136 AC-FT STORAGE
BTM ELEV.: 726.35
100-YR WSEL (WITH OFFSITE): 729.31

20.0' LANDSCAPE BUFFER

50.0' SETBACK

15.0' EASEMENT

REBAR FOUND WITH ALUMINUM CAP
0.4' EAST OF CORNER
0.5' ABOVE GRADE

15.0' EASEMENT

R=50.0'

R=70.0'

1 TYP

36.0'

PROPOSED POND
NORMAL POND ELEV.: 725.85
TOP OF BERM ELEV.: 730.35
100-YR WSEL (WITHOUT OFFSITE): 727.92
100-YR WSEL (WITH OFFSITE): 729.14
4.78 AC-FT STORAGE

PART OF
FRANKLIN PARK CORPORATION
INSTRUMENT NO. 9300714

50.0' SETBACK

15.0' EASEMENT

S 89°59'40" E 806.72'

MATCHLINE - SEE SHEET Cx.3

MATCHLINE - SEE SHEET Cx.6

Indiana Utilities Protection Service
Call 811
before you dig

NORTH

GRAPHIC SCALE IN FEET
0 15' 30' 60'

PAVING & CURB LEGEND

- STANDARD DUTY ASPHALT PAVEMENT
  SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- HEAVY DUTY ASPHALT PAVEMENT
  SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- RIGHT OF WAY PAVEMENT
  SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- CONCRETE SIDEWALK
  SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- HEAVY DUTY CONCRETE PAVEMENT
  SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- STANDARD CONCRETE CURB

KEY NOTES

1. CONCRETE CURB, TYP. (SEE DETAILS)
2. DEPRESSED CURB (SEE DETAILS)
3. CONCRETE SIDEWALK, TYP. (SEE DETAILS)
4. CONCRETE CURB AND WALK (SEE DETAIL) (5' FROM FACE OF CURB)
5. CONCRETE CURB AND GUTTER (SEE DETAILS)
6. CONNECT TO EXISTING PAVEMENT, SIDEWALK, CURB, TYP.
7. CONCRETE PARKING BUMPER TYP. (SEE DETAILS)
8. ACCESSIBLE PAVEMENT MARKINGS, TYP. (SEE DETAILS)
9. ACCESSIBLE PARKING SIGN, TYP. (SEE PLAN FOR VAN LOCATION) (MUTCD R7-8, SEE DETAILS)
10. ACCESSIBLE RAMP (SEE DETAILS)
11. 2' WIDE TACTILE WARNING STRIP
12. 4" WIDE PAINTED WHITE SOLID LINE, TYP.
13. 24" WIDE STOP BAR, TYP. (SEE DETAILS)
14. STOP SIGN, TYP. (MUTCD R1-1, SEE DETAILS)
15. BOLLARD, TYP. (SEE DETAILS)
16. TRASH COMPACTOR AND ENCLOSURE (SEE ARCHITECTURAL PLANS FOR DETAILS)
17. TRANSFORMER PAD (SEE ARCHITECTURAL PLANS FOR DETAILS)
18. MONUMENT SIGN (SEE ARCHITECTURAL PLANS FOR DETAILS)
19. LIGHT POLES SHOWN FOR COORDINATION ONLY (SEE SITE LIGHTING PLAN)
20. BIKE RACK (SEE LANDSCAPE PLAN FOR DETAILS)
21. 2' CURB TURNOUT (SEE DETAILS)
22. 3-FT TRANSITION CURB

GENERAL PLAN NOTES

REFER TO GENERAL NOTES SHEET FOR MORE INFORMATION INCLUDING THE FOLLOWING: (EXISTING LEGEND, BENCHMARK INFORMATION, AND SPECIFIC GENERAL PLAN NOTES.)

NO.	REVISIONS	DATE	BY

Kimley»Horn
© 2021 KIMLEY-HORN AND ASSOCIATES, INC.
250 EAST 96TH STREET, SUITE 580,
INDIANAPOLIS, IN 46240
PHONE: 317-218-6030
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED | DESIGNED BY: AMM | DRAWN BY: CPP | CHECKED BY: WAB

WILLIAM A. BUCK
REGISTERED
PROFESSIONAL ENGINEER
STATE OF INDIANA
NOT APPROVED FOR CONSTRUCTION
9/9/2021

PETERSON

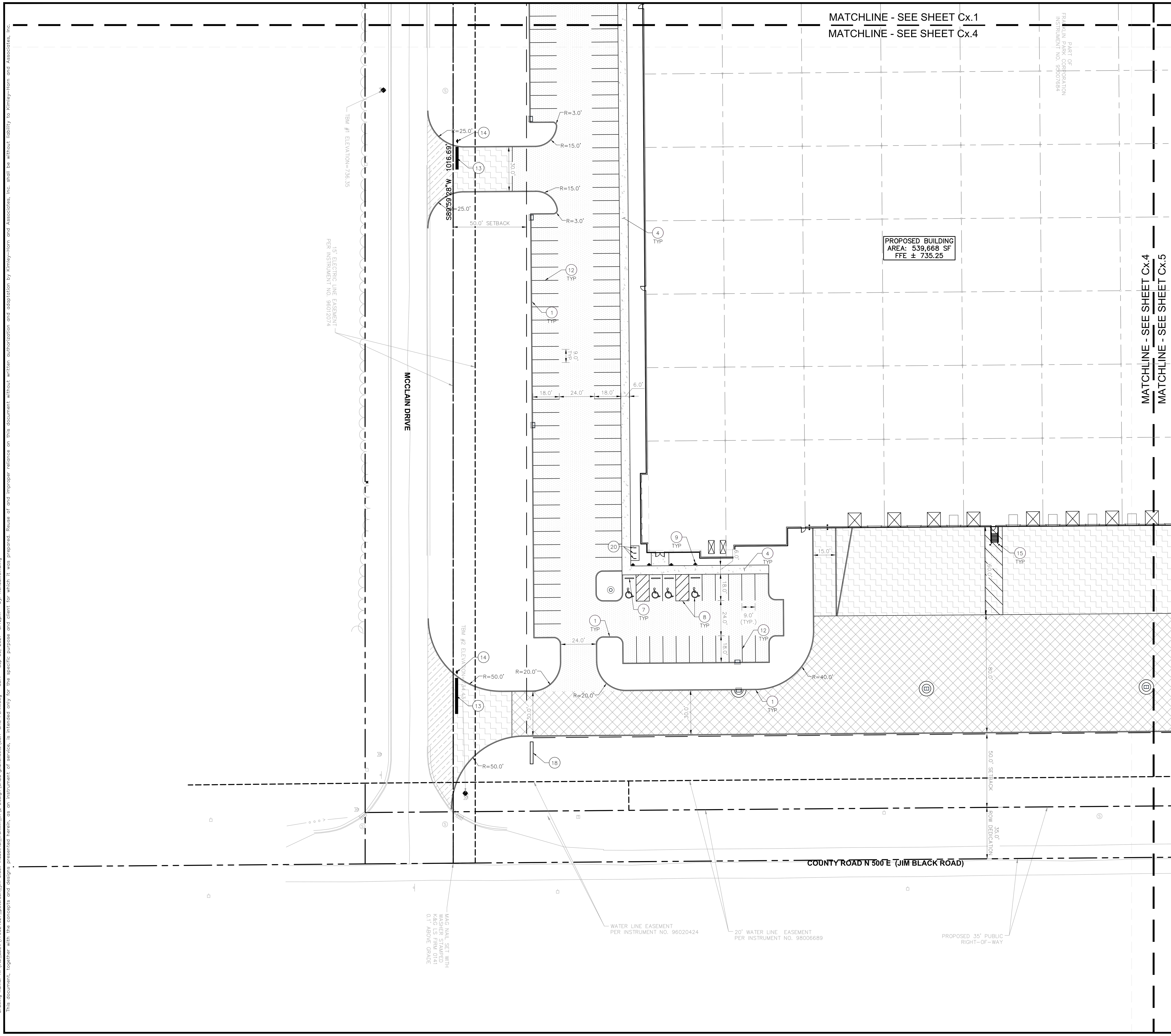
SITE PLAN

FRANKLIN INDUSTRIAL
JIM BLACK RD. & MCCLAIN DR., FRANKLIN, IN

ORIGINAL ISSUE: 9/9/2021

KHA PROJECT NO. 170024027

SHEET NUMBER
C3.3



Indiana Utilities Protection Service
Call 811
before you dig

NORTH

GRAPHIC SCALE IN FEET
0 15' 30' 60'

PAVING & CURB LEGEND

- STANDARD DUTY ASPHALT PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- HEAVY DUTY ASPHALT PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- RIGHT OF WAY PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- CONCRETE SIDEWALK — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- HEAVY DUTY CONCRETE PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- STANDARD CONCRETE CURB

KEY NOTES

1. CONCRETE CURB, TYP. (SEE DETAILS)
2. DEPRESSED CURB (SEE DETAILS)
3. CONCRETE SIDEWALK, TYP. (SEE DETAILS)
4. CONCRETE CURB AND WALK (SEE DETAIL) (5' FROM FACE OF CURB)
5. CONCRETE CURB AND GUTTER (SEE DETAILS)
6. CONNECT TO EXISTING PAVEMENT, SIDEWALK, CURB, TYP.
7. CONCRETE PARKING BUMPER TYP. (SEE DETAILS)
8. ACCESSIBLE PAVEMENT MARKINGS, TYP. (SEE DETAILS)
9. ACCESSIBLE PARKING SIGN, TYP. (SEE PLAN FOR VAN LOCATION) (MUTCD R7-8, SEE DETAILS)
10. ACCESSIBLE RAMP (SEE DETAILS)
11. 2' WIDE TACTILE WARNING STRIP
12. 4" WIDE PAINTED WHITE SOLID LINE, TYP.
13. 24" WIDE STOP BAR, TYP. (SEE DETAILS)
14. STOP SIGN, TYP. (MUTCD R1-1, SEE DETAILS)
15. BOLLARD, TYP. (SEE DETAILS)
16. TRASH COMPACTOR AND ENCLOSURE (SEE ARCHITECTURAL PLANS FOR DETAILS)
17. TRANSFORMER PAD (SEE ARCHITECTURAL PLANS FOR DETAILS)
18. MONUMENT SIGN (SEE ARCHITECTURAL PLANS FOR DETAILS)
19. LIGHT POLES SHOWN FOR COORDINATION ONLY (SEE SITE LIGHTING PLAN)
20. BIKE RACK (SEE LANDSCAPE PLAN FOR DETAILS)
21. 2' CURB TURNOUT (SEE DETAILS)
22. 3-FT TRANSITION CURB

GENERAL PLAN NOTES

REFER TO GENERAL NOTES SHEET FOR MORE INFORMATION INCLUDING THE FOLLOWING: (EXISTING LEGEND, BENCHMARK INFORMATION, AND SPECIFIC GENERAL PLAN NOTES.)

No.	REVISIONS	DATE	BY

Kimley»Horn
©2021 KIMLEY-HORN AND ASSOCIATES, INC.
250 EAST 96TH STREET, SUITE 580,
INDIANAPOLIS, IN 46240
PHONE: 317-218-9560
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: AMM
DRAWN BY: CPP
CHECKED BY: WAB

NOT APPROVED FOR CONSTRUCTION
9/9/2021

PETERSON

SITE PLAN

FRANKLIN INDUSTRIAL JIM BLACK RD. & MCCLAIN DR., FRANKLIN, IN

ORIGINAL ISSUE: 9/9/2021
KHA PROJECT NO. 170024027
SHEET NUMBER
C3.4

MATCHLINE - SEE SHEET Cx.2

MATCHLINE - SEE SHEET Cx.5

N89°59'43"E 1015'

PROPOSED BUILDING
AREA: 539,668 SF
FFE ± 735.25

6.0' | 18.0' | 24.0' | 18.0'

0.16

15.0'

60.0'

80.0'

50.0' SETBACK

35.0' ROW DEDICATION

S00°28'26"E 1420.57'

COUNTY ROAD N 500 E (JIM BLACK ROAD)

SANITARY SEWER, ROADWAY & UTILITY EASEMENT PER INSTRUMENT NO. 94023845

20' WATER LINE EASEMENT PER INSTRUMENT NO. 98006689

R=20.0'

30.0'

MATCHLINE - SEE SHEET Cx.4

MATCHLINE - SEE SHEET Cx.5

MATCHLINE - SEE SHEET Cx.5

MATCHLINE - SEE SHEET Cx.6

Indiana Utilities Protection Service
Call 811
before you dig

NORTH

GRAPHIC SCALE IN FEET
0 15' 30' 60'

PAVING & CURB LEGEND

- STANDARD DUTY ASPHALT PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- HEAVY DUTY ASPHALT PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- RIGHT OF WAY PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- CONCRETE SIDEWALK — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- HEAVY DUTY CONCRETE PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- STANDARD CONCRETE CURB

KEY NOTES

1. CONCRETE CURB, TYP. (SEE DETAILS)
2. DEPRESSED CURB (SEE DETAILS)
3. CONCRETE SIDEWALK, TYP. (SEE DETAILS)
4. CONCRETE CURB AND WALK (SEE DETAIL) (5' FROM FACE OF CURB)
5. CONCRETE CURB AND GUTTER (SEE DETAILS)
6. CONNECT TO EXISTING PAVEMENT, SIDEWALK, CURB, TYP.
7. CONCRETE PARKING BUMPER TYP. (SEE DETAILS)
8. ACCESSIBLE PAVEMENT MARKINGS, TYP. (SEE DETAILS)
9. ACCESSIBLE PARKING SIGN, TYP. (SEE PLAN FOR VAN LOCATION) (MUTCD R7-8, SEE DETAILS)
10. ACCESSIBLE RAMP (SEE DETAILS)
11. 2' WIDE TACTILE WARNING STRIP
12. 4" WIDE PAINTED WHITE SOLID LINE, TYP.
13. 24" WIDE STOP BAR, TYP. (SEE DETAILS)
14. STOP SIGN, TYP. (MUTCD R1-1, SEE DETAILS)
15. BOLLARD, TYP. (SEE DETAILS)
16. TRASH COMPACTOR AND ENCLOSURE (SEE ARCHITECTURAL PLANS FOR DETAILS)
17. TRANSFORMER PAD (SEE ARCHITECTURAL PLANS FOR DETAILS)
18. MONUMENT SIGN (SEE ARCHITECTURAL PLANS FOR DETAILS)
19. LIGHT POLES SHOWN FOR COORDINATION ONLY (SEE SITE LIGHTING PLAN)
20. BIKE RACK (SEE LANDSCAPE PLAN FOR DETAILS)
21. 2' CURB TURNOUT (SEE DETAILS)
22. 3-FT TRANSITION CURB

GENERAL PLAN NOTES

REFER TO GENERAL NOTES SHEET FOR MORE INFORMATION INCLUDING THE FOLLOWING: (EXISTING LEGEND, BENCHMARK INFORMATION, AND SPECIFIC GENERAL PLAN NOTES.)

NO.	REVISIONS	DATE	BY

Kimley»Horn
© 2021 KIMLEY-HORN AND ASSOCIATES, INC.
250 EAST 96TH STREET, SUITE 580,
INDIANAPOLIS, IN 46240
PHONE: 317-218-0560
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED | DESIGNED BY: AMM | DRAWN BY: CPP | CHECKED BY: WAB

WILLIAM A. BLOOM
REGISTERED
PROFESSIONAL ENGINEER
STATE OF INDIANA
NOT APPROVED FOR CONSTRUCTION
9/9/2021

PETERSON

SITE PLAN

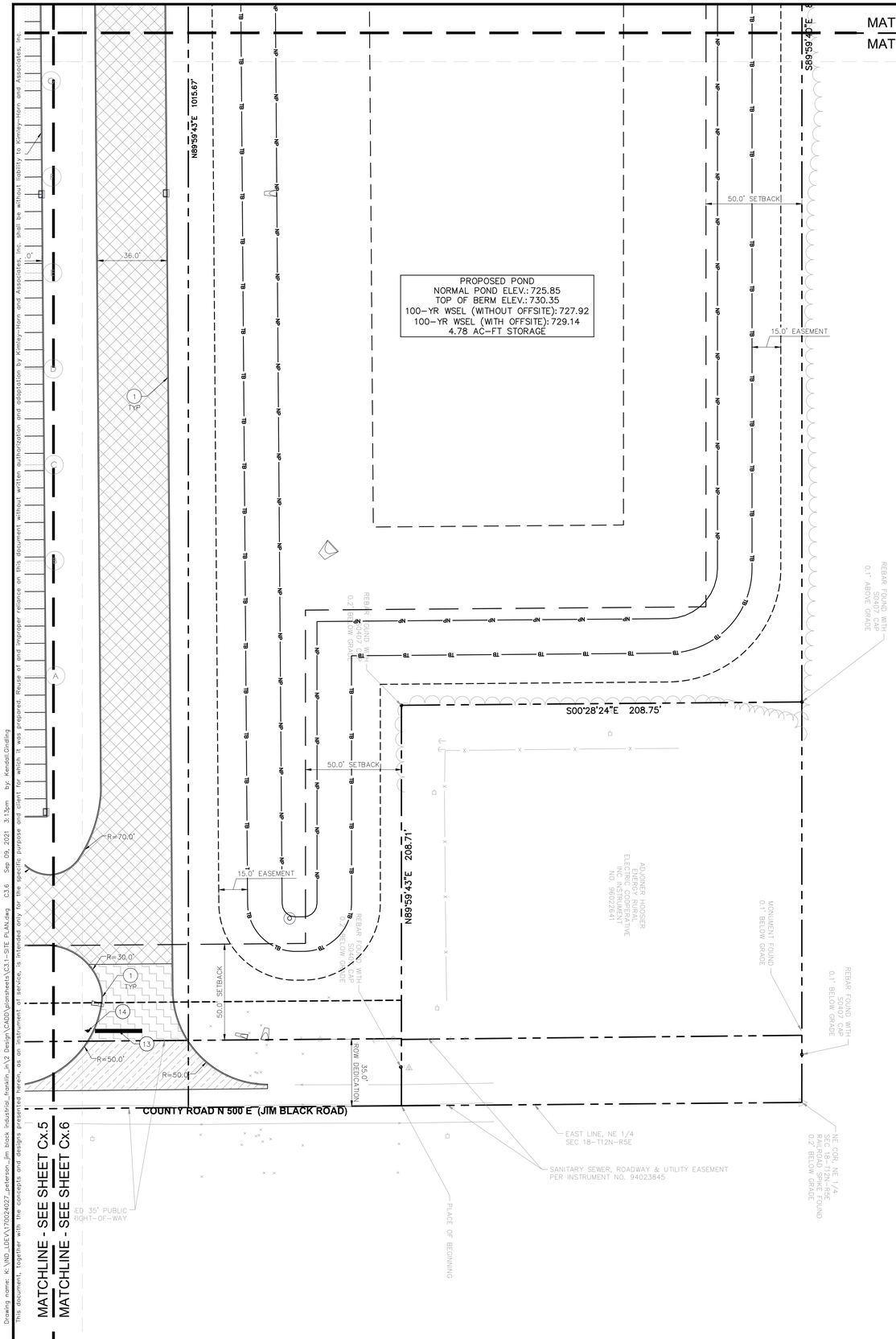
FRANKLIN INDUSTRIAL
JIM BLACK RD. & MCCLAIN DR., FRANKLIN, IN

ORIGINAL ISSUE: 9/9/2021

KHA PROJECT NO. 170024027

SHEET NUMBER

C3.5



Indiana Utilities Protection Service
Call 811 before you dig

NORTH

GRAPHIC SCALE IN FEET
0 15' 30' 60'

PAVING & CURB LEGEND

- STANDARD DUTY ASPHALT PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- HEAVY DUTY ASPHALT PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- RIGHT OF WAY PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- CONCRETE SIDEWALK — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- HEAVY DUTY CONCRETE PAVEMENT — SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- STANDARD CONCRETE CURB

KEY NOTES

1. CONCRETE CURB, TYP. (SEE DETAILS)
2. DEPRESSED CURB (SEE DETAILS)
3. CONCRETE SIDEWALK, TYP. (SEE DETAILS)
4. CONCRETE CURB AND WALK (SEE DETAIL) (5' FROM FACE OF CURB)
5. CONCRETE CURB AND GUTTER (SEE DETAILS)
6. CONNECT TO EXISTING PAVEMENT, SIDEWALK, CURB, TYP.
7. CONCRETE PARKING BUMPER TYP. (SEE DETAILS)
8. ACCESSIBLE PAVEMENT MARKINGS, TYP. (SEE DETAILS)
9. ACCESSIBLE PARKING SIGN, TYP. (SEE PLAN FOR VAN LOCATION) (MUTCD R7-8, SEE DETAILS)
10. ACCESSIBLE RAMP (SEE DETAILS)
11. 2' WIDE TACTILE WARNING STRIP
12. 4" WIDE PAINTED WHITE SOLID LINE, TYP.
13. 24" WIDE STOP BAR, TYP. (SEE DETAILS)
14. STOP SIGN, TYP. (MUTCD R1-1, SEE DETAILS)
15. BOLLARD, TYP. (SEE DETAILS)
16. TRASH COMPACTOR AND ENCLOSURE (SEE ARCHITECTURAL PLANS FOR DETAILS)
17. TRANSFORMER PAD (SEE ARCHITECTURAL PLANS FOR DETAILS)
18. MONUMENT SIGN (SEE ARCHITECTURAL PLANS FOR DETAILS)
19. LIGHT POLES SHOWN FOR COORDINATION ONLY (SEE SITE LIGHTING PLAN)
20. BIKE RACK (SEE LANDSCAPE PLAN FOR DETAILS)
21. 2' CURB TURNOUT (SEE DETAILS)
22. 3-FT TRANSITION CURB

GENERAL PLAN NOTES

REFER TO GENERAL NOTES SHEET FOR MORE INFORMATION INCLUDING THE FOLLOWING: (EXISTING LEGEND, BENCHMARK INFORMATION, AND SPECIFIC GENERAL PLAN NOTES.)

NO.	REVISIONS	DATE	BY

Kimley»Horn
© 2021 KIMLEY-HORN AND ASSOCIATES, INC.
250 EAST 96TH STREET, SUITE 580,
INDIANAPOLIS, IN 46240
PHONE: 317-218-0560
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED | DESIGNED BY: AMM | DRAWN BY: CPP | CHECKED BY: WAB

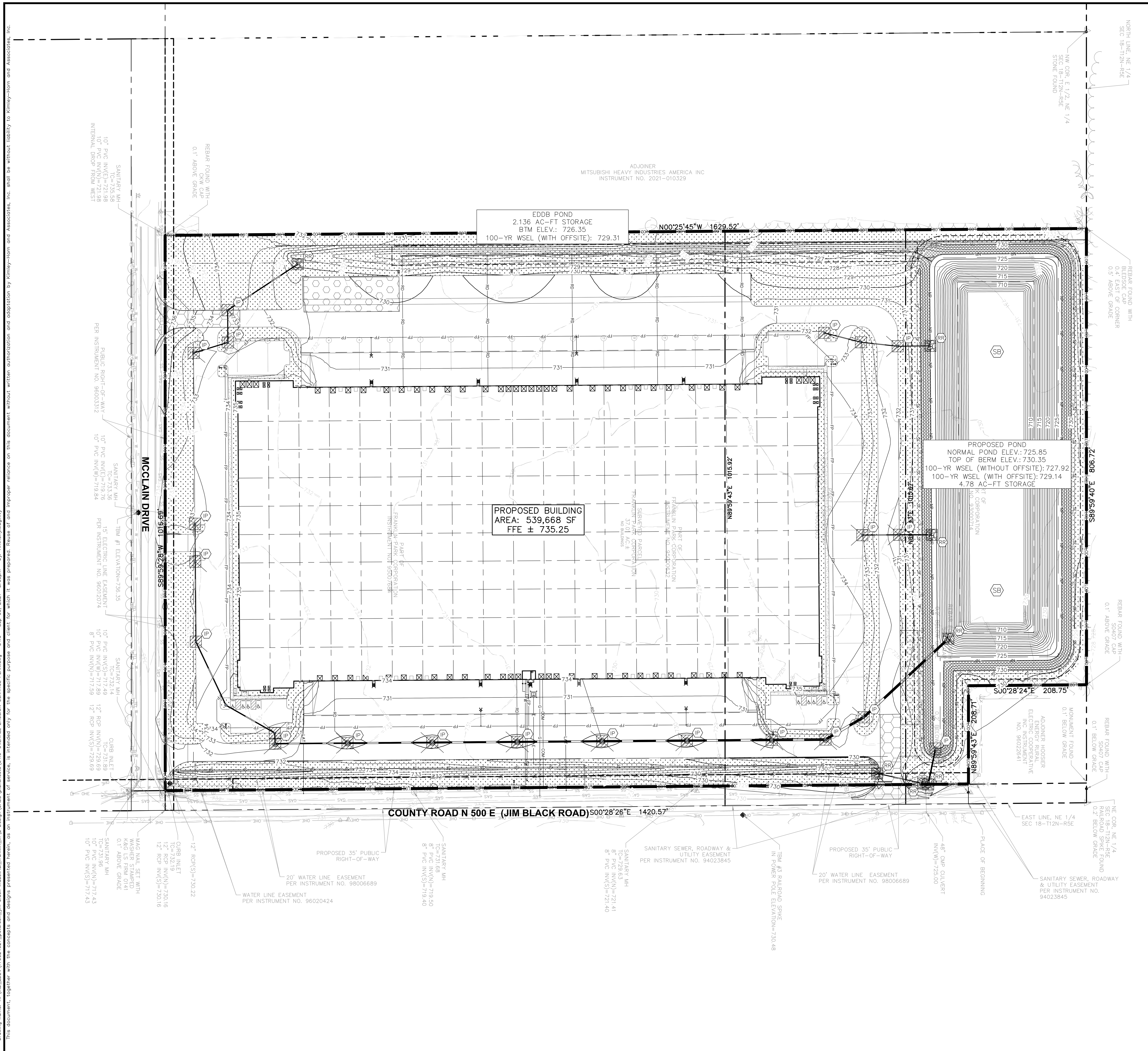
WILLIAM A. BLOCK
REGISTERED
PROFESSIONAL ENGINEER
STATE OF INDIANA
NOT APPROVED FOR CONSTRUCTION
9/9/2021

PETERSON

SITE PLAN

FRANKLIN INDUSTRIAL
JIM BLACK RD. & MCCLAIN DR., FRANKLIN, IN

ORIGINAL ISSUE: 9/9/2021
KHA PROJECT NO. 170024027
SHEET NUMBER C3.6



Indiana Utilities Protection Service
Call 811 before you dig

NORTH

GRAPHIC SCALE IN FEET
0 40' 80' 160'

EROSION CONTROL LEGEND

Symbol	Description
TS	TEMPORARY SEEDING (SEE EROSION CONTROL DETAILS)
EB	TEMPORARY EROSION CONTROL BLANKET (SEE TEMPORARY EROSION CONTROL NOTE #3)
CE	CONSTRUCTION ENTRANCE (SEE EROSION CONTROL DETAILS)
SF	SILT FENCE (SEE EROSION CONTROL DETAILS)
IP	AREA INLET PROTECTION (SEE EROSION CONTROL DETAILS)
CW	CONCRETE WASHOUT (SEE EROSION CONTROL DETAILS) (TO BE DETERMINED BY CONTRACTOR)
RR	RIP RAP (SEE EROSION CONTROL DETAILS)
RD	ROCK DONUT (SEE EROSION CONTROL DETAILS)
SS	TEMPORARY SOIL STOCKPILE
LD	LIMITS OF DISTURBANCE
CD	CHECK DAM
	EXISTING CONTOURS
	PROPOSED CONTOURS
NS	N.O.I. SIGN
SA	STAGING AREA
DD	DEBRIS DUMPSTER
PL	PORT-O-LET
SB	SEDIMENTATION BASIN

EXISTING LEGEND

- STORM INLET
- CURB INLET
- SANITARY SEWER MANHOLE (SSMH)
- STORM DRAIN MANHOLE (SDMH)
- TELEPHONE MANHOLE (TMH)
- RIGHT OF WAY MONUMENT
- WATER VALVE
- POWER POLE
- POWER METER
- TELEPHONE BOX/PEDESTAL
- ELECTRICAL MANHOLE
- PS PARKING SPACE
- H/C PARKING SPACE
- TRAFFIC SIGNAL POLE
- LIGHT POLE
- TREE
- MAILBOX
- MONITOR WELL
- FIB UNDERGROUND FIBER OPTIC
- CBL UNDERGROUND CABLE
- [E] UNDERGROUND ELECTRIC
- DITCH FLOWLINE
- SD STORM DRAIN
- SS SEWER LINE
- GAS GAS LINE
- W WATER LINE

GENERAL PLAN NOTES

REFER TO GENERAL NOTES SHEET FOR MORE INFORMATION INCLUDING THE FOLLOWING: (EXISTING LEGEND, BENCHMARK INFORMATION, AND SPECIFIC GENERAL PLAN NOTES.)

No. | REVISIONS | DATE | BY

Kimley»Horn
© 2021 KIMLEY-HORN AND ASSOCIATES, INC.
250 EAST 96TH STREET, SUITE 580,
INDIANAPOLIS, IN 46240
PHONE: 317-218-9560
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: AMM
DRAWN BY: CPP
CHECKED BY: WAB

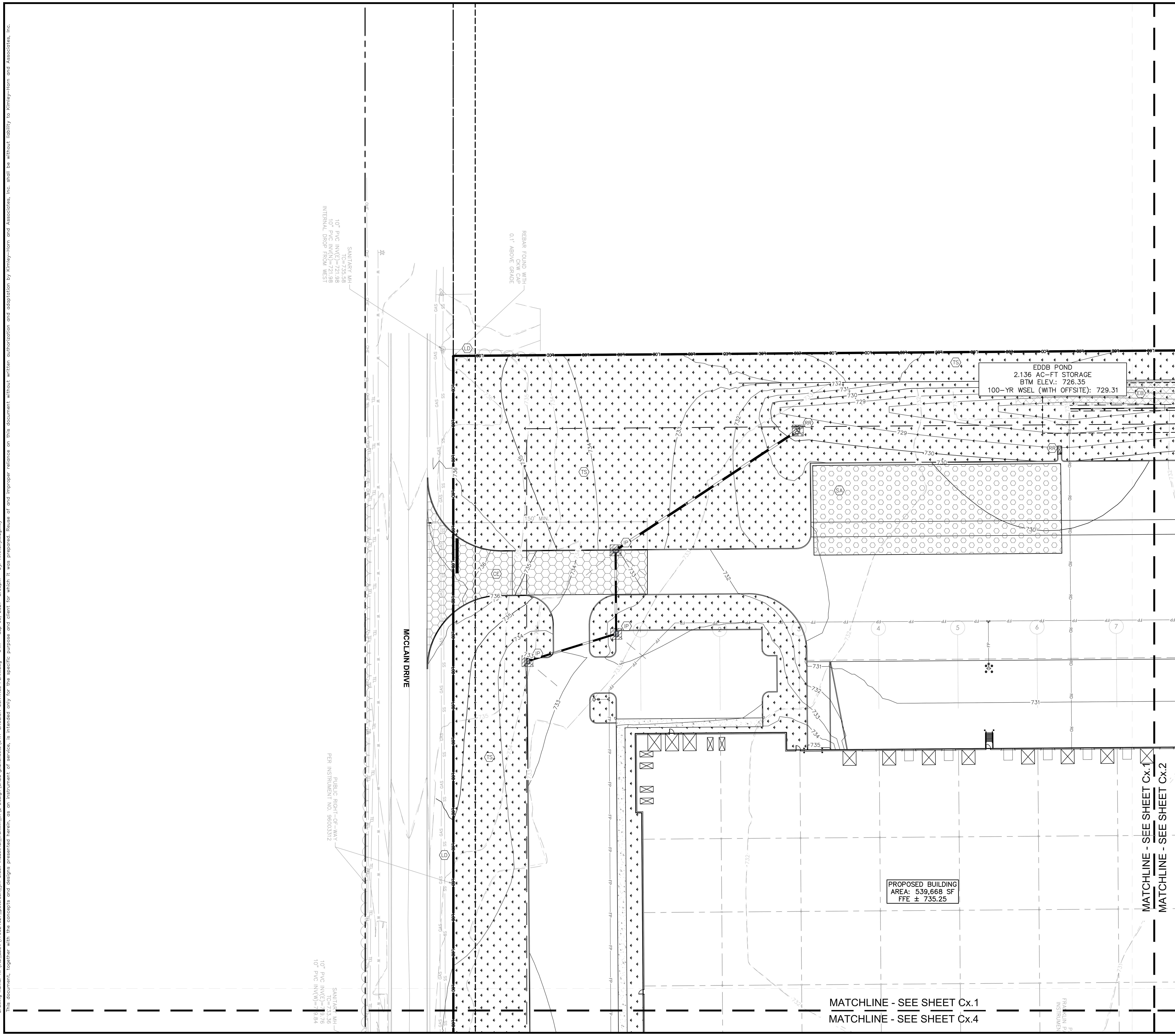
WILLIAM A. B... REGISTERED PROFESSIONAL ENGINEER INDIANA
NOT APPROVED FOR CONSTRUCTION
9/9/2021

PETERSON

OVERALL EROSION CONTROL PLAN

FRANKLIN INDUSTRIAL
JIM BLACK RD. & MCCLAIN DR., FRANKLIN, IN

ORIGINAL ISSUE: 9/9/2021
KHA PROJECT NO. 170024027
SHEET NUMBER
C4.0



Indiana Utilities Protection Service
Call 811 before you dig

NORTH

GRAPHIC SCALE IN FEET
0 15' 30' 60'

EROSION CONTROL LEGEND

Symbol	Description
TS	TEMPORARY SEEDING (SEE EROSION CONTROL DETAILS)
EB	TEMPORARY EROSION CONTROL BLANKET (SEE TEMPORARY EROSION CONTROL NOTE #3)
CE	CONSTRUCTION ENTRANCE (SEE EROSION CONTROL DETAILS)
SF	SILT FENCE (SEE EROSION CONTROL DETAILS)
IP	AREA INLET PROTECTION (SEE EROSION CONTROL DETAILS)
CW	CONCRETE WASHOUT (SEE EROSION CONTROL DETAILS) (TO BE DETERMINED BY CONTRACTOR)
RR	RIP RAP (SEE EROSION CONTROL DETAILS)
RD	ROCK DONUT (SEE EROSION CONTROL DETAILS)
SS	TEMPORARY SOIL STOCKPILE
LD	LIMITS OF DISTURBANCE
CD	CHECK DAM
—620— (dashed)	EXISTING CONTOURS
—620—	PROPOSED CONTOURS
NS	N.O.I. SIGN
SA	STAGING AREA
DD	DEBRIS DUMPSTER
PL	PORT-O-LET
SB	SEDIMENTATION BASIN

GENERAL PLAN NOTES

REFER TO GENERAL NOTES SHEET FOR MORE INFORMATION INCLUDING THE FOLLOWING: (EXISTING LEGEND, BENCHMARK INFORMATION, AND SPECIFIC GENERAL PLAN NOTES.)

No.	REVISIONS	DATE	BY

Kimley-Horn

250 EAST 96TH STREET, SUITE 580, INDIANAPOLIS, IN 46240
PHONE: 317-218-9560
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: AMM
DRAWN BY: CPP
CHECKED BY: WAB

WILLIAM A. B... REGISTERED PROFESSIONAL ENGINEER, STATE OF INDIANA
NOT APPROVED FOR CONSTRUCTION
9/9/2021

PETERSON

EROSION CONTROL PLAN

FRANKLIN INDUSTRIAL
JIM BLACK RD. & MCCLAIN DR., FRANKLIN, IN

ORIGINAL ISSUE: 9/9/2021
KHA PROJECT NO. 170024027
SHEET NUMBER
C4.1

Drawing name: K:\IND_LDEV\170024027_peterson_jim black industrial_franklin_in\2 Design\CADD\plansheets\C4.1-EROSION CONTROL PLAN.dwg C4.1 Sep 09, 2021 3:06pm by: AnthonyMaginity

Indiana Utilities Protection Service
Call 811 before you dig

NORTH

GRAPHIC SCALE IN FEET
0 15' 30' 60'

ADJOINER
MITSUBISHI HEAVY INDUSTRIES AMERICA INC
INSTRUMENT NO. 2021-010329

MATCHLINE - SEE SHEET Cx.2
MATCHLINE - SEE SHEET Cx.3

N00°25'45"W 1629.52'

EDDB POND
2.136 AC-FT STORAGE
BTM ELEV.: 726.35
100-YR WSEL (WITH OFFSITE): 729.31

PROPOSED BUILDING
AREA: 539,668 SF
FFE ± 735.25

MATCHLINE - SEE SHEET Cx.1
MATCHLINE - SEE SHEET Cx.2

MATCHLINE - SEE SHEET Cx.2
MATCHLINE - SEE SHEET Cx.5

S89°43'E 1015.92'

EROSION CONTROL LEGEND

- TEMPORARY SEEDING (SEE EROSION CONTROL DETAILS)
- TEMPORARY EROSION CONTROL BLANKET (SEE TEMPORARY EROSION CONTROL NOTE #3)
- CONSTRUCTION ENTRANCE (SEE EROSION CONTROL DETAILS)
- SILT FENCE (SEE EROSION CONTROL DETAILS)
- AREA INLET PROTECTION (SEE EROSION CONTROL DETAILS)
- CONCRETE WASHOUT (SEE EROSION CONTROL DETAILS) (TO BE DETERMINED BY CONTRACTOR)
- RIP RAP (SEE EROSION CONTROL DETAILS)
- ROCK DONUT (SEE EROSION CONTROL DETAILS)
- TEMPORARY SOIL STOCKPILE
- LIMITS OF DISTURBANCE
- CHECK DAM
- EXISTING CONTOURS
- PROPOSED CONTOURS
- N.O.I. SIGN
- STAGING AREA
- DEBRIS DUMPSTER
- PORT-O-LET
- SEDIMENTATION BASIN

GENERAL PLAN NOTES

REFER TO GENERAL NOTES SHEET FOR MORE INFORMATION INCLUDING THE FOLLOWING: (EXISTING LEGEND, BENCHMARK INFORMATION, AND SPECIFIC GENERAL PLAN NOTES.)

NO.	REVISIONS	DATE	BY

Kimley»Horn
© 2021 KIMLEY-HORN AND ASSOCIATES, INC.
250 EAST 96TH STREET, SUITE 580,
INDIANAPOLIS, IN 46240
PHONE: 317-208-2500
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED | DESIGNED BY: AMM | DRAWN BY: CPP | CHECKED BY: WAB

WILLIAM A. BLOCK
REGISTERED
PROFESSIONAL ENGINEER
STATE OF INDIANA
NOT APPROVED FOR CONSTRUCTION
9/9/2021

PETERSON

EROSION CONTROL PLAN

FRANKLIN INDUSTRIAL
JIM BLACK RD. & MCCLAIN DR., FRANKLIN, IN

ORIGINAL ISSUE: 9/9/2021

KHA PROJECT NO. 170024027

SHEET NUMBER

C4.2

MATCHLINE - SEE SHEET Cx.2
MATCHLINE - SEE SHEET Cx.3

EDDB POND
2.136 AC-FT STORAGE
BTM ELEV.: 726.35
100-YR WSEL (WITH OFFSITE): 729.31

PROPOSED POND
NORMAL POND ELEV.: 725.85
TOP OF BERM ELEV.: 730.35
100-YR WSEL (WITHOUT OFFSITE): 727.92
100-YR WSEL (WITH OFFSITE): 729.14
4.78 AC-FT STORAGE

REBAR FOUND WITH ELLIS CAP 0.4' EAST OF CORNER 0.5' ABOVE GRADE

PART OF FRANKLIN PARK CORPORATION INSTRUMENT NO. 9300714

S 59° 40' E 806.72'

MATCHLINE - SEE SHEET Cx.3
MATCHLINE - SEE SHEET Cx.6

Indiana Utilities Protection Service
Call 811
before you dig

NORTH

GRAPHIC SCALE IN FEET
0 15' 30' 60'

EROSION CONTROL LEGEND

- TEMPORARY SEEDING (SEE EROSION CONTROL DETAILS)
- TEMPORARY EROSION CONTROL BLANKET (SEE TEMPORARY EROSION CONTROL NOTE #3)
- CONSTRUCTION ENTRANCE (SEE EROSION CONTROL DETAILS)
- SF — SILT FENCE (SEE EROSION CONTROL DETAILS)
- AREA INLET PROTECTION (SEE EROSION CONTROL DETAILS)
- CW — CONCRETE WASHOUT (SEE EROSION CONTROL DETAILS) (TO BE DETERMINED BY CONTRACTOR)
- RIP RAP (SEE EROSION CONTROL DETAILS)
- ROCK DONUT (SEE EROSION CONTROL DETAILS)
- SF / SF / SF / SF / LOD — TEMPORARY SOIL STOCKPILE
- LIMITS OF DISTURBANCE
- CHECK DAM
- 620 — EXISTING CONTOURS
- 620 — PROPOSED CONTOURS
- NS — N.O.I. SIGN
- STAGING AREA
- DD — DEBRIS DUMPSTER
- PL — PORT-O-LET
- SB — SEDIMENTATION BASIN

GENERAL PLAN NOTES

REFER TO GENERAL NOTES SHEET FOR MORE INFORMATION INCLUDING THE FOLLOWING: (EXISTING LEGEND, BENCHMARK INFORMATION, AND SPECIFIC GENERAL PLAN NOTES.)

NO.	REVISIONS	DATE	BY

Kimley»Horn
© 2021 KIMLEY-HORN AND ASSOCIATES, INC.
250 EAST 96TH STREET, SUITE 580,
INDIANAPOLIS, IN 46240
PHONE: 317-218-0540
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED | DESIGNED BY: AMM | DRAWN BY: CPP | CHECKED BY: WAB

WILLIAM A. BLOCK
REGISTERED
PROFESSIONAL ENGINEER
STATE OF INDIANA
NOT APPROVED FOR CONSTRUCTION
9/9/2021

PETERSON

EROSION CONTROL PLAN

FRANKLIN INDUSTRIAL
JIM BLACK RD. & MCCLAIN DR., FRANKLIN, IN

ORIGINAL ISSUE: 9/9/2021
KHA PROJECT NO. 170024027
SHEET NUMBER
C4.3

MATCHLINE - SEE SHEET Cx.1
MATCHLINE - SEE SHEET Cx.4

MATCHLINE - SEE SHEET Cx.4
MATCHLINE - SEE SHEET Cx.5

PROPOSED BUILDING
AREA: 539,668 SF
FFE ± 735.25

MCCLAIN DRIVE

COUNTY ROAD N 500 E (JIM BLACK ROAD)

TBM #1 ELEVATION=736.35

SANITARY MH
TC=733.36
10" PVC INV(E)=719.76
10" PVC INV(W)=719.84

16' ELECTRIC LINE EASEMENT
PER INSTRUMENT NO. 9602074

PART OF
FRANKLIN PARK CORPORATION
INSTRUMENT NO. 9300684

SANITARY MH
TC=732.14
10" PVC INV(S)=717.89
10" PVC INV(W)=717.89
8" PVC INV(N)=717.59

CURB INLET
TC=731.89
12" RCP INV(N)=729.69
12" RCP INV(S)=729.69

SANITARY MH
TC=717.43
10" PVC INV(N)=717.43
10" PVC INV(S)=717.43

MAG NAIL SET WITH WASHER STAMPED K&G LS FIRM 0141 0.1' ABOVE GRADE

CURB INLET
TC=730.16
12" RCP INV(N)=730.16
12" RCP INV(S)=730.16

12" RCP(S)=730.22

WATER LINE EASEMENT
PER INSTRUMENT NO. 96020424

20' WATER LINE EASEMENT
PER INSTRUMENT NO. 98006689

PROPOSED 35' PUBLIC
RIGHT-OF-WAY

SANITARY MH
TC=731.50
8" PVC INV(E)=718.50
8" PVC INV(S)=718.40

Indiana Utilities Protection Service
Call 811
before you dig

NORTH

GRAPHIC SCALE IN FEET
0 15' 30' 60'

EROSION CONTROL LEGEND

- TEMPORARY SEEDING (SEE EROSION CONTROL DETAILS)
- TEMPORARY EROSION CONTROL BLANKET (SEE TEMPORARY EROSION CONTROL NOTE #3)
- CONSTRUCTION ENTRANCE (SEE EROSION CONTROL DETAILS)
- SILT FENCE (SEE EROSION CONTROL DETAILS)
- AREA INLET PROTECTION (SEE EROSION CONTROL DETAILS)
- CW — CONCRETE WASHOUT (SEE EROSION CONTROL DETAILS) (TO BE DETERMINED BY CONTRACTOR)
- RIP RAP (SEE EROSION CONTROL DETAILS)
- ROCK DONUT (SEE EROSION CONTROL DETAILS)
- SF — TEMPORARY SOIL STOCKPILE
- LOD — LIMITS OF DISTURBANCE
- CHECK DAM
- 620 — EXISTING CONTOURS
- 620 — PROPOSED CONTOURS
- NS — N.O.I. SIGN
- STAGING AREA
- DD — DEBRIS DUMPSTER
- PL — PORT-O-LET
- SB — SEDIMENTATION BASIN

GENERAL PLAN NOTES

REFER TO GENERAL NOTES SHEET FOR MORE INFORMATION INCLUDING THE FOLLOWING: (EXISTING LEGEND, BENCHMARK INFORMATION, AND SPECIFIC GENERAL PLAN NOTES.)

NO.	REVISIONS	DATE	BY

Kimley»Horn
© 2021 KIMLEY-HORN AND ASSOCIATES, INC.
250 EAST 96TH STREET, SUITE 580,
INDIANAPOLIS, IN 46240
PHONE: 317-228-0500
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: AMM
DRAWN BY: CPP
CHECKED BY: WAB

WILLIAM A. BLOCK
REGISTERED
PROFESSIONAL ENGINEER
STATE OF INDIANA
NOT APPROVED FOR CONSTRUCTION
9/9/2021

PETERSON

EROSION CONTROL PLAN

FRANKLIN INDUSTRIAL
JIM BLACK RD. & MCCLAIN DR., FRANKLIN, IN

ORIGINAL ISSUE: 9/9/2021

KHA PROJECT NO. 170024027

SHEET NUMBER

C4.4

MATCHLINE - SEE SHEET Cx.4
MATCHLINE - SEE SHEET Cx.5

MATCHLINE - SEE SHEET Cx.2
MATCHLINE - SEE SHEET Cx.5

N89°59'43"E 1015.22'

PROPOSED BUILDING
AREA: 539,668 SF
FFE ± 735.25

S00°28'26"E 1420.57'

COUNTY ROAD N 500 E (JIM BLACK ROAD)

SANITARY MH
TC=729.63
8" PVC IN(S)=721.40
8" PVC OUT(S)=721.40

SANITARY SEWER, ROADWAY & UTILITY EASEMENT
PER INSTRUMENT NO. 94023845

TBM #3 RAILROAD SPIKE
IN POWER POLE ELEVATION=730.48

20' WATER LINE EASEMENT
PER INSTRUMENT NO. 98006689

MATCHLINE - SEE SHEET Cx.5
MATCHLINE - SEE SHEET Cx.6

Indiana Utilities Protection Service
Call 811
before you dig

NORTH

GRAPHIC SCALE IN FEET
0 15' 30' 60'

EROSION CONTROL LEGEND

- TEMPORARY SEEDING (SEE EROSION CONTROL DETAILS)
- TEMPORARY EROSION CONTROL BLANKET (SEE TEMPORARY EROSION CONTROL NOTE #3)
- CONSTRUCTION ENTRANCE (SEE EROSION CONTROL DETAILS)
- SILT FENCE (SEE EROSION CONTROL DETAILS)
- AREA INLET PROTECTION (SEE EROSION CONTROL DETAILS)
- CW — CONCRETE WASHOUT (SEE EROSION CONTROL DETAILS) (TO BE DETERMINED BY CONTRACTOR)
- RIP RAP (SEE EROSION CONTROL DETAILS)
- ROCK DONUT (SEE EROSION CONTROL DETAILS)
- SF — TEMPORARY SOIL STOCKPILE
- LOD — LIMITS OF DISTURBANCE
- CHECK DAM
- 620 — EXISTING CONTOURS
- 620 — PROPOSED CONTOURS
- NS — N.O.I. SIGN
- STAGING AREA
- DD — DEBRIS DUMPSTER
- PL — PORT-O-LET
- SB — SEDIMENTATION BASIN

GENERAL PLAN NOTES

REFER TO GENERAL NOTES SHEET FOR MORE INFORMATION INCLUDING THE FOLLOWING: (EXISTING LEGEND, BENCHMARK INFORMATION, AND SPECIFIC GENERAL PLAN NOTES.)

NO.	REVISIONS	DATE	BY

Kimley»Horn
© 2021 KIMLEY-HORN AND ASSOCIATES, INC.
250 EAST 96TH STREET, SUITE 580,
INDIANAPOLIS, IN 46240
PHONE: 317-208-2500
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED | DESIGNED BY: AMM | DRAWN BY: CPP | CHECKED BY: WAB

WILLIAM A. BLOCK
REGISTERED
PROFESSIONAL ENGINEER
STATE OF INDIANA
NOT APPROVED FOR CONSTRUCTION
9/9/2021

PETERSON

EROSION CONTROL PLAN

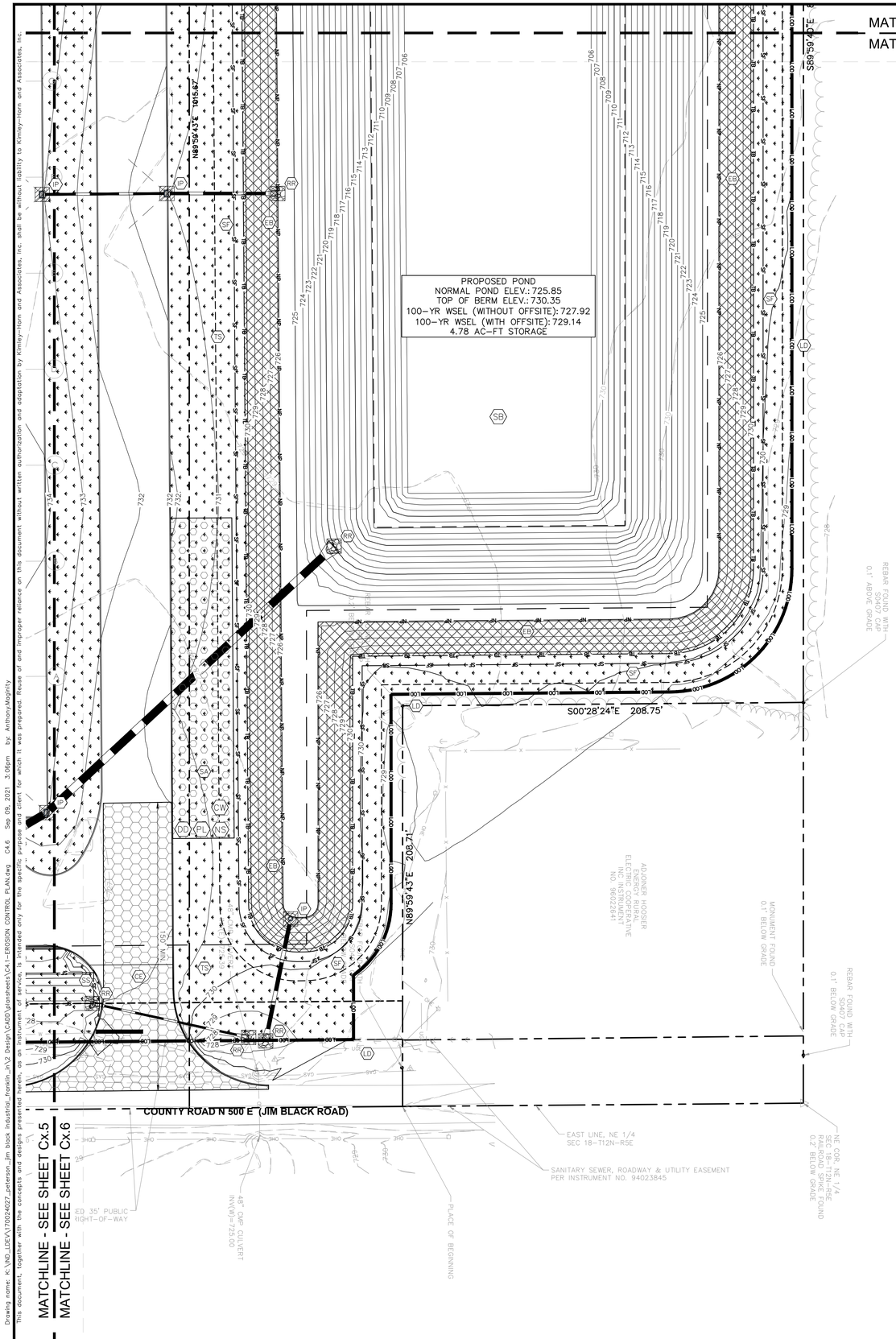
FRANKLIN INDUSTRIAL
JIM BLACK RD. & MCCLAIN DR., FRANKLIN, IN

ORIGINAL ISSUE: 9/9/2021

KHA PROJECT NO. 170024027

SHEET NUMBER

C4.5



Indiana Utilities Protection Service
Call 811
before you dig

NORTH

GRAPHIC SCALE IN FEET
0 15' 30' 60'

EROSION CONTROL LEGEND

- TEMPORARY SEEDING (SEE EROSION CONTROL DETAILS)
- TEMPORARY EROSION CONTROL BLANKET (SEE TEMPORARY EROSION CONTROL NOTE #3)
- CONSTRUCTION ENTRANCE (SEE EROSION CONTROL DETAILS)
- SILT FENCE (SEE EROSION CONTROL DETAILS)
- AREA INLET PROTECTION (SEE EROSION CONTROL DETAILS)
- CONCRETE WASHOUT (SEE EROSION CONTROL DETAILS) (TO BE DETERMINED BY CONTRACTOR)
- RIP RAP (SEE EROSION CONTROL DETAILS)
- ROCK DONUT (SEE EROSION CONTROL DETAILS)
- TEMPORARY SOIL STOCKPILE
- LIMITS OF DISTURBANCE
- CHECK DAM
- EXISTING CONTOURS
- PROPOSED CONTOURS
- N.O.I. SIGN
- STAGING AREA
- DEBRIS DUMPSTER
- PORT-O-LET
- SEDIMENTATION BASIN

GENERAL PLAN NOTES

REFER TO GENERAL NOTES SHEET FOR MORE INFORMATION INCLUDING THE FOLLOWING: (EXISTING LEGEND, BENCHMARK INFORMATION, AND SPECIFIC GENERAL PLAN NOTES.)

NO.	REVISIONS	DATE	BY

Kimley»Horn
© 2021 KIMLEY-HORN AND ASSOCIATES, INC.
250 EAST 96TH STREET, SUITE 580,
INDIANAPOLIS, IN 46240
PHONE: 317-218-0540
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED | DESIGNED BY: AMM | DRAWN BY: CPP | CHECKED BY: WAB

WILLIAM A. BLOOM
REGISTERED
PROFESSIONAL ENGINEER
STATE OF INDIANA
NOT APPROVED FOR CONSTRUCTION
9/9/2021

PETERSON

EROSION CONTROL PLAN

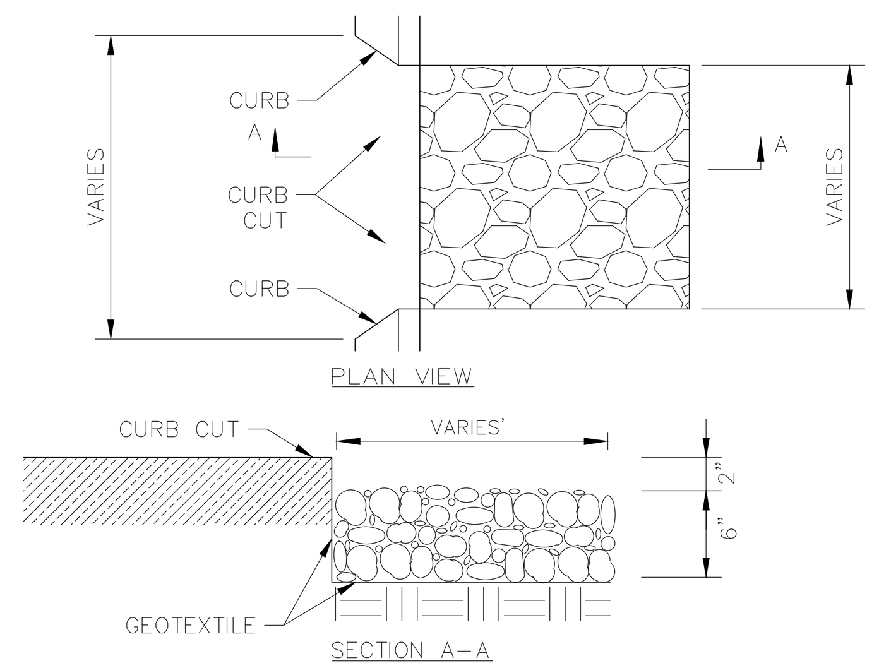
FRANKLIN INDUSTRIAL
JIM BLACK RD. & MCCLAIN DR., FRANKLIN, IN

ORIGINAL ISSUE: 9/9/2021

KHA PROJECT NO. 170024027

SHEET NUMBER

C4.6

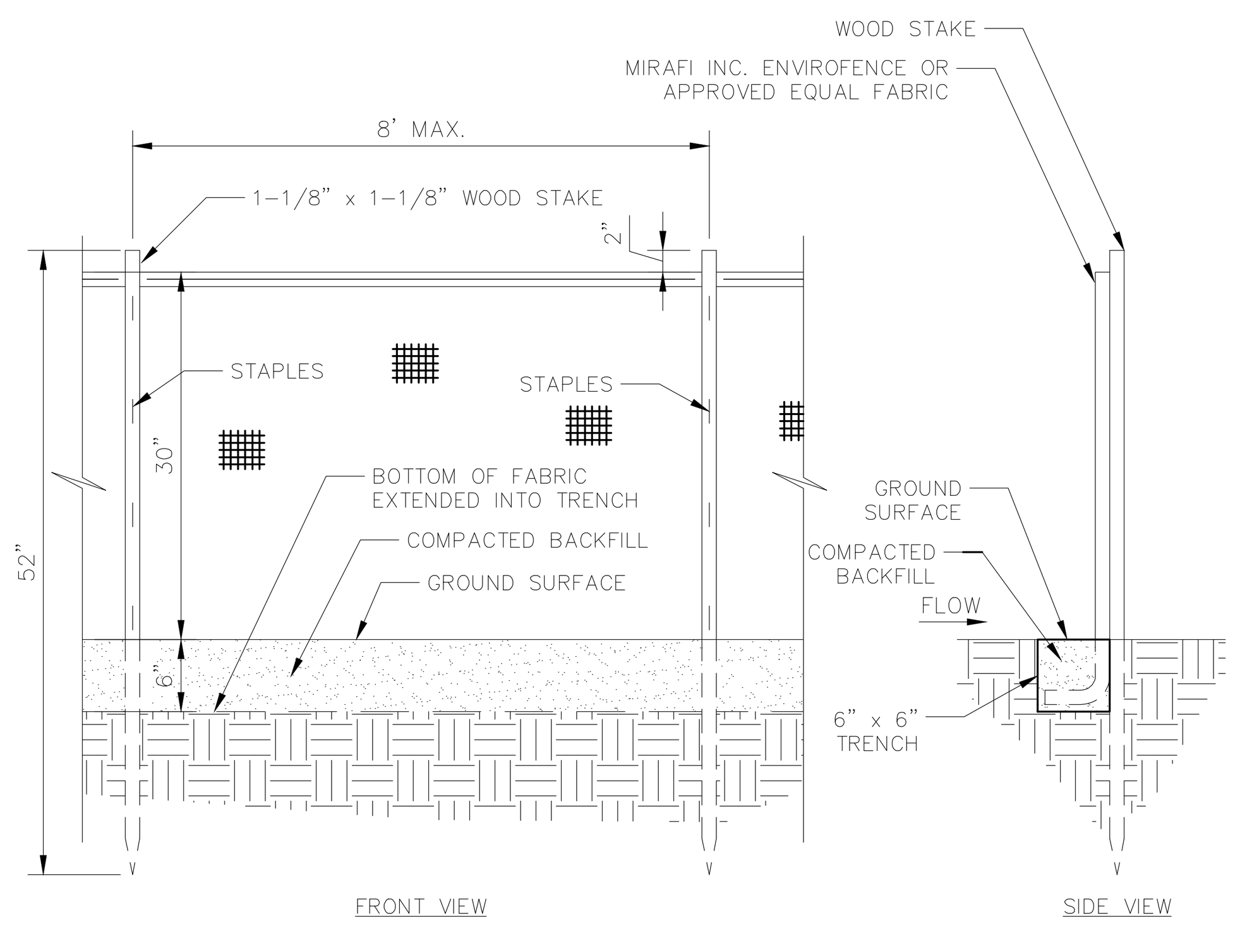


NOTES:

2. GEOTEXTILE (NON-WOVEN) MINIMUM CRITERIA:
   - WEIGHT OF GEOTEXTILE (OZ/SQ.YD.) 6
   - TENSILE STRENGTH (LB) ASTM D 4632 180
   - ELONGATION AT FAILURE (%) ASTM D 4632 .... ≥ 50
   - PUNCTURE (LB) ASTM D 4833 80
   - ULTRAVIOLET LIGHT (% RESIDUAL TENSILE STRENGTH) ASTM D 4355 .... MIN 70
   - APPARENT OPENING SIZE (AOS) ASTM D 4751 .... MAX 40 SIEVE
   - PERMITTIVITY SEC−1 ASTM D 4491 .... MIN 0.70
2. THE RIPRAP SHALL BE PLACED PER INDOT STANDARDS.

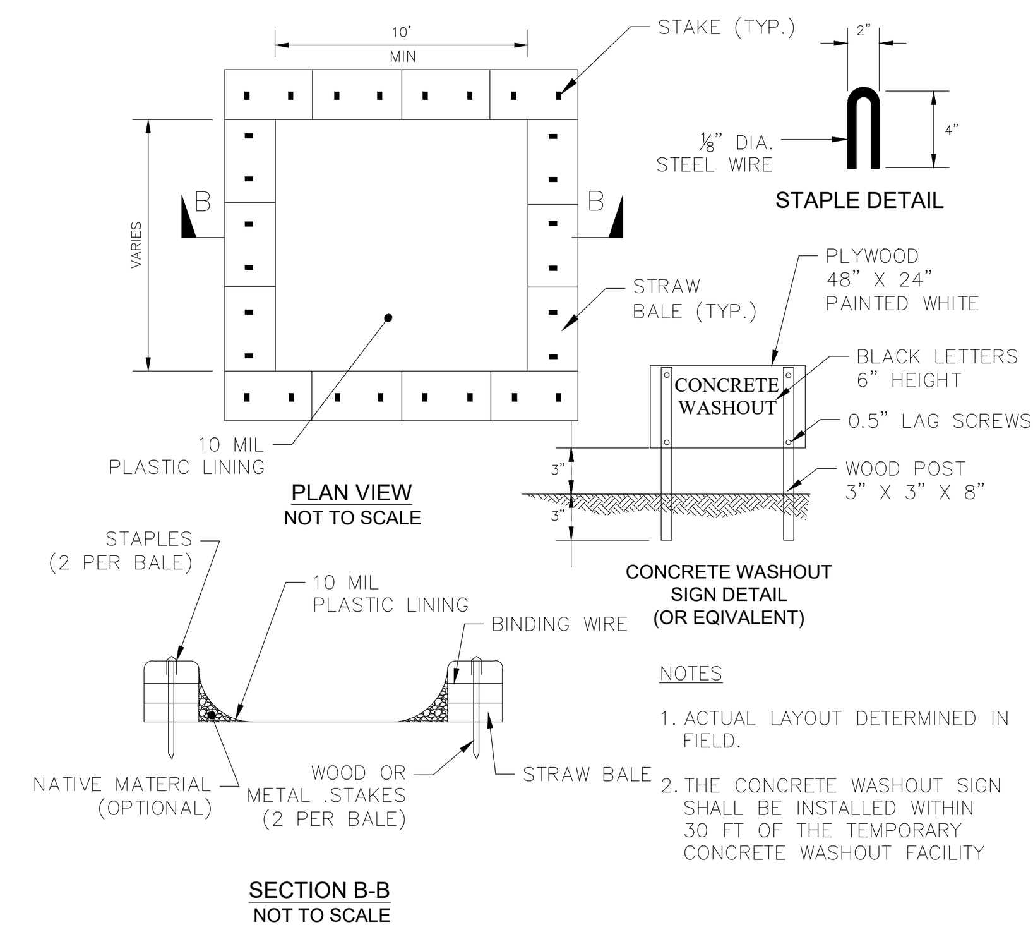
RIP RAP (AT CURB CUT)

N.T.S.



SEDIMENTATION/SILT FENCE

N.T.S.

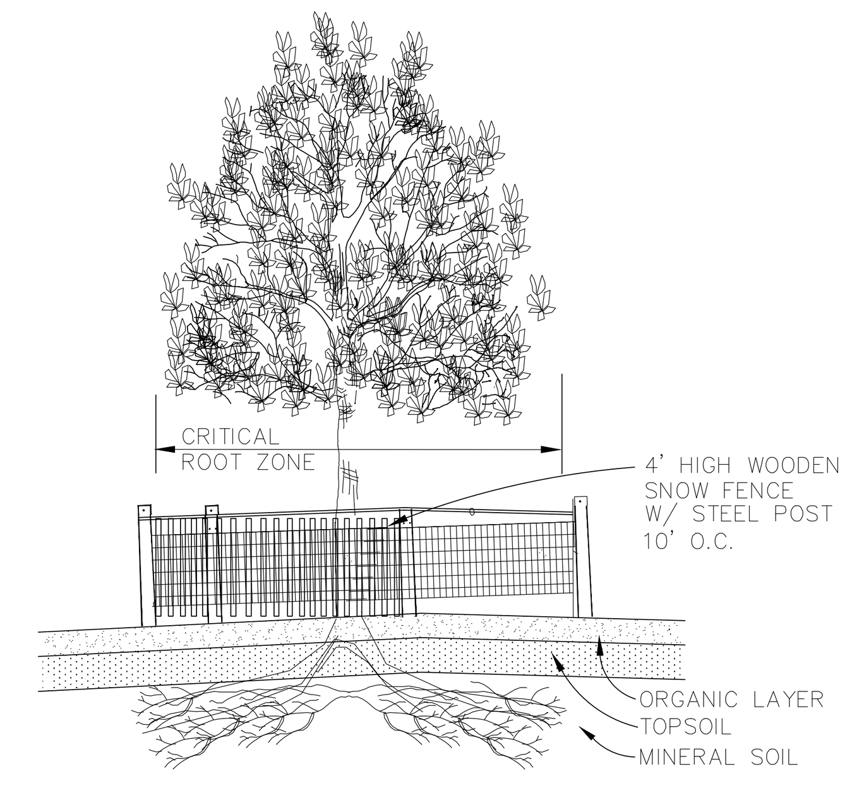


NOTES

1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT OF THE TEMPORARY CONCRETE WASHOUT FACILITY

CONCRETE WASHOUT

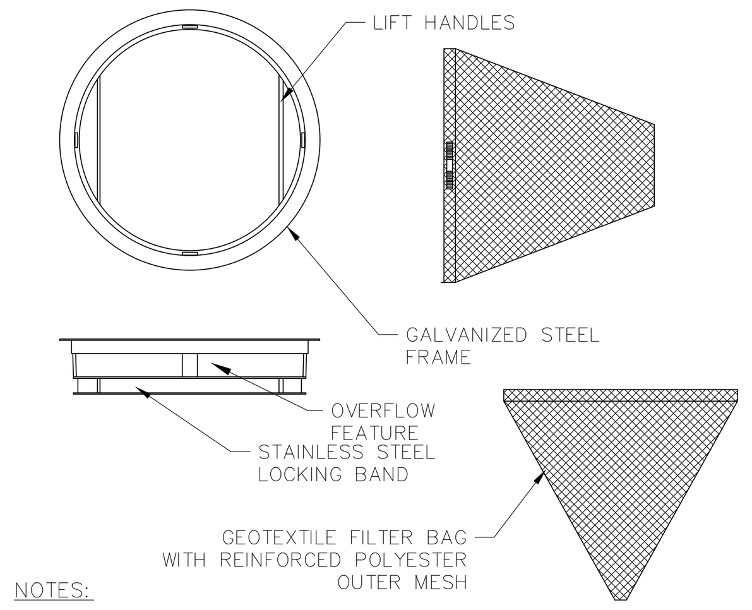
N.T.S.



PROVIDE FENCE AROUND CRITICAL ROOT ZONE OF TREE. FENCE SHALL BE PLACED IN A CIRCLE WITH A RADIUS OF 1' PER 1" DIAMETER OF THE TREE MEASURED AT 4.5' ABOVE GROUND FOR INDIVIDUAL TREES OR STANDS OF TREES.

TREE PROTECTION

N.T.S.



NOTES:

ALL PRODUCTS MANUFACTURED BY INLET AND PIPE PROTECTION, INC OR APPROVED EQUAL.

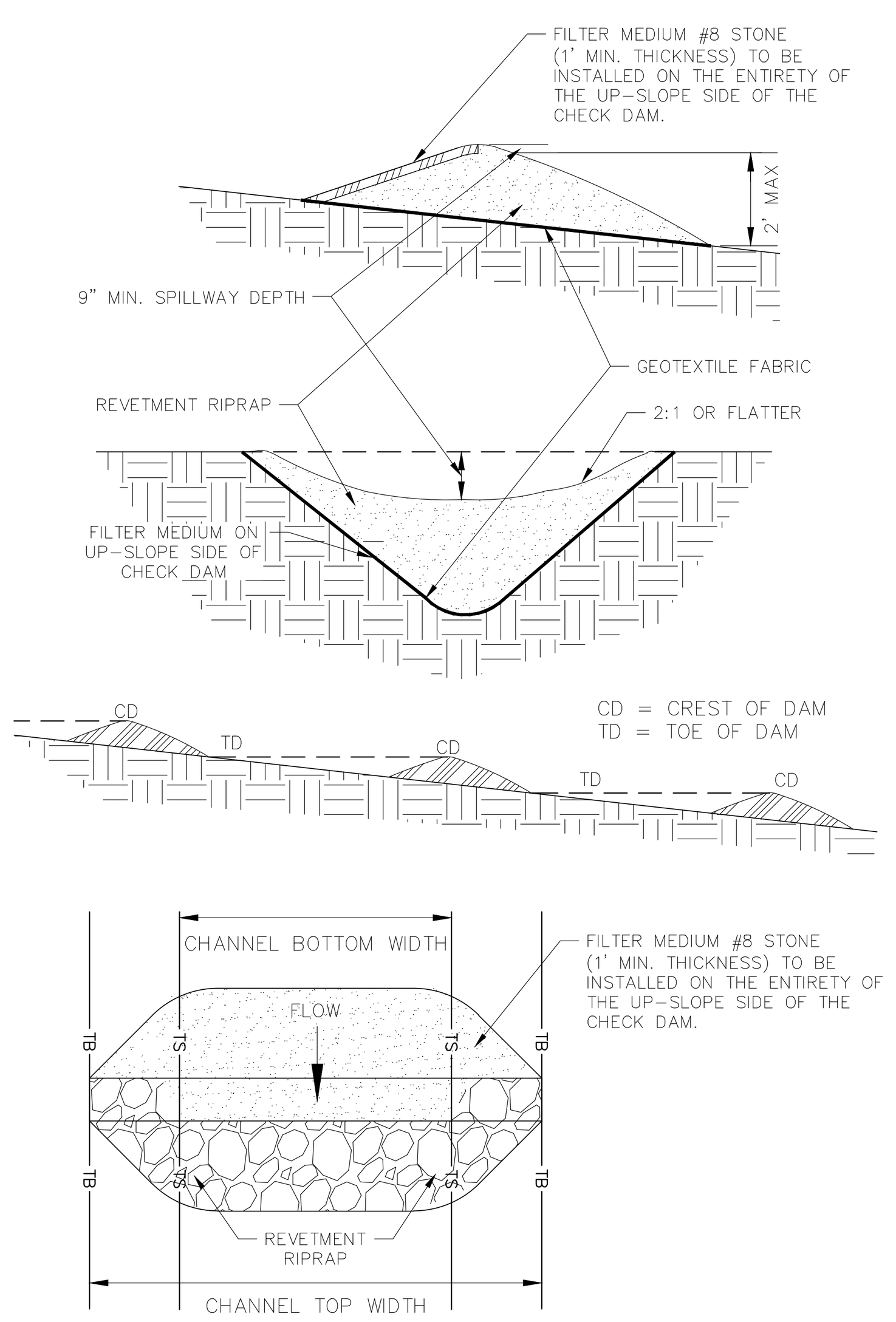
NOTE: INLET FILTERS ARE SLIGHTLY SMALLER THAN THE INLET GRATE SIZES. WHEN IDENTIFYING OR SPECIFYING FILTERS/CASTINGS PLEASE REFER TO THE DIAMETER "D" OR WIDTH "W" AND HEIGHT "H" OF FILTER FRAMES OR CASTING GRATES. YOU MAY ALSO REFER TO OUR CASTING CROSS REFERENCE GUIDE FOR INDOT STANDARDS

NOTE: ROUND AND SQUARE INLET FILTERS AVAILABLE FOR MOST NEENAH AND EAST JORDAN BEEHIVE, ROLL CURB AND CURB BOX FRAME TYPES.

ALL IPP INLET FILTERS TO CONFORM TO INDOT SPECIFICATIONS.

INLET PROTECTION

N.T.S.



SPECIFICATIONS
- CONTRIBUTING DRAINAGE AREA (2) TWO ACRES MAXIMUM.

RIPRAP ROCK CHECK DAM
- DAM HEIGHT: (2') TWO FEET MAXIMUM; CENTER OF THE DAM TO BE AT LEAST NINE INCHES LOWER THAN THE POINTS OF CONTACT BETWEEN THE UPPERMOST POINTS OF THE RIPRAP DAM AND CHANNEL BANKS. SIDE SLOPE: RATIO OF 2:1 OR FLATTER.
- SPACING: TOE OF THE UPSTREAM DAM AT SAME ELEVATION AS OVERFLOW WEIR OF THE DOWNSTREAM DAM.
- DO NOT USE CHECK DAMNS WITHIN PERENNIAL STREAMS.

OVERFLOW AREAS
- STABILIZED TO REDUCE SCOUR/EROSION ALONG SIDES AND BELOW THE DAM.

FILTER MEDIUM
- PLACED ON UP-SLOPE SIDE OF DAM.
- HEIGHT: TO BASE OF OVERFLOW WEIR NOTCH.

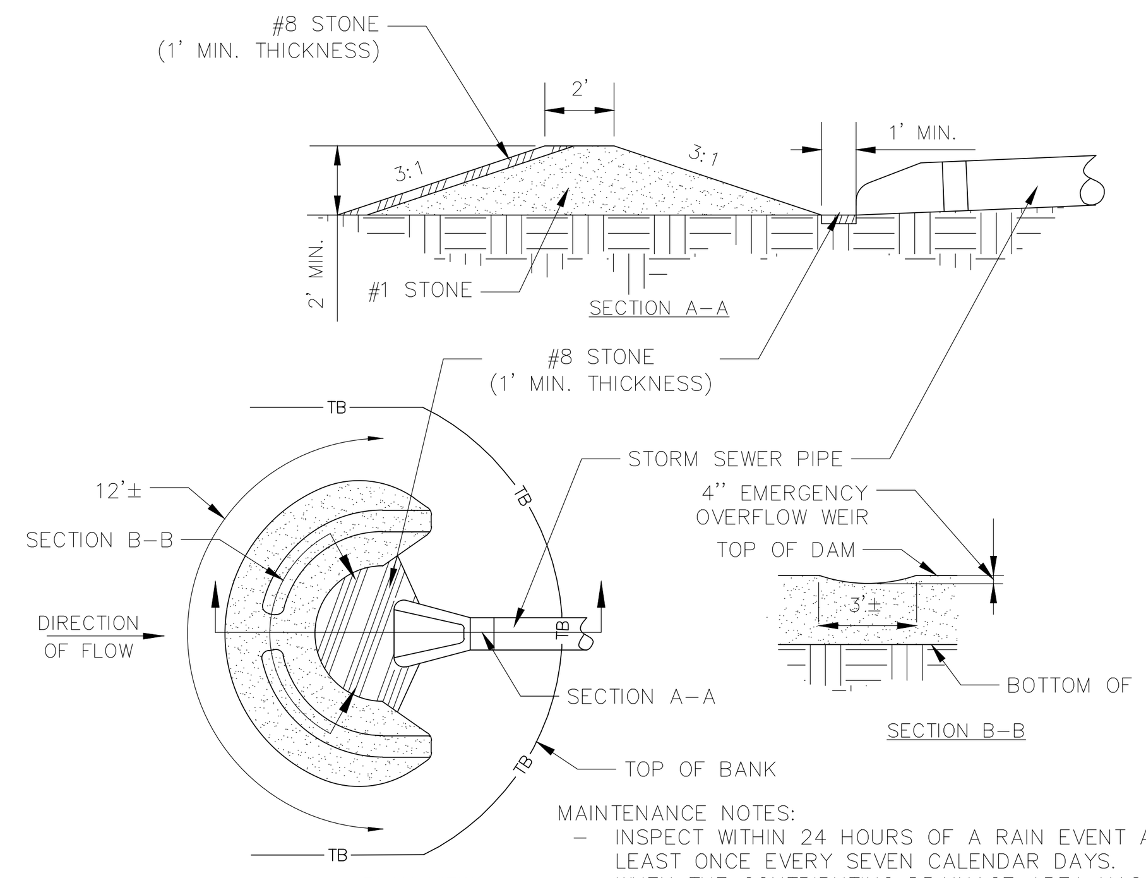
MATERIALS
- GEOTEXTILE FABRIC (8 OUNCE OR HEAVIER; NON-WOVEN).
- INDOT REVETMENT RIPRAP FOR DAM.
- INDOT CA NO. 5 AGGREGATE FOR USE AS FILTER MEDIUM (AGGREGATE MUST BE WELL-GRADED)
- NOTE: INDOT CA NO. 8 AGGREGATE IS ACCEPTABLE IF NO. 5 IS NOT AVAILABLE. THE USE OF NO. 8 AGGREGATE MAY RESULT IN MORE FREQUENT OVERTOPPING OF THE STRUCTURE AND WILL INCREASE THE FREQUENCY OF STRUCTURE MAINTENANCE.

INSTALLATION
1. LAY OUT THE LOCATION OF THE CHECK DAM.
2. EXCAVATE A CUTOFF TRENCH INTO THE CHANNEL BOTTOM AND DITCH BANKS, EXTENDING IT A MINIMUM OF 18 INCHES BEYOND THE TOP OF THE DITCH BANK.
3. INSTALL AND ANCHOR FILTER FABRIC IN THE CHANNEL AND CUTOFF TRENCH.
4. PLACE RIPRAP IN THE CUTOFF TRENCH AND CHANNEL TO THE LINES AND DIMENSIONS SHOWN IN THE CONSTRUCTION PLANS. THE CENTER OF EACH DAM MUST BE AT LEAST NINE INCHES LOWER THAN THE UPPERMOST POINTS OF CONTACT BETWEEN THE RIPRAP DAM AND CHANNEL BANKS.
5. EXTEND THE RIPRAP AT LEAST 18 INCHES BEYOND THE TOP OF THE CHANNEL BANKS TO KEEP OVERFLOW FROM ERODING AREAS ADJACENT TO THE CHANNEL BANKS BEFORE IT RE-ENTERS THE CHANNEL.
6. PLACE FILTER MEDIUM (INDOT CA NO. 5 AGGREGATE) ON THE UP-SLOPE SIDE OF THE DAM. PLACE FILTER MEDIUM OVER THE ENTIRE FACE OF THE DAM UP TO THE BASE OF THE OVERFLOW WEIR NOTCH.
7. STABILIZE THE CHANNEL ABOVE THE UPPERMOST DAM.
8. INSTALL AN EROSION-RESISTANT LINING IN THE CHANNEL BELOW THE LOWERMOST DAM. THE LINING SHOULD EXTEND A MINIMUM DISTANCE OF SIX FEET BELOW THE DAM.
9. ADDITIONAL SEDIMENT STORAGE CAN BE PROVIDED BY EXCAVATING A SMALL SEDIMENT TRAP ON THE UPSTREAM SIDE OF THE CHECK DAM.

MAINTENANCE
- INSPECT WITHIN 24 HOURS OF EACH RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
- IF SIGNIFICANT EROSION OCCURS BETWEEN DAMS, INSTALL AN EROSION-RESISTANT LINER IN THAT PORTION OF THE CHANNEL.
- ADD RIPRAP AND AGGREGATE AS NEEDED TO MAINTAIN DESIGN HEIGHT AND CROSS SECTION OF THE DAMS.
- WHEN DAMS ARE NO LONGER NEEDED, REMOVE THE RIPRAP AND AGGREGATE AND STABILIZE THE CHANNEL, USING AN EROSION-RESISTANT LINING IF NECESSARY. (RIPRAP AND AGGREGATE FROM THE DAM MAY BE REMOVED OR UTILIZED TO STABILIZE THE CHANNEL.)
- REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES ONE-HALF THE HEIGHT OF THE DAM TO MAINTAIN CHANNEL CAPACITY, ALLOW DRAINAGE THROUGH THE DAM, AND PREVENT LARGE FLOW FROM DISPLACING SEDIMENT.

ROCK CHECK DAM

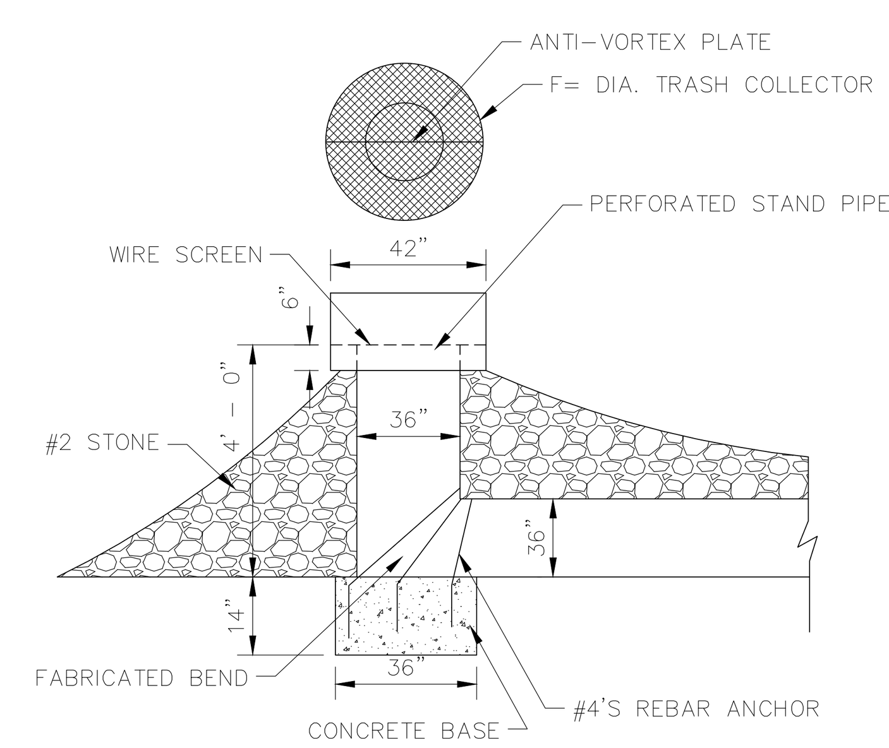
N.T.S.



MAINTENANCE NOTES:
- INSPECT WITHIN 24 HOURS OF A RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
- WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE AND PROPERLY DISPOSE OF ANY UNSTABLE SEDIMENT AND CONSTRUCTION MATERIAL, AND RE-STABILIZE.

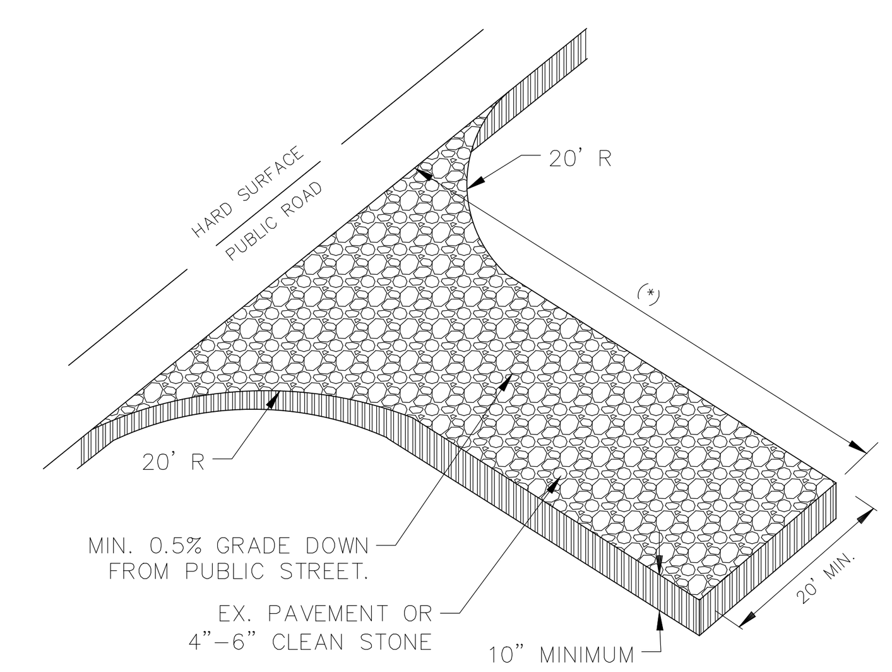
ROCK DONUT DETAIL

N.T.S.



TEMPORARY STANDPIPE DETAIL

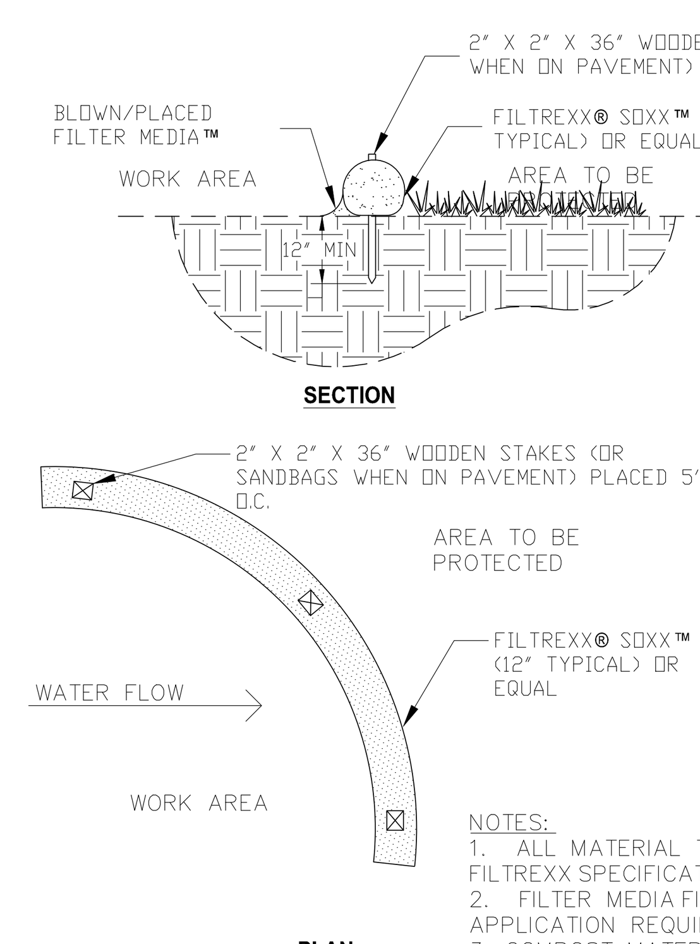
N.T.S.



NOTE:
1. (*) 50' FOR LAND DISTURBANCE SMALLER THAN 2.0 AC.
2. 150' FOR LAND DISTURBANCE LARGER THAN 2.0 AC.

CONSTRUCTION ENTRANCE

N.T.S.



NOTES:
1. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
2. FILTER MEDIA FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

FILTER SOCK SEDIMENT CONTROL

N.T.S.

STABILIZATION TYPE	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
PERMANENT SEEDING			●A →	→	→	* →		●A * →	→			
DORMANT SEEDING	●B →	→	→									●B →
TEMPORARY SEEDING			●C →	→	→	→		●D →	→	→	→	
SODDING				●E ** →	→	→	→	→	→			
MULCHING	●F →	→	→	→	→	→	→	→	→	→	→	→

- A KENTUCKY BLUEGRASS 90 LBS/ACRE MIXED WITH PERENNIAL RYEGRASS 30 LBS/ACRE
- B KENTUCKY BLUEGRASS 135 LBS/ACRE MIXED WITH PERENNIAL RYEGRASS 45 LBS/ACRE + 2 TONS STRAW MULCH/ACRE
- C SPRING OATS 100 LBS/ACRE
- D WHEAT OR CEREAL RYE 150 LBS/ACRE
- E SOD
- F STRAW MULCH 2 TONS/ACRE
- * IRRIGATION NEEDED DURING JUNE AND AUGUST
- ** IRRIGATION NEEDED FOR 2 TO 3 WEEKS AFTER APPLYING SOD DURING ANY PART OF THE YEAR

SEEDING CHART

SPECIFICATIONS CAPACITY
- PEAK RUNOFF FROM A 10-YEAR FREQUENCY, 24-HOUR STORM EVENT OR THE DESIGN DISCHARGE OF THE WATER CONVEYANCE STRUCTURE, WHICHEVER IS GREATER.
- MAX VELOCITY TEN FEET PER SECOND.

APRON
- ALIGNED STRAIGHT WITH CHANNEL FLOW. IF A CURVE IS NECESSARY TO ALIGN THE APRON WITH THE RECEIVING STREAM, LOCATE THE CURVE IN THE UPSTREAM SECTION OF THE APRON.
- (AT) THICKNESS
  -- 1.2 TIMES THE MAXIMUM STONE DIAMETER FOR A D50 STONE SIZE OF 15 INCHES OR LARGER.
  -- 1.5 TIMES THE MAXIMUM STONE DIAMETER FOR A D50 STONE SIZE OF 15 INCHES OR LESS.

MATERIALS
- RIPRAP
  -- HARD, ANGULAR, HIGHLY WEATHER RESISTANT.
  -- SPECIFIC GRAVITY OF AT LEAST 2.5.
  -- SIZE AND GRADATION THAT WILL WITHSTAND VELOCITIES OF STORM WATER DISCHARGE FLOW DESIGN.
  -- WELL-GRADED MIXTURE OF STONE WITH 50 PERCENT OF THE STONE PIECES, BY WEIGHT, LARGER THAN THE D50 SIZE AND THE DIAMETER OF THE LARGEST STONE EQUAL TO 1.5 TIMES THE D50 SIZE.
- GEOTEXTILE FABRIC OR WELL-GRADED AGGREGATE (INDOT COARSE AGGREGATE NUMBER 9, 11, OR 12).

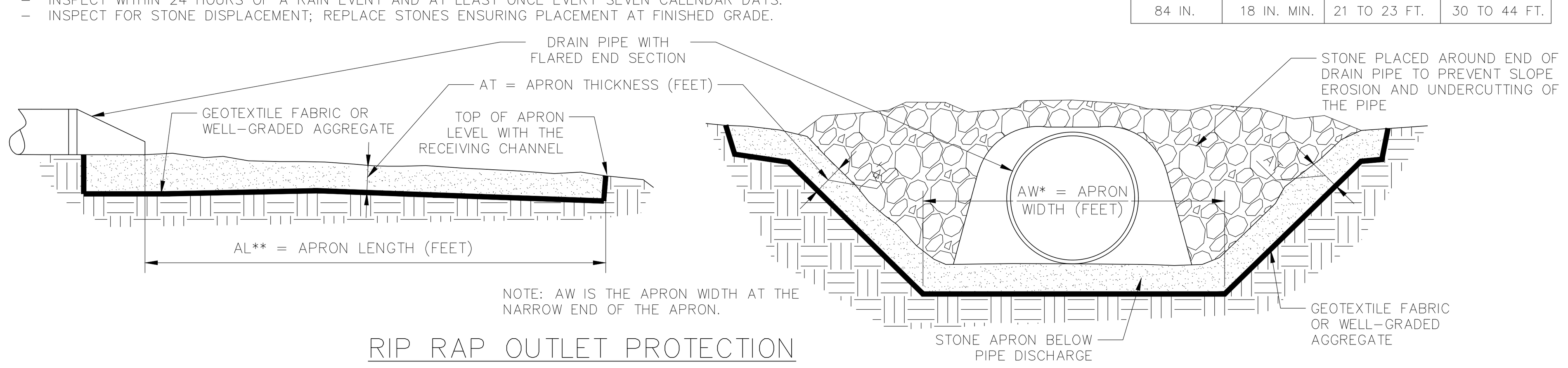
INSTALLATION
1. DIVERT SURFACE WATER RUNOFF AROUND THE STRUCTURE DURING CONSTRUCTION SO THAT THE SITE CAN BE PROPERLY DEWATERED FOR FOUNDATION PREPARATION.
2. EXCAVATE FOUNDATION AND APRON AREA SUBGRADES BELOW DESIGN ELEVATION TO ALLOW FOR THIS THICKNESS OF FILTER MEDIUM AND RIPRAP.
3. COMPACT ANY FILL USED IN SUBGRADE PREPARATION TO THE DENSITY OF SURROUNDING UNDISTURBED SOIL MATERIAL.
4. SMOOTH SUBGRADE ENOUGH TO PROTECT GEOTEXTILE FABRIC FROM TEARING.
5. PLACE GEOTEXTILE FABRIC OR AGGREGATE BEDDING MATERIAL (FOR STABILIZATION AND FILTRATION) ON THE COMPACTED AND SMOOTHED FOUNDATION.
6. INSTALL RIPRAP TO THE LINES AND ELEVATIONS SHOWN IN THE CONSTRUCTION PLANS. BLEND RIPRAP SMOOTHLY TO SURROUNDING GRADE. IF THE CHANNEL IS WELL DEFINED, EXTEND THE APRON ACROSS THE CHANNEL BOTTOM AND UP THE CHANNEL BANKS TO AN ELEVATION OF SIX INCHES ABOVE THE MAXIMUM TAILWATER DEPTH OR THE TOP OF THE BANK, WHICHEVER IS LESS.
7. IF GEOTEXTILE FABRIC TEARS WHEN PLACING RIPRAP, REPAIR IMMEDIATELY BY LAYING AND STAPLING A PIECE OF FABRIC OVER DAMAGED AREA, OVERLAPPING THE UNDAMAGED AREAS BY AT LEAST 12 INCHES.
8. CONSTRUCT A SMALL PLUNGE POOL WITHIN THE OUTLET APRON. (RIPRAP APRONS MUST BE LEVEL WITH OR SLIGHTLY LOWER THAN THE RECEIVING CHANNEL AND SHOULD NOT PRODUCE AN OVERFALL OR RESTRICT FLOW OF THE WATER CONVEYANCE STRUCTURE.)

MAINTENANCE
- CHECK FOR EROSION OR SCOURING AROUND SIDES OF THE APRON; REPAIR IMMEDIATELY.
- CHECK FOR PIPING OR UNDERCUTTING; REPAIR IMMEDIATELY.
- INSPECT WITHIN 24 HOURS OF A RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
- INSPECT FOR STONE DISPLACEMENT; REPLACE STONES ENSURING PLACEMENT AT FINISHED GRADE.

TABLE 1. SIZING FOR FLOW DISSIPATERS AT CULVERT PIPE OUTLETS

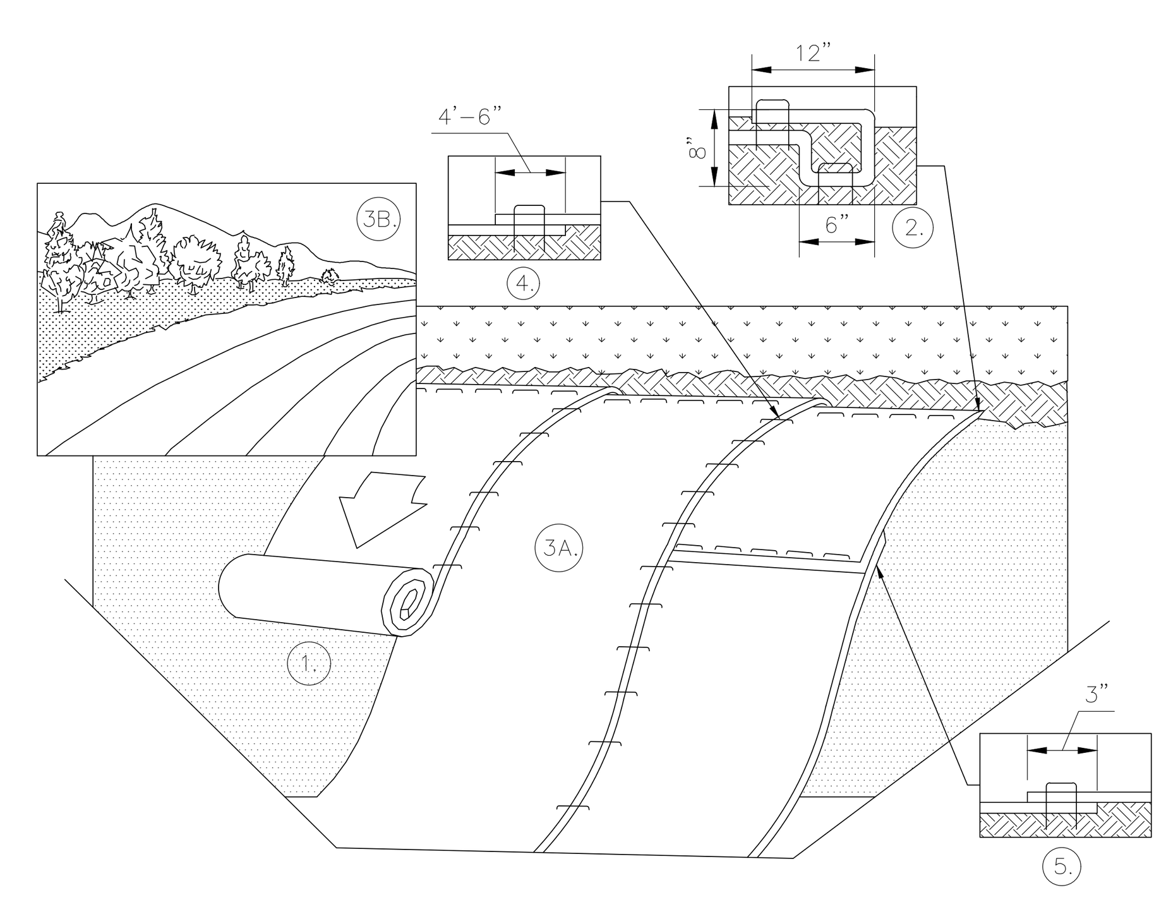
*APRON WIDTH AT THE NARROW END OF APRON (PIPE OR CHANNEL OUTLET).
**SELECT LENGTH TAKING INTO CONSIDERATION THE LOW FLOW (NO PRESSURE HEAD) OR HIGH FLOW (PRESSURE HEAD) CONDITIONS OF THE CULVERT PIPE.

PIPE SIZE	(AT) MEDIAN RIP RAP DIAMETER	(AW) APRON WIDTH*	(AL) APRON LENGTH**
8 IN.	6 IN. MIN.	2 TO 3 FT.	5 TO 7 FT.
12 IN.	6 IN. MIN.	3 TO 4 FT.	6 TO 10 FT.
15 IN.	6 IN. MIN.	4 TO 6 FT.	6 TO 12 FT.
18 IN.	6 IN. MIN.	4 TO 6 FT.	8 TO 16 FT.
21 IN.	6 IN. MIN.	6 TO 8 FT.	8 TO 16 FT.
24 IN.	9 IN. MIN.	6 TO 8 FT.	12 TO 18 FT.
30 IN.	9 IN. MIN.	8 TO 10 FT.	14 TO 20 FT.
36 IN.	9 IN. MIN.	10 TO 12 FT.	16 TO 22 FT.
42 IN.	9 IN. MIN.	12 TO 14 FT.	18 TO 24 FT.
48 IN.	12 IN. MIN.	12 TO 14 FT.	18 TO 26 FT.
54 IN.	12 IN. MIN.	14 TO 16 FT.	22 TO 28 FT.
60 IN.	12 IN. MIN.	15 TO 17 FT.	22 TO 32 FT.
66 IN.	12 IN. MIN.	17 TO 19 FT.	24 TO 36 FT.
72 IN.	12 IN. MIN.	18 TO 20 FT.	26 TO 40 FT.
84 IN.	18 IN. MIN.	21 TO 23 FT.	30 TO 44 FT.



RIP RAP OUTLET PROTECTION

N.T.S.



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.

2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH AS SHOWN IN DETAIL. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.

3. ROLL THE BLANKETS (3A.) DOWN OR (3B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS PER MANUFACTURES RECOMMENDATION.

4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH MINIMUM 6" OVERLAP. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.

5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.

7. PLACE STAPLES/STAKES PER MANUFACTURER'S RECOMMENDATION FOR THE APPROPRIATE SLOPE BEING APPLIED.

NOTES:
1. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

2. FOLLOW EROSION CONTROL TECHNOLOGY COUNCIL SPECIFICATION FOR PRODUCT SELECTION.

EROSION CONTROL BLANKET (SLOPE INSTALLATION)

N.T.S.

REVISIONS | No. | DATE | BY

Kimley»Horn

250 EAST 96TH STREET, SUITE 580,
INDIANAPOLIS, IN 46240
PHONE: 317-218-9560
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: AMM
DRAWN BY: CPP
CHECKED BY: WAB

WILLIAM A. BU... REGISTERED PROFESSIONAL ENGINEER, STATE OF INDIANA — NOT APPROVED FOR CONSTRUCTION
9/9/2021

PETERSON

EROSION CONTROL DETAILS

FRANKLIN INDUSTRIAL
JIM BLACK RD. & MCCLAIN DR., FRANKLIN, IN

ORIGINAL ISSUE: 9/9/2021
KHA PROJECT NO. 170024027
SHEET NUMBER
C4.7

GENERAL PROJECT INFORMATION

SITE NAME

THE AREA SCHEDULED FOR CONSTRUCTION IS KNOWN AS THE "FRANKLIN INDUSTRIAL" (HEREINAFTER REFERRED TO AS THE "PROJECT").

PROJECT LOCATION

THE PROJECT IS LOCATED IN NEEDHAM TOWNSHIP, FRANKLIN, JOHNSON COUNTY, INDIANA.

ADDRESS: NWC JIM BLACK ROAD AND MCCLAIN DRIVE, FRANKLIN, IN 46131
LATITUDE: 39°29'31.05"N
LONGITUDE: 86° 0'33.50"W

OWNER'S INFORMATION

NAME: THE PETERSON COMPANY, LLC
ADDRESS: 7132 ZIONSVILLE ROAD, INDIANAPOLIS, IN 46268
REPRESENTATIVE: LARRY D. SIEGLER
TELEPHONE:

DEVELOPER'S INFORMATION

NAME: SAME AS OWNER
ADDRESS:
REPRESENTATIVE:
TELEPHONE:

ASSESSMENT OF CONSTRUCTION PLAN ELEMENTS - SECTION A

A1 INDEX SHOWING LOCATIONS OF REQUIRED PLAN ELEMENTS

REFER TO THE FOLLOWING LIST FOR LOCATIONS OF REQUIRED PLAN ELEMENTS

• C0.0	(TITLE SHEET):	A4, A5
• C2.0	(EXISTING CONDITIONS AND DEMOLITION):	A10, A17, A22
• C3.0–C3.6	(SITE PLAN):	A2, A6
• C4.1–C4.6	(EROSION CONTROL PLAN):	A6, A16, A18, A21
• C5.0–C5.6	(GRADING PLAN):	A6, A23
• C6.0–C6.6	(UTILITY PLAN):	A6, A9, A19

A2 11"x17" PLAT

REFER TO SHEET C3.0 – OVERALL SITE PLAN.

A3 PROJECT DESCRIPTION

PROJECT CONSISTS OF THE DEMOLITION OF EXISTING AGRICULTURAL FIELD AND CONSTRUCTION OF AN APPROXIMATE 539,668 SF INDUSTRIAL WAREHOUSE WITH ASSOCIATED PARKING, DRIVES, ROADWAY, AND LANDSCAPING IMPROVEMENTS.

THIS SWPPP WILL SUPPLEMENT THE APPROVED SWPPP SECTIONS AND TAKE EFFECT ONCE FURTHER CONSTRUCTION TAKES PLACE.

A4 VICINITY MAP

REFER TO SHEET C0.0–COVER SHEET.

A5 LEGAL DESCRIPTION OF THE PROJECT SITE

REFER TO SHEET C0.0–COVER SHEET.

A6 LOCATION OF ALL LOTS AND PROPOSED SITE IMPROVEMENTS

REFER TO SHEET C3.0–OVERALL SITE PLAN.

A7 HYDROLOGIC UNIT CODE (14–DIGIT)

05120204090070

A8 STATE / FEDERAL WATER QUALITY PERMITS

RULE 5 NOI WILL BE REQUIRED.

A9 SPECIFIC POINTS WHERE STORMWATER DISCHARGE WILL LEAVE THE PROJECT SITE

EXISTING STORMWATER DISCHARGE

– THE EXISTING SITE IS CURRENTLY UNDEVELOPED AND PRIMARILY USED FOR AGRICULTURAL PURPOSES. THE SITE HAS ONE ONSITE DRAINAGE AREA CONSISTED OF 37.70 ACRES CURRENTLY DRAINS TOWARD TO THE SITE DISCHARGE POINT IN THE NORTH EAST CORNER OF THE SITE. IN ADDITION, THERE IS AN OFFSITE DRAINAGE AREA FROM THE WEST CONSISTED OF 20.20 ACRES THAT DRAINS THROUGH THE SITE.

POST CONSTRUCTION STORMWATER DISCHARGE

– STORMWATER RUNOFF FOR THE PROPOSED 539,668 SF INDUSTRIAL WAREHOUSE WILL DISCHARGE INTO PROPOSED WET DETENTION POND. STORMWATER RUNOFF FOR PROPOSED PAVING AND IMPROVEMENTS WILL SHEET FLOW AND PIPE FLOW INTO PROPOSED WET DETENTION POND. WET DETENTION POND IS TO DISCHARGE TO EXISTING INFRASTRUCTURE TO THE EAST.

A10 LOCATION AND NAME OF ALL WETLANDS, LAKES AND WATER COURSES ON AND ADJACENT TO THE PROJECT SITE

THERE ARE EXISTING WETLANDS WITHIN THE PROJECT SITE ALONG WITH A DRAINAGE EASEMENT THAT WILL BE VACATED. PERMITS TO IMPACT THESE WILL BE OBTAINED BY THE OWNER.

A11 IDENTIFICATION OF RECEIVING WATERS

THE PROJECT SITE DISCHARGE ULTIMATELY DISCHARGES TO EAST TOWARD AMITY DITCH.

A12 IDENTIFICATION OF POTENTIAL DISCHARGES TO GROUND WATER

RUNOFF WILL NOT BE DISCHARGED TO GROUND WATER.

A13 100–YEAR FLOODPLAINS, FLOODWAYS, AND FLOODWAY FRINGES

THE PROJECT SITE IS OR NOT LOCATED ENTIRELY IN ZONE "X" WHICH IS DEFINED AS AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN. FIRM MAP PANEL 18081C0232D, DATED AUGUST 2, 2007.

A14 PRE–CONSTRUCTION AND POST CONSTRUCTION ESTIMATE OF PEAK DISCHARGE (10–YEAR STORM EVENT)

EXISTING CONDITIONS PEAK Q = ±51.71 CFS
PROPOSED CONDITIONS PEAK Q = ±193.91 CFS

A15 ADJACENT LANDUSE, INCLUDING UPSTREAM WATERSHED

NORTH: AGRICULTURAL
SOUTH: AGRICULTURAL
EAST: AGRICULTURAL
WEST: INDUSTRIAL

A16 LOCATIONS AND APPROXIMATE BOUNDARIES OF ALL DISTURBED AREAS

REFER TO EROSION CONTROL PLAN SHEETS FOR APPROXIMATE LIMITS OF DISTURBANCE.

A17 IDENTIFICATION OF EXISTING VEGETATIVE COVER

THE PROJECT SITE IS CURRENTLY BEING MASS GRADED. THE MAJORITY OF THE GROUND COVER IS CURRENTLY AGRICULTURAL GROUNDS WITH SOME TREES.

A18 SOILS MAP INCLUDING SOIL DESCRIPTIONS AND LIMITATIONS

THE UNITED STATES DEPARTMENT OF AGRICULTURE (USDA) NATURAL RESOURCES CONSERVATION SERVICE (NRCS) WEB SOIL SURVEY OF JOHNSON COUNTY, INDIANA, INDICATES THAT BROOKSTON SILTY CLAY LOAM, 0 TO 2 PERCENT SLOPES (Br), CROSBY SILT LOAM, FINE–LOAMY SUBSOIL, 0 TO 2 PERCENT SLOPES (CrA), WHITAKER SILT LOAM, 0 TO 2 PERCENT SLOPES (Wh) SOILS ARE THE PREDOMINANT SOILS WITHIN THE PROJECT SITE. REFER TO SHEET C4.7 – EROSION CONTROL DETAILS FOR SOILS MAP.

A19 LOCATIONS, SIZE AND DIMENSIONS OF PROPOSED STORMWATER SYSTEMS

REFER TO THE UTILITY PLAN FOR INFORMATION ON THE PROPOSED STORM SEWER SYSTEM.

A20 PLANS FOR ANY OFF–SITE CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT

NO OFF–SITE CONSTRUCTION ACTIVITIES ARE ANTICIPATED FOR THIS PROJECT.

A21 LOCATIONS OF PROPOSED SOIL STOCKPILES AND/OR BORROW/DISPOSAL AREAS

PROPOSED STOCKPILE LOCATIONS WILL BE SHOWN ON THE EROSION CONTROL PLAN SHEETS C4.0–C4.6.

A22 EXISTING SITE TOPOGRAPHY AT AN INTERVAL APPROPRIATE TO INDICATE DRAINAGE PATTERNS

THE EXISTING TOPOGRAPHY WITHIN THE PROJECT SITE IS SHOWN ON SHEETS C2.0 – EXISTING CONDITIONS AND DEMOLITION PLAN SHEET.

A23 PROPOSED FINAL TOPOGRAPHY AT AN INTERVAL APPROPRIATE TO INDICATE DRAINAGE PATTERNS

THE PROPOSED TOPOGRAPHY WITHIN THE PROJECT SITE IS SHOWN ON SHEETS C5.0–C5.6 – GRADING AND DRAINAGE PLANS.

SWPPP - CONSTRUCTION - SECTION B

B1 DESCRIPTION OF POTENTIAL POLLUTANT SOURCES ASSOCIATED WITH CONSTRUCTION ACTIVITIES

THE FOLLOWING POTENTIAL POLLUTANT SOURCES MAY BE ASSOCIATED WITH CONSTRUCTION ACTIVITIES AT THE PROJECT SITE:

1. SIGNIFICANT MATERIAL INVENTORY
   - 1.1. THE VEHICLES USED BY THE FACILITY POSE A THREAT TO STORMWATER RUNOFF. STORMWATER IN THE AREA COULD BE CONTAMINATED BY AUTOMOBILE FLUIDS CONTAINING HEAVY METALS, OIL, GREASE, AND ALCOHOLS. FUELING OF VEHICLES SHOULD OCCUR ONLY IN MAINTENANCE GARAGES, OR OTHER APPROVED LOCATIONS. CONCRETE PAVEMENT SHOULD BE LAID IN FUELING AREAS, AND APPROPRIATE DRAIN COLLECTION SYSTEMS (INDEPENDENT OF STORM SEWER SYSTEMS) SHALL BE INSTALLED. THE VEHICLES SHOULD BE MAINTAINED REGULARLY TO AVOID LEAKAGE.
   - 1.2. THE BITUMINOUS ASPHALT THAT IS BEING LAID ALSO POSES A POTENTIAL POLLUTION RISK. WHEN THE ASPHALT COMES IN CONTACT WITH RAINWATER, PETROLEUM SURFACTANTS CAN BE LIFTED FROM THE ASPHALT AND TRANSPORTED INTO THE STORM SEWER. THESE POLLUTANTS CAN BE HARMFUL TO ANIMALS.
2. POTENTIAL POLLUTANTS
   - 2.1. SOLID WASTE DISPOSAL – NO SOLID MATERIALS, INCLUDING BUILDING MATERIALS ARE ALLOWED TO BE DISCHARGED FROM THE SITE VIA STORMWATER. ALL SOLID WASTE, INCLUDING DISPOSABLE MATERIALS INCIDENTAL TO THE MAJOR CONSTRUCTION ACTIVITIES, MUST BE COLLECTED AND PLACED IN CONTAINERS. ALL CONTAINERS (DUMPSTERS) MUST BE COVERED. INDIANA'S SOLID WASTE REGULATIONS REQUIRE THAT CONSTRUCTION AND DEMOLITION WASTE BE TAKEN TO A PERMITTED SANITARY LANDFILL. NO LIQUIDS OR HAZARDOUS WASTE WILL BE ACCEPTED. THE CONTRACTOR SHALL CONTACT THE NEAREST IDEM FIELD OFFICE TO DETERMINE THE NEAREST PERMITTED SANITARY LANDFILL. NO RUBBLE MAY BE PLACED WITHIN WATERWAYS, FLOODPLAINS, OR WETLANDS WITHOUT IDEM OR JURISDICTION APPROVAL.
   - 2.2. SANITARY FACILITIES – ALL PERSONNEL INVOLVED WITH CONSTRUCTION ACTIVITIES MUST COMPLY WITH STATE AND LOCAL SANITARY OR SEPTIC SYSTEM REGULATIONS. TEMPORARY SANITARY FACILITIES WILL BE PROVIDED AT THE SITE THROUGHOUT THE CONSTRUCTION PHASE. THEY MUST BE UTILIZED BY ALL CONSTRUCTION PERSONNEL AND WILL BE SERVICED BY A COMMERCIAL OPERATOR.
   - 2.3. HAUL MATERIALS – ALL MATERIALS HAULED TO OR FROM THE SITE SHOULD BE SECURED TO PREVENT LITTERING AND ANY SPILLS MUST BE CLEANED UP IMMEDIATELY.
   - 2.4. CONCRETE/MASONRY – A CONCRETE/MASONRY WASHOUT SHALL BE PRESENT ONSITE. CONTRACTOR SHALL NOT USE UNLINED EARTHEN PITS BUT SHALL ENSURE THAT THE WASHOUT IS AN APPROPRIATE SIZE AND INCLUDES A LINING AND SOMETHING TO PREVENT THE POLLUTANTS FROM REACHING THE STORM SEWER SYSTEM AND THE SOILS ONSITE. A PREFABRICATED WASHOUT IS RECOMMENDED. TO PROLONG THE LIFE OF THE PREFABRICATED WASHOUTS, SCRAPINGS MAY BE STOCKPILED NEXT TO THE WASHOUT, PROVIDED THE WASHOUT AND STOCKPILE ARE REGULARLY MAINTAINED, LEGIBLY SIGNED WITH USE INSTRUCTIONS, AND THE AREA RESTORED TO PREVIOUS CONDITIONS WHEN FINISHED.
   - 2.5. LITTER – THE CONSTRUCTION SITE SHALL BE KEPT CLEAN AT ALL TIMES. MISCELLANEOUS LITTER POSES A THREAT TO SURROUNDING WATERWAYS AND IS AN AESTHETIC NUISANCE.
   - 2.6. SEDIMENT/ EXPOSED SOIL – ALL EXPOSED SOILS ARE TO BE TEMPORARILY SEEDED OR MULCHED SO AS TO NOT BE LEFT UNEXPOSED FOR MORE THAN 7 DAYS. PROJECT SITE IS TO HAVE SILT FENCE AND INLET PROTECTION FOR SEDIMENT CONTROL.

B2 SEQUENCE DESCRIBING STORMWATER QUALITY MEASURE IMPLEMENTATION RELATIVE TO LAND DISTURBING ACTIVITIES

1. CONDUCT AN EROSION SEDIMENT CONTROL PRE–CONSTRUCTION MEETING PRIOR TO ANY EARTHWORK MATERIALS.
2. CONTACT IDEM AT LEAST 48 HOURS PRIOR TO STARTING CONSTRUCTION.
3. POST NOI AT ENTRANCE.
4. DESIGNATE A PERSON TO BE RESPONSIBLE FOR SITE INSPECTIONS AFTER EACH RAINFALL AND A MINIMUM OF 1 TIME PER WEEK.
5. INSTALL CONSTRUCTION ENTRANCE.
6. INSTALL SILT FENCE AROUND PERIMETER OF THE PROJECT SITE AND INLET PROTECTION AT EXISTING INLETS.
7. INSTALL STAGING AREA, FUELING STATION, MATERIAL STORAGE AREA, CONCRETE WASHOUT, AND PORT–O–LET.
8. CONTACT CITY MS4 TO CONDUCT AN INITIAL EROSION INSPECTION PRIOR TO MASS EARTHWORK.
9. INSTALL SEDIMENT BASINS, OFFSITE DISCHARGE PIPE, AND DIVERSION SWALES/ROCK CHECK DAMS.
10. STRIP TOPSOIL AND STOCKPILE.
11. REMOVE PAVEMENT AND OTHER ITEMS SHOWN TO BE DEMOLISHED.
12. ROUGH GRADE PROPOSED PONDS.
13. ROUGH GRADE THE PROJECT SITE, SEED DISTURBED AREAS IMMEDIATELY FOLLOWING ROUGH GRADING. AREAS THAT WILL NOT BE DISTURBED AGAIN SHOULD BE PERMANENTLY SEEDED. NO UN–VEGETATED AREAS SHALL BE LEFT EXPOSED FOR MORE THAN 7 DAYS.
14. BEGIN ROAD AND BUILDING CONSTRUCTION.
15. INSTALL UNDERGROUND UTILITIES. EROSION CONTROL MEASURES SHALL BE INSTALLED AT NEW DRAIN INLET LOCATIONS IMMEDIATELY UPON INSTALLATION.
16. FINAL GRADE THE SITE.
17. PAVING OPERATIONS. EROSION CONTROL MEASURES SHALL BE LEFT IN–PLACE UNTIL THE SITE VEGETATION HAS BEEN ESTABLISHED.
18. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AT THE CONCLUSION OF THE PROJECT.

B3 STABLE CONSTRUCTION ENTRANCE LOCATIONS AND SPECIFICATIONS (AT ALL POINTS OF INGRESS AND EGRESS)

REFER TO SHEETS C4.0–C4.6 – EROSION CONTROL PLAN FOR THE PROPOSED LOCATION OF THE CONSTRUCTION ENTRANCE. ENTRANCE SHALL BE INSTALLED PRIOR TO ANY SITE WORK.

B4 SEDIMENT CONTROL MEASURES FOR SHEET FLOW AREAS

REFER TO SHEETS C4.0–C4.6 – EROSION CONTROL PLAN FOR SHEET FLOW AREAS TO BE PROTECTED BY SEEDING, MULCHING, OR HYDROSEEDING. IF CONCENTRATED FLOW IS EXPERIENCED DUE TO INTERIM GRADING DURING CONSTRUCTION, CONTRACTOR SHALL UTILIZE EROSION CONTROL BLANKETS AND ROCK DONUTS AT INLET LOCATIONS TO SLOW RUNOFF AND REDUCE THE POTENTIAL FOR EROSION AND SEDIMENTATION. SILT FENCES AND STRAW BALES ARE NOT AN ACCEPTABLE MEASURES FOR CONCENTRATED FLOW PROTECTION.

B5 SEDIMENT CONTROL MEASURES FOR CONCENTRATED FLOW AREAS

DIVERSION SWALES, EROSION CONTROL BLANKET, ROCK DONUTS AND CHECK DAMS, AND TEMPORARY SEDIMENT BASINS WILL BE USED TO CONTROL SEDIMENT IN CONCENTRATED FLOW AREAS. SEE EROSION CONTROL PLANS SHEETS C4.0–C4.6 FOR LOCATIONS OF THESE MEASURES. EROSION CONTROL MEASURES ARE TO BE INSPECTED AFTER EVERY MAJOR RAINFALL AND A MINIMUM OF ONCE A WEEK.

WATER REMOVED FROM TRAPS, BASINS, AND OTHER HOLDING DEPRESSIONS OR EXCAVATIONS MUST FIRST PASS THROUGH A SEDIMENT CONTROL AND/OR FILTRATION DEVICE. WHEN DEWATERING DEVICES ARE USED, DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION.

B6 STORM SEWER INLET PROTECTION MEASURE LOCATIONS AND SPECIFICATIONS

REFER TO SHEETS C4.0–C4.6 – EROSION CONTROL PLAN FOR INLET PROTECTION MEASURES AT EXISTING/ PROPOSED STORM SEWER INLETS. STRAW BALES WILL NOT BE ALLOWED AS INLET PROTECTION MEASURES.

B7 RUNOFF CONTROL MEASURES

REFER TO SHEETS C4.0–C4.6 – EROSION CONTROL PLAN FOR RUNOFF CONTROL MEASURES.

AREAS OF CONCENTRATED FLOW WILL BE PROTECTED WITH PERMANENT RIP RAP AT PIPE OUTLETS AND EROSION CONTROL BLANKET IN SWALES.

B8 STORM WATER OUTLET PROTECTION SPECIFICATIONS

PERMANENT RIP RAP WILL BE PROVIDED AT THE PROPOSED STORM WATER OUTLETS AS SHOWN ON SHEETS C4.0–C4.6 – EROSION CONTROL PLAN SHEETS.

B9 GRADE STABILIZATION STRUCTURE LOCATIONS AND SPECIFICATIONS

RIP RAP AND TEMPORARY EROSION CONTROL BLANKET WILL BE UTILIZED TO PREVENT GRADE DESTABILIZATION. REFER TO SHEETS C4.0–C4.6 – EROSION CONTROL PLAN FOR LOCATIONS AND SHEET C4.7 – EROSION CONTROL DETAILS SHEET FOR DETAILS.

B10 LOCATION, DIMENSIONS, SPECIFICATIONS, AND CONSTRUCTION DETAILS OF EACH STORMWATER QUALITY MEASURE

REFER TO SHEETS C4.1–C4.6 – EROSION CONTROL PLAN SHEETS FOR LOCATIONS AND SHEET C4.7 – EROSION CONTROL DETAILS SHEET FOR DETAILS OF CONSTRUCTION PHASE STORMWATER QUALITY MEASURES.

B11 TEMPORARY SURFACE STABILIZATION METHODS APPROPRIATE FOR EACH SEASON

1. TEMPORARY SEEDING
   - 1.1. TEMPORARY SEEDING IS THE PLANTING OF FAST–GROWING GRASSES TO HOLD DOWN THE SOILS IN DISTURBED AREAS SO THAT THEY ARE LESS LIKELY TO BE CARRIED OFFSITE BY STORMWATER RUNOFF OR WIND. WITHIN 14 DAYS AFTER CONSTRUCTION ACTIVITY CEASES ON ANY PARTICULAR AREA, ALL DISTURBED GROUND WHERE THERE WILL NOT BE CONSTRUCTION FOR LONGER THAN 14 DAYS MUST BE SEEDED WITH FAST–GERMINATING TEMPORARY SEED AND PROTECT WITH MULCH. IN THE EVENT OF SNOW COVER, STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE THEREAFTER. REFER TO PLANTING PLAN OR SEED CHART FOR RECOMMENDED SEED MIXTURE.
   - 1.2. ANNUAL RYEGRASS SHALL BE USED FROM MARCH THROUGH NOVEMBER. MIXTURE SHALL BE APPLIED AT THE RATE OF 40 LB/ACRE.
   - 1.3. SPRING MIX SHALL BE USED FROM MARCH THROUGH MAY. THIS MIXTURE SHALL BE APPLIED AT THE RATE OF 150 LB/ACRE. THIS MIX SHALL CONSIST OF OATS.
   - 1.4. FALL MIX SHALL BE USED FROM SEPTEMBER THROUGH NOVEMBER. THIS MIXTURE SHALL BE APPLIED AT A RATE OF 150 LB/ACRE. THIS MIX SHALL CONSIST OF WINTER WHEAT.

B12 PERMANENT SURFACE STABILIZATION SPECIFICATIONS

THE PURPOSE OF SOIL STABILIZATION IS TO PREVENT SOIL FROM LEAVING THE SITE. IN THE NATURAL CONDITION, SOIL IS STABILIZED BY NATIVE VEGETATION. THE PRIMARY TECHNIQUE TO BE USED AT THIS SITE FOR STABILIZING SITE SOIL WILL BE TO PROVIDE A PROTECTIVE COVER OF TURF GRASS, PAVEMENT, OR BUILDING.

1. STEPS IN INSTALLING AND MAINTAINING PERMANENT SURFACE STABILIZATION MEASURES.
   - 1.1. SOIL PREPARATION – LOOSEN SOIL TO A DEPTH OF 6 INCHES. IF SOIL AMENDMENTS / FERTILIZERS ARE REQUIRED, APPLY AT MANUFACTURER'S RECOMMENDED APPLICATION RATE.
   - 1.2. FERTILIZER FOR LAWNS – PROVIDE A FAST–RELEASE FERTILIZER FOR LAWN APPLICATIONS.
   - 1.3. FERTILIZER FOR TREES / SHRUBS – PROVIDE A SLOW–RELEASE GRANULAR FERTILIZER FOR TREE / SHRUB APPLICATIONS.
   - 1.4. REMOVE TRASH, DEBRIS, STONES LARGER THAN 1 INCH IN DIAMETER, AND OTHER OBJECTS THAT MAY INTERFERE WITH PLANT ESTABLISHMENT. FINE GRADE SOIL SURFACE TO A SMOOTH FINISH. APPLY SEED USING A SPREADER OR SEEDING MACHINE AND DO NOT SEED WHEN WIND VELOCITIES ARE IN EXCESS OF 5 MPH. WHEN SOWING, APPLY IN TWO DIRECTIONS THAT ARE PERPENDICULAR TO EACH OTHER.
   - 1.5. RAKE SEED LIGHTLY INTO THE TOP 1/8 INCH OF SOIL, ROLL LIGHTLY, AND WATER WITH A FINE SPRAY.
   - 1.6. PROTECT FRESHLY SOWED SEED BY INSTALLING A LAYER OF CLEAN, SEED–FREE STRAW MULCH UNIFORMLY TO PROVIDE A BLANKET NOT LESS THAN 1$\frac{1}{2}$ INCHES THICK.
   - 1.7. GENTLY WATER AREA TO KEEP STRAW MOIST UNTIL THE SEEDS HAVE ESTABLISHED.

B13 MATERIAL HANDLING AND SPILL PREVENTION PLAN

1. SOIL TRACKING
   - 1.1. CONSTRUCTION TRAFFIC MUST ENTER AND EXIT THE SITE AT THE STABILIZED CONSTRUCTION ENTRANCE AND UTILIZE THE WHEEL WASH PRIOR TO LEAVING THE SITE. THE PURPOSE IS TO TRAP DUST AND MUD THAT WOULD OTHERWISE BE CARRIED OFF–SITE BY CONSTRUCTION TRAFFIC. ALL DIRT TRACKED ONTO PUBLIC AND PRIVATE STREETS SHALL BE CLEANED.
2. DUST CONTROL
   - 2.1. WATER TRUCKS WILL BE USED AS NEEDED DURING CONSTRUCTION TO REDUCE DUST GENERATED ON THE SITE. DUST CONTROL MUST BE PROVIDED BY THE GENERAL CONTRACTOR TO A DEGREE THAT IS IN COMPLIANCE WITH APPLICABLE LOCAL AND STATE DUST CONTROL REGULATIONS. AFTER CONSTRUCTION, THE SITE WILL BE STABILIZED (AS DESCRIBED ELSEWHERE), WHICH WILL REDUCE THE POTENTIAL FOR DUST GENERATION.
3. WATER SOURCE
   - 3.1. NON–STORMWATER COMPONENTS OF SITE DISCHARGE MUST BE CLEAN WATER. WATER USED FOR CONSTRUCTION, WHICH DISCHARGES FROM THE SITE MUST ORIGINATE FROM A PUBLIC WATER SUPPLY OR PRIVATE WELL APPROVED BY THE STATE HEALTH DEPARTMENT. WATER USED FOR CONSTRUCTION THAT DOES NOT ORIGINATE FROM AN APPROVED PUBLIC SUPPLY MUST NOT DISCHARGE FROM THE SITE. IT CAN BE RETAINED IN THE PONDS UNTIL IT INFILTRATES AND EVAPORATES.
4. CONCRETE WASTE FROM CONCRETE READY–MIX TRUCKS
   - 4.1. DISCHARGE OF EXCESS OR WASTE CONCRETE AND/OR WASH WATER FROM CONCRETE TRUCKS WILL BE ALLOWED ON THE CONSTRUCTION SITE, BUT ONLY IN SPECIFICALLY DESIGNATED DIKED AREAS THAT HAVE BEEN PREPARED TO PREVENT CONTACT BETWEEN THE CONCRETE AND/OR WASH WATER AND STORMWATER THAT WILL BE DISCHARGED FROM THE SITE OR IN LOCATIONS WHERE WASTE CONCRETE CAN BE PLACED INTO FORMS TO MAKE RIPRAP OR OTHER USEFUL CONCRETE PRODUCTS. THE CURED RESIDUE FROM THE CONCRETE WASHOUT DIKED AREAS SHALL BE DISPOSED IN ACCORDANCE WITH APPLICABLE STATE AND FEDERAL REGULATIONS. THE JOBSITE SUPERINTENDENT IS RESPONSIBLE FOR ASSURING THAT THESE PROCEDURES ARE FOLLOWED.
5. FUEL TANKS
   - 5.1. TEMPORARY ON–SITE FUEL TANKS FOR CONSTRUCTION VEHICLES SHALL MEET ALL STATE AND FEDERAL REGULATIONS. TANKS SHALL HAVE APPROVED SPILL CONTAINMENT WITH THE CAPACITY REQUIRED BY THE APPLICABLE REGULATIONS. THE TANK SHALL BE IN SOUND CONDITION FREE OF RUST OR OTHER DAMAGE WHICH MIGHT COMPROMISE CONTAINMENT. HOSES, VALVES, FITTINGS, CAPS, FILLER NOZZLES, AND ASSOCIATED HARDWARE SHALL BE MAINTAINED IN PROPER WORKING CONDITION AT ALL TIMES.
6. MASONRY WASTES
   - 6.1. CLEANING MASONRY TOOLS AND EQUIPMENT GENERATE A VARIETY OF WASTES. EXCESS CEMENT AND RINSE WATER ARE TWO EXAMPLES. SWEEP STREETS, GUTTERS, ALLEYS, AND SIDEWALKS RATHER THAN HOSING, REUSE AND RECYCLE MATERIALS IF POSSIBLE AND COLLECT AND PROPERLY DISPOSE OF WASTE.
7. SANITARY FACILITIES
   - 7.1. ALL PERSONNEL INVOLVED WITH CONSTRUCTION ACTIVITIES MUST COMPLY WITH STATE AND LOCAL SANITARY OR SEPTIC SYSTEM REGULATIONS. TEMPORARY SANITARY FACILITIES WILL BE PROVIDED AT THE SITE THROUGHOUT THE CONSTRUCTION PHASE. THEY MUST BE UTILIZED BY ALL CONSTRUCTION PERSONNEL AND WILL BE SERVICED BY A COMMERCIAL OPERATOR.
8. DUMPSTERS (LIDS AND LEAKS)
   - 8.1. WHEN WATER ENTERS THE DUMPSTER, IT CAN PICK UP POLLUTANTS FROM THE WASTE AND LEAK OUT AND EVENTUALLY ENTER THE STORM SEWER SYSTEM. TO PREVENT THIS, DUMPSTER LIDS MUST REMAIN CLOSED AT ALL TIMES AND DUMPSTERS MUST BE INSPECTED FOR LEAKS. NEVER PLACE HAZARDOUS WASTES IN A DUMPSTER OR TRASH BIN. DO NOT HOSE OUT THE DUMPSTER INTERIOR OR LOADING DOCKS. APPLY ABSORBENT OVER ANY FLUIDS SPILLED IN THE DUMPSTER. CHECK LOADING AND UNLOADING EQUIPMENT REGULARLY FOR LEAKS.
9. VEHICLE AND EQUIPMENT LEAKS
   - 9.1. VEHICLES AND CONSTRUCTION EQUIPMENT CONTAIN VARIOUS LIQUID POLLUTANTS THAT MAY LEAK AND ENTER THE STORM SEWER SYSTEM. TO PREVENT THIS, LOOK FOR AND REPORT LEAKS ON VEHICLES WHEN ADDING FUEL. USE SECONDARY CONTAINMENT WHEN TRANSFERRING FUEL FROM THE TANK TRUCK TO THE FUEL TANK. COVER STORM DRAINS IN THE VICINITY DURING THE TRANSFER. CLEAN UP SMALL SPILLS WITH ABSORBENT MATERIALS RATHER THAN HOSING DOWN THE AREA. REMOVE THE ABSORBENT MATERIALS PROMPTLY AND DISPOSE OF IN TRASH.
10. EQUIPMENT MAINTENANCE
    - 10.1. EQUIPMENT REQUIRES MAINTENANCE METHODS THAT CAN PRODUCE POLLUTANTS THAT WILL ENTER THE STORM SEWER SYSTEM IF NOT PROPERLY CLEANED. KEEP ACCURATE MAINTENANCE LOGS AND UP TO DATE INVENTORY OF MATERIALS. PERFORM MAINTENANCE IN COVERED, DESIGNATED SERVICE BAYS WHERE SPILLS AND LEAKS CAN BE PROPERTY CONTAINED. RECYCLE SPENT FLUIDS – DO NOT DUMP DOWN THE DRAIN OR IN THE TRASH. AVOID HOSING DOWN WORK AREAS – USE RAGS FOR SMALL SPILLS, A DAMP MOP FOR GENERAL CLEANUP, AND DRY ABSORBENT FOR LARGER SPILLS.
11. CHEMICALS USED IN CONSTRUCTION
    - 11.1. THE CONSTRUCTION PROCESS REQUIRES THE USE OF MANY CHEMICALS INCLUDING PAINT, SOLVENTS, AND FERTILIZERS. IT IS IMPORTANT TO HANDLE THESE CHEMICALS APPROPRIATELY TO PREVENT CONTAMINATION OF THE STORM SEWER SYSTEM. FIT OIL AND CHEMICAL STORAGE CONTAINERS WITH SECONDARY CONTAINMENT STRUCTURES TO CONTAIN SPILLED MATERIALS. IT IS PREFERABLE TO STORE MATERIALS INDOORS BUT IF THERE IS ONLY AN OUTDOOR STORAGE AREA AVAILABLE, KEEP MATERIALS COVERED TO PREVENT RAIN FROM CONTACTING THE MATERIAL. COVER AND/OR CONTAIN STOCKPILES OR RAW MATERIALS (I.E. SALT, SOIL) TO PREVENT POLLUTED STORMWATER RUNOFF.
12. SPILL CLEANUP PROCEDURES
    - 12.1. IF A SPILL OCCURS, NOTIFY THE KEY SPILL RESPONSE PERSONNEL. IF THE MATERIAL IS HAZARDOUS, CONTACT THE LOCAL FIRE DEPARTMENT. NEVER WASH A SPILL INTO THE STORM DRAIN OR LEAVE IT WITHOUT CLEANING IT UP. CONTAIN SPILLS AND BLOCK THE NEARBY STORM DRAIN. CLEAN UP NON–HAZARDOUS SPILLS BY USING A RAG, DAMP CLOTH, OR ABSORBENT MATERIALS.
    - 12.2. IN CASE OF HAZARDOUS MATERIAL SPILLS, CONTACT THE CORRESPONDING AGENCY. THE INDIANA DEPARTMENT OF ENVIRONMENTAL SPILL RESPONSE LINE CAN BE CONTACTED 24 HOURS–A–DAY, 7 DAYS–A–WEEK AT (317) 233–7745, OR CALL 911.

B14 MONITORING AND MAINTENANCE GUIDELINES FOR EACH PROPOSED STORMWATER QUALITY MEASURE

INSPECTION SCHEDULE / REPORTING

1. ALL DISTURBED AREAS WITHIN THE PROJECT SITE, INCLUDING ALL EROSION AND SEDIMENT CONTROL DEVICES, SHALL BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS AFTER A RAINFALL EVENT TOTALING $\frac{1}{2}$" OF RAIN OR MORE.
2. INSPECTIONS AND WRITTEN REPORTS SHALL BE PREPARED BY A QUALIFIED PERSON WHO IS FAMILIAR WITH THIS SWPPP, THE PROJECT, AND THE EPA NPDES STORM WATER GENERAL PERMIT. PAPER COPIES OF INSPECTIONS SHALL BE KEPT ON–SITE FOR INSPECTION BY LOCAL AND STATE OFFICIALS.
3. INSPECTION REPORTS SHALL INCLUDE:
   - 3.1. TYPE OF INSPECTION
   - 3.2. FIELD OBSERVATIONS
   - 3.3. ACTIONS TAKEN AS A RESULT OF INSPECTION RESULTS
   - 3.4. OVERALL ASSESSMENT OF SWPPP COMPLIANCE
   - 3.5. THE CONTRACTOR SHALL KEEP A COPY OF THE REPORTS ONSITE AND PERMANENTLY FOR A PERIOD OF 2 YEARS FOLLOWING CONSTRUCTION.
4. CONSTRUCTION ENTRANCE
   - 4.1. VERIFY ADEQUATE STONE COVERAGE
   - 4.2. VERIFY CONSTRUCTION ACTIVITIES ARE NOT TRACKING SITE SOIL OUT ONTO ADJACENT ROADWAYS
5. MATERIAL STORAGE
   - 5.1. VERIFY MATERIAL STORAGE AREAS ARE PROTECTED FROM RAINFALL
   - 5.2. VERIFY FLUID IS NOT LEAKING FROM THE AREA
   - 5.3. OFFSITE STORAGE AREAS ARE TO BE CONSIDERED PART OF THE PROJECT
6. SOIL STABILIZATION
   - 6.1. VERIFY THAT SEEDED AREAS EXHIBIT HEALTHY PLANT ESTABLISHMENT
   - 6.2. THE SITE HAS ACHIEVED FINAL STABILIZATION ONCE ALL AREAS ARE EITHER COVERED BY PAVEMENT OR HAVE REACHED 70% OF THE VEGETATION DENSITY. THIS VEGETATION DENSITY MUST BE MAINTAINED IN ORDER TO REMAIN CATEGORIZED AS FINAL STABILIZATION. MEASURES MUST BE TAKEN TO REACH THIS LEVEL IF STANDARD PROCEDURES DO NOT YIELD ADEQUATE PLANT ESTABLISHMENT.
7. EROSION AND SEDIMENT CONTROL INSPECTIONS – THE FOLLOWING IS A LIST OF INSPECTION / MAINTENANCE PRACTICES THAT SHOULD BE CONDUCTED FOR EACH CONTROL MEASURE:
8. GEOTEXTILES/EROSION CONTROL MATS – MISSING / LOOSE MATS SHALL BE REPLACED AND REINSTALLED PER MANUFACTURER'S RECOMMENDATION.
   - 8.1. INLET PROTECTION – INLET PROTECTION MEASURES SHALL BE ROUTINELY INSPECTED AND ACCUMULATED SEDIMENT SHALL BE REMOVED TO ENSURE PROPER OPERATION.
   - 8.2. DIVERSION SWALES – REMOVE ACCUMULATED DEBRIS THAT REDUCES THE HYDRAULIC CAPACITY OF THE SWALE.
   - 8.3. MULCHING – APPLY ADDITIONAL MULCH TO SPARSE OR BARE SPOTS.
   - 8.4. SEDIMENT TRAP – REMOVE ACCUMULATED SEDIMENT TO ENSURE PROPER OPERATION.
   - 8.5. SEDIMENT BASIN – REMOVE ACCUMULATED SEDIMENT TO ENSURE PROPER OPERATION.
   - 8.6. SILT FENCE – REMOVE ACCUMULATED SEDIMENT THAT POSES A THREAT TO THE STABILITY OF THE FENCE ($\frac{1}{3}$ HEIGHT OF FENCE).
   - 8.7. CONSTRUCTION ENTRANCE – REDRESS ENTRANCE WITH ADDITIONAL STONE PERIODICALLY TO MAINTAIN FUNCTIONALITY.
   - 8.8. VEGETATION – ENSURE NEWLY SEEDED AREAS ARE PROTECTED FROM EROSION.
   - 8.9. GOOD HOUSEKEEPING – VERIFY THAT LITTER, MISCELLANEOUS CONSTRUCTION DEBRIS, CONSTRUCTION RELATED CHEMICALS, AND OTHER POTENTIALLY HARMFUL MATERIALS ARE PROPERLY STORED, COVERED, AND/OR DO NOT HAVE THE POTENTIAL TO ENTER THE STORM SEWER SYSTEM.
9. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, DOWNSTREAM SEDIMENT MUST BE REMOVED IMMEDIATELY TO REDUCE THE RISK OF ADVERSE IMPACTS.
10. BASED ON THE ACTUAL CONDITIONS OBSERVED ONSITE, ANY NECESSARY MODIFICATIONS TO THE PROJECT SWPPP SHALL BE IMPLEMENTED WITHIN 7 CALENDAR DAYS OF THE INSPECTION. ALL MODIFICATIONS TO THE SWPPP SHALL BE RECORDED BY THE CONTRACTOR AND SHALL BE PROVIDED UPON REQUEST.
11. IT IS THE OPERATOR'S SOLE RESPONSIBILITY TO ENSURE THE EROSION AND SEDIMENT CONTROL MEASURES ONSITE ARE SUFFICIENT TO MEET THE REQUIREMENTS OF THE EPA NPDES STORM WATER DISCHARGE PERMIT. IF ADDITIONAL MEASURES ARE REQUIRED, THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING SUCH MEASURES.

NOTICE OF TERMINATION (NOT)

12. COMPLIANCE WITH THE GENERAL CONSTRUCTION PERMIT IS THE RESPONSIBILITY OF THE OPERATOR / PERMITTEE WHO SUBMITTED THE NOI UNTIL A NOTICE OF TERMINATION (NOT) HAS BEEN PROCESSED. THE PERMITTEE'S AUTHORIZATION TO DISCHARGE UNDER THE GENERAL CONSTRUCTION PERMIT TERMINATES AT MIDNIGHT OF THE DAY THE NOT IS SIGNED.
13. ALL PERMITTEES MUST SUBMIT AN NOT WITHIN 30 DAYS AFTER ONE OR MORE OF THE FOLLOWING CONDITIONS HAVE BEEN MET:
    - 13.1. FINAL STABILIZATION HAS BEEN ACHIEVED ONSITE
    - 13.2. ANOTHER OPERATOR / PERMITTEE HAS ASSUMED CONTROL OVER THE AREAS OF THE SITE THAT HAVE YET TO ACHIEVE FINAL STABILIZATION
    - 13.3. IN RESIDENTIAL CONSTRUCTION OPERATIONS, TEMPORARY STABILIZATION HAS BEEN COMPLETED AND THE RESIDENCE HAS BEEN TRANSFERRED TO THE HOMEOWNER.

B15 EROSION & SEDIMENT CONTROL SPECIFICATIONS FOR INDIVIDUAL BUILDING LOTS

SINCE THE ENTIRE PROJECT SITE IS UNDER THE SAME OWNER, THERE ARE NOT ANY INDIVIDUAL BUILDING LOTS.

SWPPP - POST CONSTRUCTION - SECTION C

C1 DESCRIPTION OF POLLUTANTS AND THEIR SOURCES ASSOCIATED WITH THE PROPOSED LAND USE

POTENTIAL POLLUTANTS GENERATED DUE TO THIS PROJECT INCLUDE:

1. LITTER FROM USERS.
2. AUTOMOBILE FLUIDS FROM VEHICLES.

C2 SEQUENCE DESCRIBING STORMWATER QUALITY MEASURE IMPLEMENTATION

THE PROPOSED WET DETENTION POND AND HYDRODYNAMIC SEPARATORS WILL BE INSTALLED INITIALLY IN CONJUNCTION WITH STORM INFRASTRUCTURE, FOLLOWED BY INFILTRATION TRENCHES LOCATED UPSTREAM OF POND, WHICH WILL BE INSTALLED IN ACCORDANCE WITH LATER UTILITY INSTALLATION AND GRADING.

C3 DESCRIPTION OF PROPOSED POST–CONSTRUCTION STORMWATER QUALITY MEASURES

PROPOSED WET DETENTION POND:

– WET DETENTION POND DETAIN STORM WATER RUNOFF LONG ENOUGH FOR CONTAMINATED SEDIMENTS TO SETTLE AND REMAIN IN THE POND AND ALLOW THE WATER IN THE POND TO BE DISPLACED BY THE NEXT RAIN EVENT. THE SEDIMENTATION PROCESS REMOVES PARTICULATE, ORGANIC MATTER, AND METALS FROM THE WATER WHILE NUTRIENTS ARE REMOVED THROUGH BIOLOGICAL UPTAKE. BY CAPTURING AND RETAINING RUNOFF, WET PONDS CONTROL BOTH STORM WATER QUALITY AND QUANTITY.

GOOD HOUSEKEEPING MEASURES:

– GOOD HOUSEKEEPING MEASURES SUCH AS REGULAR STREET SWEEPING AND, INSTALLATION OF TRASH RECEPTACLES, AND REDUCTION IN FERTILIZER OVERSPRAY CAN BE INCORPORATED BY THE OWNER AND/OR OCCUPANT.

C4 LOCATION, DIMENSIONS, SPECIFICATIONS, AND CONSTRUCTION DETAILS OF EACH STORMWATER QUALITY MEASURE

THE FOLLOWING ITEMS ARE STORMWATER QUALITY MEASURES THAT WILL BE INSTALLED DURING CONSTRUCTION. THESE ITEMS WILL REMAIN IN PLACE AFTER CONSTRUCTION IS COMPLETED AND ARE CONSIDERED TO SERVE ON INCIDENTAL FUNCTION AS POST–CONSTRUCTION STORMWATER QUALITY BMPS.

WET DETENTION POND:

– THE PROPOSED WET DETENTION POND WILL BE VARYING LENGTHS AND SIZES. THE POND LOCATION CAN BE FOUND ON SHEETS C4.1–C4.6.

DRY DETENTION POND (EXTENDED DRY DETENTION BASIN):

– THE PROPOSED DRY DETENTION POND WILL BE VARYING LENGTHS AND SIZES. THE POND LOCATION CAN BE FOUND ON THE GRADING AND DRAINAGE PLAN.

C5 DESCRIPTION OF MAINTENANCE GUIDELINES FOR POST–CONSTRUCTION STORMWATER QUALITY MEASURES

MAINTENANCE REQUIREMENTS FOR THE STORMWATER QUALITY MEASURES WHICH REMAIN IN PLACE AFTER CONSTRUCTION IS COMPLETE, ARE DESCRIBED BELOW. REFER TO THE BMP OPERATIONS AND MAINTENANCE MANUAL FOR MORE DETAILED MAINTENANCE REQUIREMENTS.

DETENTION PONDS (WET & DRY)

– INSPECT PERIODICALLY AS NEEDED OR AT LEAST EVERY SIX MONTHS. SEDIMENT SHALL BE DISPOSED OF OFFSITE IN ACCORDANCE WITH ALL APPLICABLE LAWS. AREAS THAT SHOW SIGN OF EROSION SHALL BE STABILIZED WITH EROSION CONTROL BLANKET AND/OR SEED AS NECESSARY.

No.	REVISIONS	DATE	BY

Kimley»Horn

©2021 KIMLEY–HORN AND ASSOCIATES, INC.
250 EAST 96TH STREET, SUITE 580,
INDIANAPOLIS, IN 46240
PHONE: 317–218–9560
WWW.KIMLEY–HORN.COM

SCALE: AS NOTED
DESIGNED BY: AMM
DRAWN BY: CPP
CHECKED BY: WAB

NOT APPROVED FOR CONSTRUCTION
9/9/2021

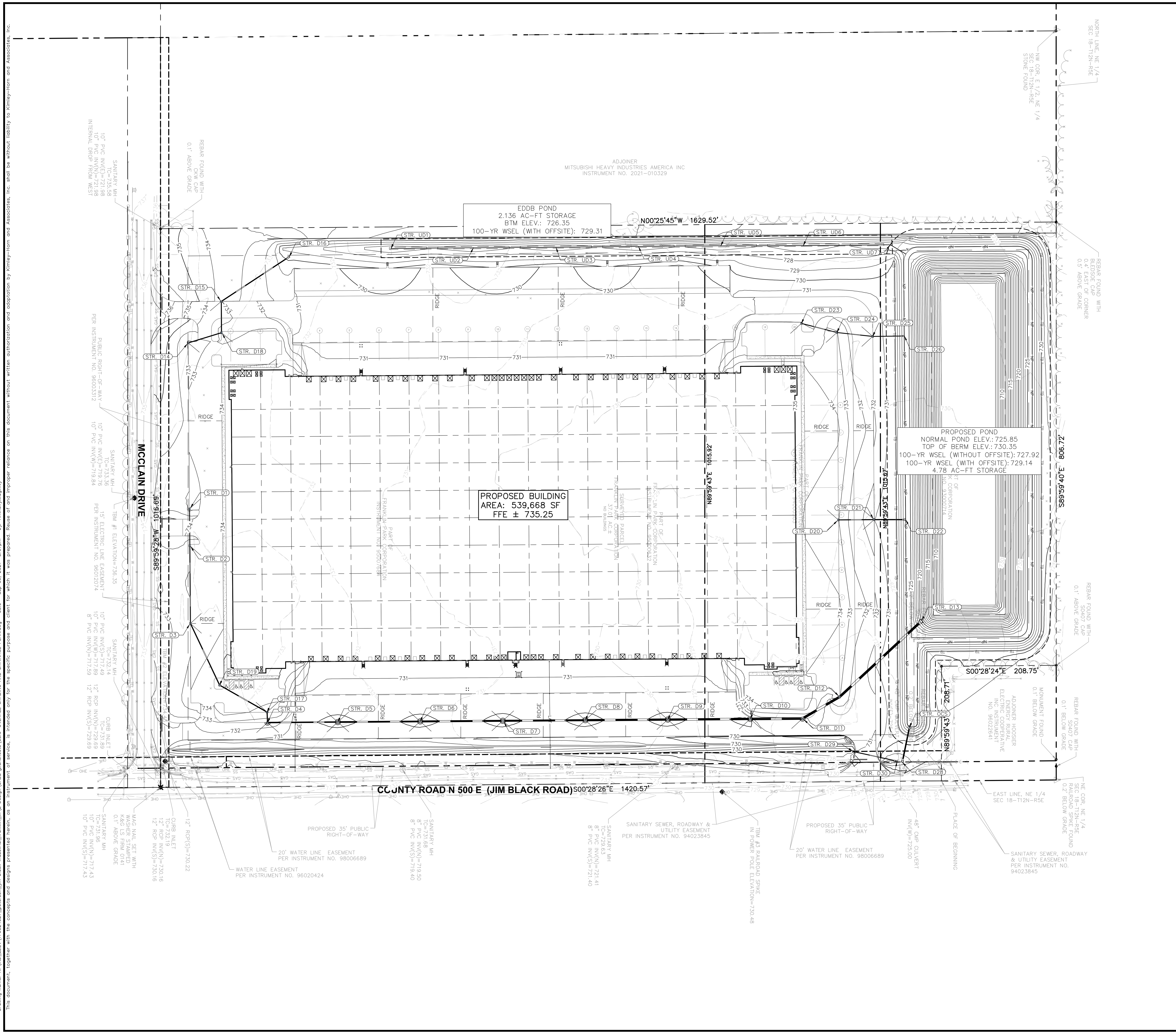
PETERSON

SWPPP

FRANKLIN INDUSTRIAL
JIM BLACK RD. & MCCLAIN
DR., FRANKLIN, IN

ORIGINAL ISSUE:
9/9/2021
KHA PROJECT NO.
170024027
SHEET NUMBER

C4.8



Indiana Utilities Protection Service
Call 811 before you dig

NORTH

GRAPHIC SCALE IN FEET
0 40' 80' 160'

GRADING LEGEND

- XXX.XX — FINISHED GRADE SPOT ELEVATION
- TC XXX.XX / BC XXX.XX — TOP OF CURB / BOTTOM OF CURB SPOT ELEVATION
- FL XXX.XX — FLOW LINE SPOT ELEVATION
- ME XXX.XX — MATCH EXISTING SPOT ELEVATION
- FF XXX.XX — FINISHED FLOOR SPOT ELEVATION
- FG XXX.XX — FINISHED GRADE NEAR BUILDING SPOT ELEVATION
- TW XXX.XX — TOP OF WALL SPOT ELEVATION
- BW XXX.XX — BOTTOM OF WALL SPOT ELEVATION
- R XXX.XX — RIM ELEVATION
- STR XX R XXX.XX — STRUCTURE ID & RIM ELEVATION
- STR XX INV XXX.XX — STRUCTURE ID & INVERT ELEVATION
- 620 — PROPOSED CONTOUR
- RIDGE — RIDGE LINE
- X.XX% — SLOPE AND FLOW DIRECTION
- 100-YEAR OVERLAND OVERFLOW ROUTE
- DETENTION BASIN 100-YEAR EMERGENCY
- PROPOSED SWALE
- PROPOSED STORM SEWER
- PROPOSED STORM STRUCTURES
- PROPOSED SANITARY MANHOLE
- PROPOSED STORM/SANITARY CLEANOUT
- PROPOSED WATER STRUCTURES
- PROPOSED LIGHT POLES
- PROPOSED TRANSFORMER PAD

EXISTING LEGEND

- STORM INLET
- CURB INLET
- SANITARY SEWER MANHOLE (SSMH)
- STORM DRAIN MANHOLE (SDMH)
- TELEPHONE MANHOLE (TMH)
- RIGHT OF WAY MONUMENT
- WATER VALVE
- POWER POLE
- POWER METER
- TELEPHONE BOX/PEDESTAL
- ELECTRICAL MANHOLE
- PS — PARKING SPACE
- H/C PARKING SPACE
- TRAFFIC SIGNAL POLE
- LIGHT POLE
- TREE
- MAILBOX
- MONITOR WELL
- FIB — UNDERGROUND FIBER OPTIC
- CBL — UNDERGROUND CABLE
- [E] — UNDERGROUND ELECTRIC
- DITCH FLOWLINE
- SD — STORM DRAIN
- SS — SEWER LINE
- GAS — GAS LINE
- W — WATER LINE

BENCHMARKS

TEMPORARY SITE BENCHMARKS:
(LOCATIONS SHOWN ON SURVEY)

SBM #1 TOP NORTH–NORTHEAST FLANGE BOLT, ON FIRE HYDRAINT ALONG SOUTH SIDE OF MCCLAIN DRIVE, LOCATED 525' MORE OR LESS WEST OF THE INTERSECTION OF MCCLAIN DRIVE AND C.R. 500 EAST.
ELEVATION=736.35 (NAVD 1988)

SBM #2 TOP NORTH–NORTHWEST FLANGE BOLT ON FIRE HYDRAINT LOCATED IN NORTHWEST QUADRANT OF INTERSECTION OF MCCLAIN DRIVE AND C.R. 500 EAST.
ELEVATION=734.43 (NAVD 1998)

SBM #3 RAILROAD SPIKE IN POWER POLE ALONG EAST SIDE OF C.R. 500 EAST, LOCATED 1,055' MORE OR LESS NORTH OF THE INTERSECTION OF MCCLAIN DRIVE AND C.R. 500 EAST.
ELEVATION=730.48 (NAVD 1988)

CLAY POND LINER ARE REQUIRED IF SIGNIFICANT SAND AND GRAVEL STRATIFICATIONS ARE ENCOUNTERED DURING EXCAVATION OF THE POND.

GENERAL PLAN NOTES

REFER TO GENERAL NOTES SHEET FOR MORE INFORMATION INCLUDING THE FOLLOWING: (EXISTING LEGEND, BENCHMARK INFORMATION, AND SPECIFIC GENERAL PLAN NOTES.)

No.	REVISIONS	DATE	BY

Kimley»Horn

250 EAST 96TH STREET, SUITE 580,
INDIANAPOLIS, IN 46240
PHONE: 317-218-9560
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: AMM
DRAWN BY: CPP
CHECKED BY: WAB

WILLIAM A. BU... REGISTERED PROFESSIONAL ENGINEER, STATE OF INDIANA
NOT APPROVED FOR CONSTRUCTION
9/9/2021

PETERSON

OVERALL GRADING AND DRAINAGE PLAN

FRANKLIN INDUSTRIAL
JIM BLACK RD. & MCCLAIN DR., FRANKLIN, IN

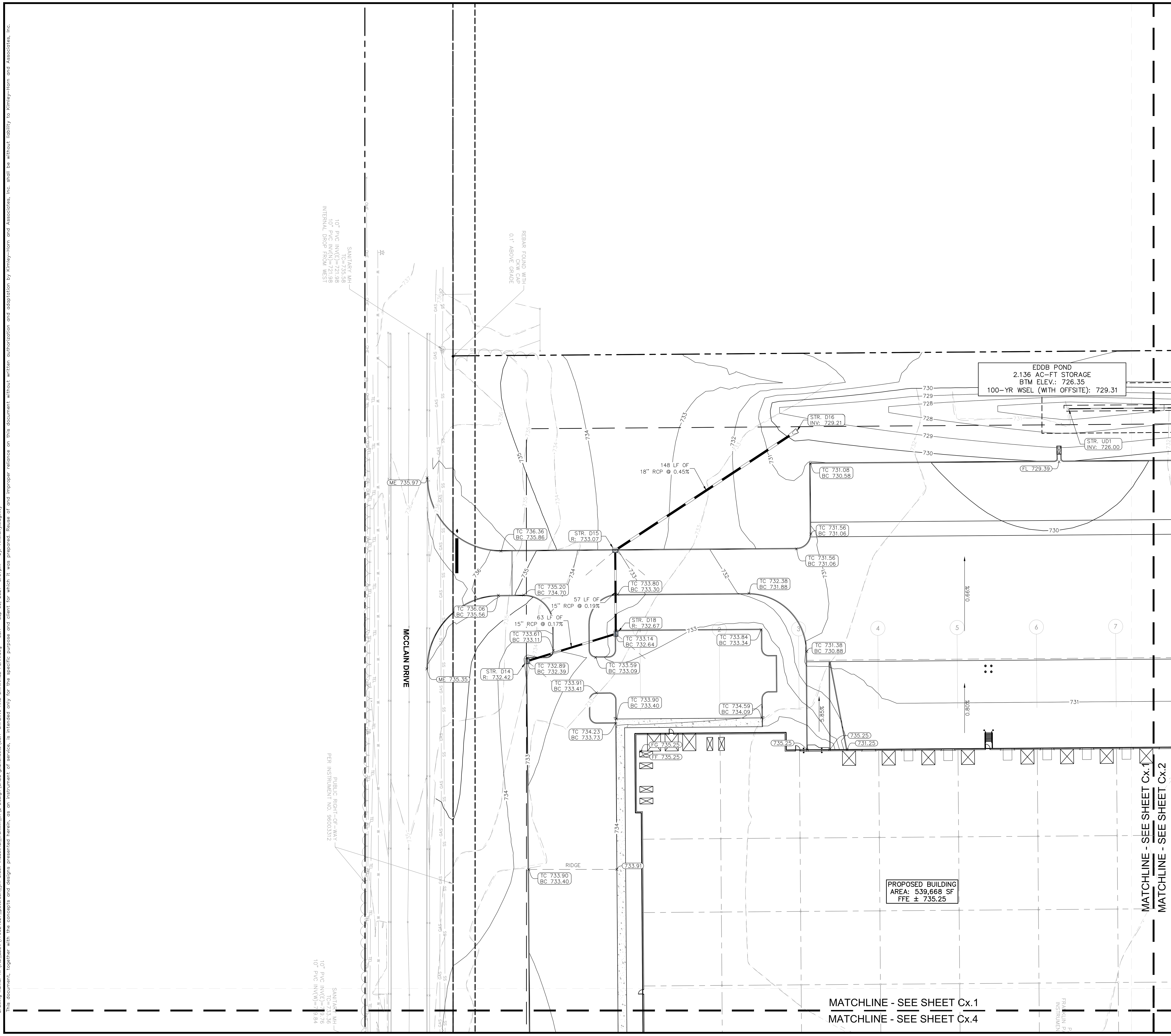
ORIGINAL ISSUE: 9/9/2021
KHA PROJECT NO. 170024027
SHEET NUMBER
C5.0

Indiana Utilities Protection Service

Call 811 before you dig

NORTH

GRAPHIC SCALE IN FEET
0 15' 30' 60'



GRADING LEGEND

XXX.XX	FINISHED GRADE SPOT ELEVATION
TC XXX.XX / BC XXX.XX	TOP OF CURB / BOTTOM OF CURB SPOT ELEVATION
FL XXX.XX	FLOW LINE SPOT ELEVATION
ME XXX.XX	MATCH EXISTING SPOT ELEVATION
FF XXX.XX	FINISHED FLOOR SPOT ELEVATION
FG XXX.XX	FINISHED GRADE NEAR BUILDING SPOT ELEVATION
TW XXX.XX	TOP OF WALL SPOT ELEVATION
BW XXX.XX	BOTTOM OF WALL SPOT ELEVATION
R XXX.XX	RIM ELEVATION
STR XX R XXX.XX	STRUCTURE ID & RIM ELEVATION
STR XX INV XXX.XX	STRUCTURE ID & INVERT ELEVATION
620	PROPOSED CONTOUR
RIDGE	RIDGE LINE
X.XX%	SLOPE AND FLOW DIRECTION
	100-YEAR OVERLAND OVERFLOW ROUTE
	DETENTION BASIN 100-YEAR EMERGENCY
	PROPOSED SWALE
	PROPOSED STORM SEWER
	PROPOSED STORM STRUCTURES
	PROPOSED SANITARY MANHOLE
	PROPOSED STORM/SANITARY CLEANOUT
	PROPOSED WATER STRUCTURES
	PROPOSED LIGHT POLES
	PROPOSED TRANSFORMER PAD

GENERAL PLAN NOTES

REFER TO GENERAL NOTES SHEET FOR MORE INFORMATION INCLUDING THE FOLLOWING: (EXISTING LEGEND, BENCHMARK INFORMATION, AND SPECIFIC GENERAL PLAN NOTES.)

No.	REVISIONS	DATE	BY

Kimley-Horn
©2021 KIMLEY-HORN AND ASSOCIATES, INC.
250 EAST 96TH STREET, SUITE 580, INDIANAPOLIS, IN 46240
PHONE: 317-218-9560
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: AMM
DRAWN BY: CPP
CHECKED BY: WAB

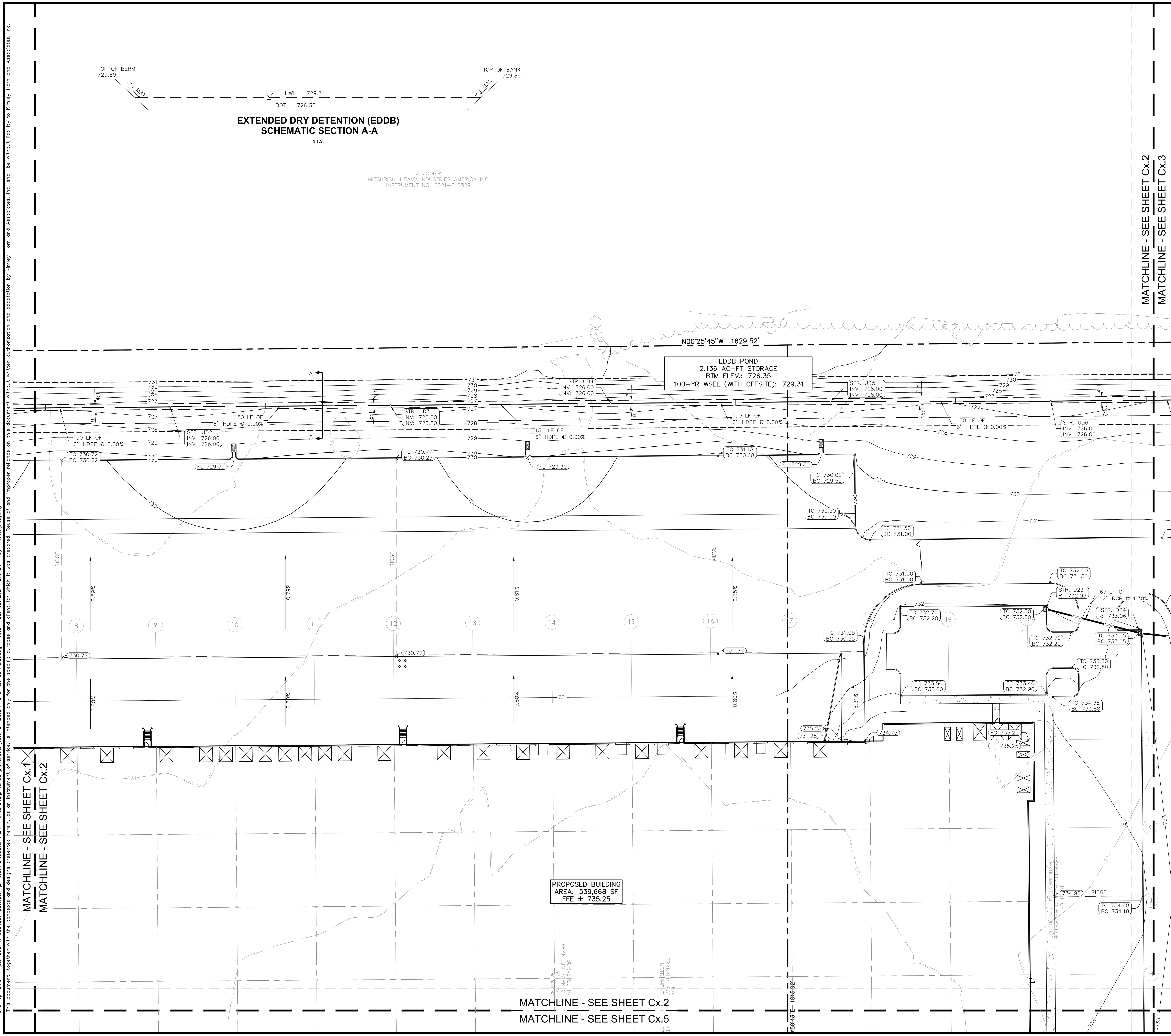
WILLIAM A. BU... REGISTERED ... PROFESSIONAL ENGINEER — NOT APPROVED FOR CONSTRUCTION
9/9/2021

PETERSON

GRADING AND DRAINAGE PLAN

FRANKLIN INDUSTRIAL
JIM BLACK RD. & MCCLAIN DR., FRANKLIN, IN

ORIGINAL ISSUE: 9/9/2021
KHA PROJECT NO. 170024027
SHEET NUMBER
C5.1



Indiana Utilities Protection Service

Call 811 before you dig

NORTH

GRAPHIC SCALE IN FEET
0 15' 30' 60'

GRADING LEGEND

Symbol	Description
XXX.XX	FINISHED GRADE SPOT ELEVATION
TC XXX.XX / BC XXX.XX	TOP OF CURB / BOTTOM OF CURB SPOT ELEVATION
FL XXX.XX	FLOW LINE SPOT ELEVATION
ME XXX.XX	MATCH EXISTING SPOT ELEVATION
FF XXX.XX	FINISHED FLOOR SPOT ELEVATION
FG XXX.XX	FINISHED GRADE NEAR BUILDING SPOT ELEVATION
TW XXX.XX	TOP OF WALL SPOT ELEVATION
BW XXX.XX	BOTTOM OF WALL SPOT ELEVATION
R XXX.XX	RIM ELEVATION
STR XX / R XXX.XX	STRUCTURE ID & RIM ELEVATION
STR XX / INV XXX.XX	STRUCTURE ID & INVERT ELEVATION
620	PROPOSED CONTOUR
RIDGE	RIDGE LINE
X.XX%	SLOPE AND FLOW DIRECTION
	100-YEAR OVERLAND OVERFLOW ROUTE
	DETENTION BASIN 100-YEAR EMERGENCY
	PROPOSED SWALE
	PROPOSED STORM SEWER
	PROPOSED STORM STRUCTURES
	PROPOSED SANITARY MANHOLE
	PROPOSED STORM/SANITARY CLEANOUT
	PROPOSED WATER STRUCTURES
	PROPOSED LIGHT POLES
	PROPOSED TRANSFORMER PAD

GENERAL PLAN NOTES

REFER TO GENERAL NOTES SHEET FOR MORE INFORMATION INCLUDING THE FOLLOWING: (EXISTING LEGEND, BENCHMARK INFORMATION, AND SPECIFIC GENERAL PLAN NOTES.)

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2021 KIMLEY-HORN AND ASSOCIATES, INC.
250 EAST 96TH STREET, SUITE 580,
INDIANAPOLIS, IN 46240
PHONE: 317-218-9560
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: AWM
DRAWN BY: CPP
CHECKED BY: WAB

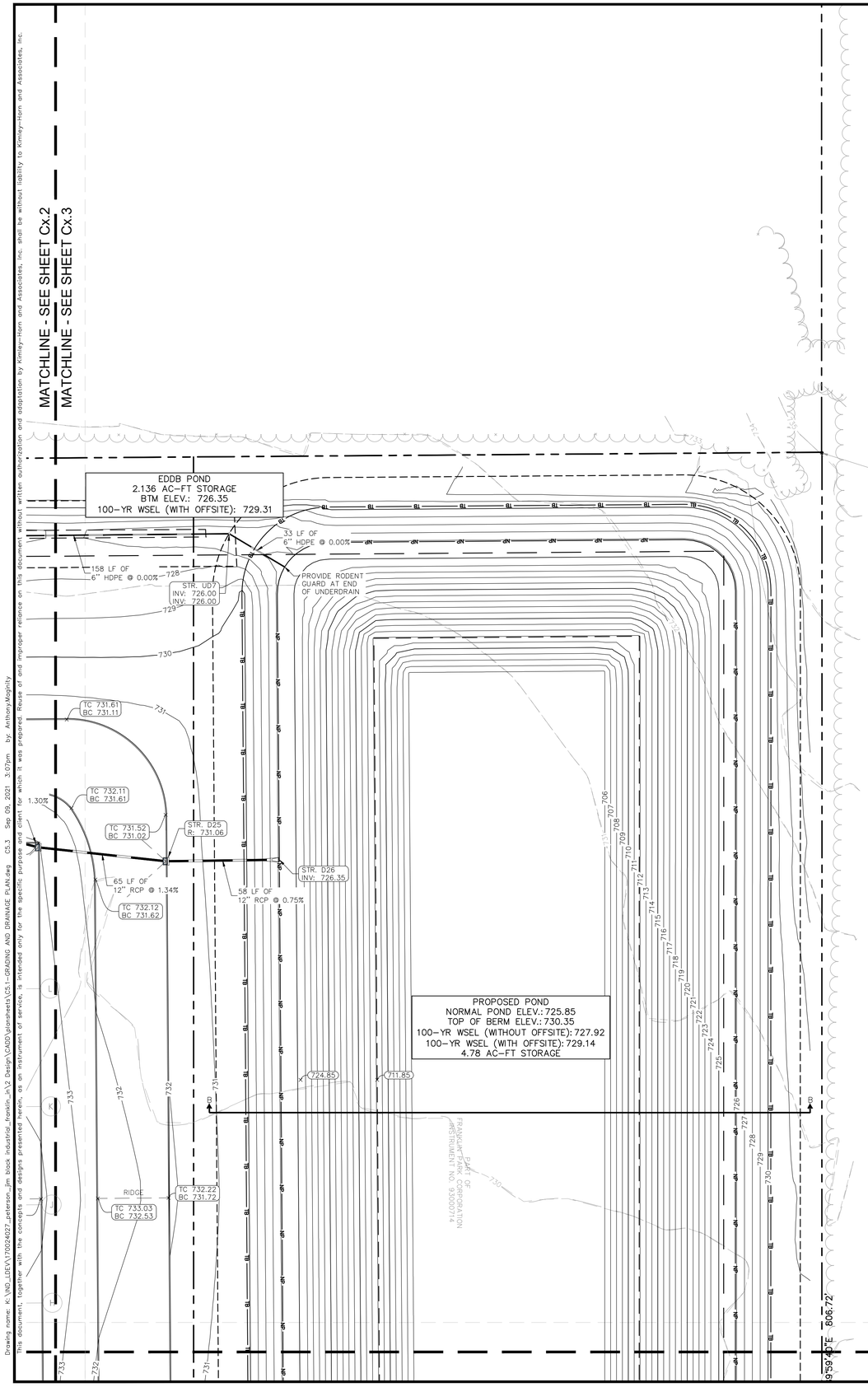
WILLIAM A. BU... REGISTERED PROFESSIONAL ENGINEER, INDIANA — NOT APPROVED FOR CONSTRUCTION — 9/9/2021

PETERSON

GRADING AND DRAINAGE PLAN

FRANKLIN INDUSTRIAL
JIM BLACK RD. & MCCLAIN DR., FRANKLIN, IN

ORIGINAL ISSUE: 9/9/2021
KHA PROJECT NO. 170024027
SHEET NUMBER
C5.2



Indiana Utilities Protection Service

Call 811 before you dig

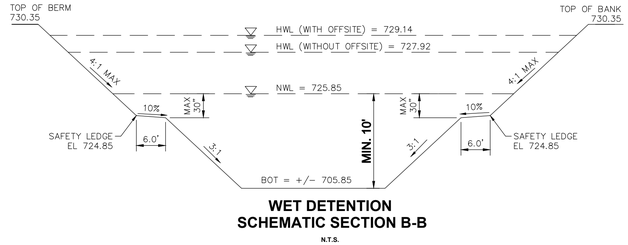
NORTH

GRAPHIC SCALE IN FEET
0 15' 30' 60'

GRADING LEGEND

XXX.XX	FINISHED GRADE SPOT ELEVATION
TC XXX.XX BC XXX.XX	TOP OF CURB / BOTTOM OF CURB SPOT ELEVATION
FL XXX.XX	FLOW LINE SPOT ELEVATION
ME XXX.XX	MATCH EXISTING SPOT ELEVATION
FF XXX.XX	FINISHED FLOOR SPOT ELEVATION
FG XXX.XX	FINISHED GRADE NEAR BUILDING SPOT ELEVATION
TW XXX.XX	TOP OF WALL SPOT ELEVATION
BW XXX.XX	BOTTOM OF WALL SPOT ELEVATION
R XXX.XX	RIM ELEVATION
STR XX R XXX.XX	STRUCTURE ID & RIM ELEVATION
STR XX INV XXX.XX	STRUCTURE ID & INVERT ELEVATION
620	PROPOSED CONTOUR
RIDGE	RIDGE LINE
X.XX%	SLOPE AND FLOW DIRECTION
	100-YEAR OVERLAND OVERFLOW ROUTE
	DETENTION BASIN 100-YEAR EMERGENCY
	PROPOSED SWALE
	PROPOSED STORM SEWER
	PROPOSED STORM STRUCTURES
	PROPOSED SANITARY MANHOLE
	PROPOSED STORM/SANITARY CLEANOUT
	PROPOSED WATER STRUCTURES
	PROPOSED LIGHT POLES
	PROPOSED TRANSFORMER PAD

CLAY POND LINER ARE REQUIRED IF SIGNIFICANT SAND AND GRAVEL STRATIFICATIONS ARE ENCOUNTERED DURING EXCAVATION OF THE POND.



WET DETENTION
SCHEMATIC SECTION B-B
N.T.S.

GENERAL PLAN NOTES

REFER TO GENERAL NOTES SHEET FOR MORE INFORMATION INCLUDING THE FOLLOWING: (EXISTING LEGEND, BENCHMARK INFORMATION, AND SPECIFIC GENERAL PLAN NOTES.)

NO.	REVISIONS	DATE	BY

Kimley»Horn

250 EAST 96TH STREET, SUITE 580
INDIANAPOLIS, IN 46240
PHONE: 317-218-0500
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED | DESIGNED BY: AMM | DRAWN BY: CPP | CHECKED BY: WAB

WILLIAM A. BLACK
REGISTERED
PROFESSIONAL ENGINEER
STATE OF INDIANA

NOT APPROVED FOR CONSTRUCTION

9/9/2021

PETERSON

GRADING AND DRAINAGE PLAN

FRANKLIN INDUSTRIAL
JIM BLACK RD. & MCCLAIN DR., FRANKLIN, IN

ORIGINAL ISSUE: 9/9/2021

KHA PROJECT NO. 170024027

SHEET NUMBER

C5.3