

ENGINEERING PLANS SHOPPING CENTER RENOVATION

4661 S. US HIGHWAY 41 TERRE HAUTE, INDIANA 47802

UTILIT	UTILITY AND GOVERNING AGENCY CONTACTS				
SERVICE / JURISDICTION	COMPANY / DEPT.	ADDRESS	PHONE NUMBER	CONTACT	
SANITARY SEWER	CITY OF TERRE HAUTE	17 HARDING AVENUE TERRE HAUTE, IN 47807	(812) 244-8903	CHUCK ENNIS, P.E.	
ENGINEERING	CITY OF TERRE HAUTE	17 HARDING AVENUE TERRE HAUTE, IN 47807	(812) 244-4903	CHUCK ENNIS, P.E.	
WATER	INDIANA AMERICAN WATER	555 E. COUNTY LINE ROAD #201 GREENWOOD, INDIANA 46143	(317) 855-2426	TRACY WHITE	
NATURAL GAS	CENTER POINT ENERGY SOUTH	475 S. 1st STREET, TERRE HAUTE, IN 47807	(800) 227-1376		
ELECTRICITY	DUKE ENERGY		(812) 231-6711	JESSE JOHNSON	
TELEPHONE / COMMUNICATIONS	FRONTIER COMMUNICATIONS		(812) 235-3520		
STREETS	CITY OF TERRE HAUTE	17 HARDING AVENUE TERRE HAUTE, IN 47807	(812) 244-2311	ERNIE MEEKS	

PROJECT TEAM					
ROLE	COMPANY	ADDRESS	PHONE NUMBER	CONTACT	
DEVELOPER/OWNER	BLACKSTONE GROUP, LLC	ONE LAWRENCE SQUARE SPRINGFIELD, IL 62704	217-544-4002	MIMI HURWITZ	
CIVIL ENGINEER	KIMLEY-HORN & ASSOCIATES, INC.	250 E. 96TH ST., STE 580, INDIANAPOLIS, IN 46240	(317) 218-9560	LIAM SAWYER, P.E.	
LANDSCAPE ARCHITECT	KIMLEY-HORN & ASSOCIATES, INC.	250 E. 96TH ST., STE 580, INDIANAPOLIS, IN 46240	(317) 218-9560		
LAND SURVEYOR	FOREFRONT SURVEYING	17241 FOUNDATION PARKWAY WESTFIELD, IN 46074	(317) 785-0850	JOE TRTAN	

LEGAL DESCRIPTION

A PART OF THE SOUTHEAST QUARTER OF SECTION 9, TOWNSHIP 11 NORTH, RANGE 9 WEST OF THE 2ND HONEY CREEK TOWNSHIP, VIGO COUNTY, INDIANA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT AN IRON PIN AT THE SOUTHWEST CORNER OF SAID SOUTHEAST QUARTER OF SECTION 9, THENCE NORTH ON THE WEST LINE OF SAID SOUTHEAST QUARTER ON A BEARING (ASSUMED) OF NORTH OO DEGREES 52 MINUTES OO SECONDS WEST A DISTANCE OF 1043.50 FEET TO A POINT; THENCE NORTH 89 DEGREES 08 MINUTES 00 SECONDS EAST A DISTANCE (30.00 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION, BEING ALSO THE INTERSECTION OF THE EAST RIGHT OF WAY LINE OF SOUTH FIRST STREET, OR KIDDER ROAD, AND THE NORTH RIGHT OF WAY OF A NEW ROAD UNDER CONSTRUCTION; THENCE NORTH OO DEGREES 52 MINUTES OO SECONDS WEST ALONG THE EAST RIGHT OF WAY LINE OF SAID SOUTH FIRST STREET, OR KIDDER ROAD, BEING PARALLEL TO AND 30.0 FEET EAST OF THE WEST LINE OF SAID SOUTHEAST QUARTER OF SECTION 9, A DISTANCE OF 1051.62 FEET TO AN IRON PIPE (FOUND); THENCE NORTH 89 DEGREES 09 MINUTES 00 SECONDS EAST A DISTANCE OF 654.61 FEET TO AN IRON PIPE (FOUND); THENCE NORTH 51 DEGREES 08 MINUTES 15.7 SECONDS EAST DISTANCE OF 68.88 FEET TO AN IRON PIPE AT A POINT ON A CURVE ON THE WEST RIGHT OF WAY LINE OF U.S. HIGHWAY 4 THENCE ALONG THE WEST RIGHT OF WAY LINE OF U.S. HIGHWAY 41 ALONG A CURVE TO THE LEFT AN ARC DISTANCE OF 37.86 FEET TO A POINT AT THE END OF THE CURVE (CURVE RADIUS OF 3906.00 FEET, CHORD BEARING SOUTH 39 DEGREES 15 MINUTES 50.4 SECONDS EAST, CHORD DISTANCE 37.86 FEET); THENCE CONTINUING ALONG THE WEST RIGHT OF WAY LINE OF U.S. HIGHWAY 41 ON A BEARING OF SOUTH 39 DEGREES 32 MINUTES 30 SECONDS EAST (SAME BEARING AS SHOWN ON ISHC ROAD PLANS F-PROJECT 52(7) DATED 1948, REVISED 1950) A DISTANCE OF 607.60 FEET TO A POINT; THENCE SOUTH 50 DEGREES 27 MINUTES 30 SECONDS WEST A DISTANCE OF 222.00 FEET; THENCE SOUTH 39 DEGREES 32 MINUTES 30 SECONDS EAST A DISTANCE OF 109.44 FEET TO A POINT ON A CURVE ON THE WEST RIGHT OF WAY LINE OF THE NEW ROAD UNDER CONSTRUCTION; THENCE ALONG SAID CURVE TO THE LEFT AN ARC DISTANCE OF 102.54 FEET (CHORD BEARING SOUTH 65 DEGREES 20 MINUTES 09 SECONDS WEST, CHORD DISTANCE OF 101.40 FEET, RADIUS 197.46 FEET); THENCE SOUTH 50 DEGREES 27 MINUTES 30 SECONDS WEST A DISTANCE OF 463.44 FEET TO A POINT, BEING THE BEGINNING OF A CURVE TO

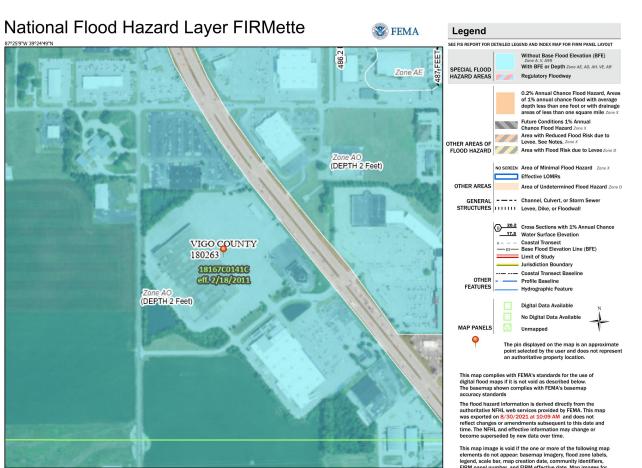
		(NOT TO SCALE)	IAP	
U		US Halt Dr Thompson Ditch		NORTH
S Longyear Pl =	W Yesk of W Mayfair Dr	45 45 45 45 45 45 45 45 45 45 45 45 45 4	5.5th 5t 5.5th 1/2.5t	S 9th St S 10th St
v	W Springhill Dr ຜູ້	E Springhill Dr	PRC	MECT
Lasalle Zug De Soto	Dright Pl	S 1st St.	LOC	E Azalia Dr S
	W Righey Or	Old Royse Rd	S Glenn St. Oak Ct. Oak Ct. Sunt S	E Char E Mary Ln E Wood Ln

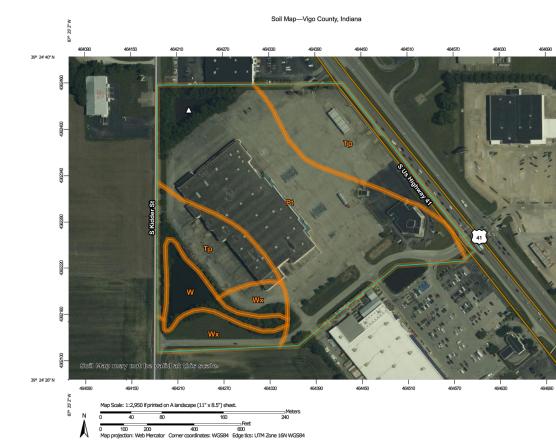
SHOPPING CENTER RENOVATION OF A ±55,857 SF RETAIL STORE FOR BLACKSTONE GROUP, LLC ON ±21.23 AC. PROJECT IS IN SECTION 9 OF T11N, R9E IN THE TERRA HAUTE, VIGO COUNTY, INDIANA

	SHEET LIST TABLE
SHEET NUMBER	SHEET TITLE
C0.0	TITLE SHEET
C1.0	GENERAL SPECIFICATIONS
C1.1	GENERAL NOTES
C2.0	OVERALL EXISTING CONDITIONS & DEMO PLAN
C2.1	ENLARGED DEMOLITION PLAN
C3.0	OVERALL SITE PLAN
C3.1	ENLARGED DEVELOPMENT PLAN
C4.0	EROSION CONTROL PLAN
C5.0	CONSTRUCTION DETAILS



THE RIGHT; THENCE ALONG SAID CURVE TO THE RIGHT AN ARC DISTANCE OF 108.06 FEET (CHORD BEARING SOUTH 69 DEGREES 47 MINUTES 45 SECONDS WEST, CHORD DISTANCE OF 106.02 FEET, RADIUS 160.09 FEET); THENCE SOUTH 89 DEGREES 08 MINUTES 00 SECONDS WEST A DISTANCE OF 452.54 FEET TO THE POINT OF BEGINNING. BEING A PART OF HORNE PROPERTIES, INC. PHASE II SUBDIVISION.







ORIGINAL ISSUE:

HURWITZ I

9/07/2021 KHA PROJECT NO. 170278000 SHEET NUMBER

C0.0

GENERAL NOTES

- 1. THE MUNICIPALITY REQUIREMENTS AND THE LATEST INDIANA DEPARTMENT OF TRANSPORTATION $oxed{1}$ (INDOT) STANDARD SPECIFICATIONS INCLUDING CHANGES SHALL GOVERN ALL CONSTRUCTION ÎTEMS 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
- 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
- CONFLICT MAY BE RESOLVED. OWNER SHALL OBTAIN FASEMENTS AND APPROVAL OF PERMITS NECESSARY TO FACILITATION. CONSTRUCTION OF THE PROPOSED UTILITIES. THE CONTRACTOR, HOWEVER, SHALL FURNISH ALL REQUIRED BONDS AND EVIDENCE OF INSURANCE NECESSARY TO SECURE THESE PERMITS AND

OF THE NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE

UTILITY LINES AND THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. IF

EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT WITH LOCATIONS

- 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
- 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 I 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
- 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
- 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 \mid 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
- 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 \mid 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
- 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.
- 30. CONTRACTOR SHALL POTHOLE EXISTING UTILITIES AT ALL PROPOSED SITE IMPROVEMENT AND UTILITY CROSSING LOCATIONS PRIOR TO COMMENCING CONSTRUCTION AND COORDINATE WITH UTILITY PROVIDERS TO VERIFY MINIMUM COVER AND CLEARANCES ARE MAINTAINED PER THE UTILITY PROVIDER REQUIREMENTS. CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY IF MINIMUM CLEARANCES CANNOT BE ACHIEVED.

EROSION CONTROL NOTES

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. POST CONSTRUCTION STORM WATER POLLUTION CONTROL MEASURES INCLUDE STABILIZATION BY

PERMANENT PAVING, DRAINAGE SYSTEM STRUCTURE, OR LANDSCAPING.

- 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.
- 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
- 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.
- THE BASE COURSE MATERIAL.
- 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 TH GEOTECHNICAL ENGINEER OR SOILS TESTING AGENCY AND THE OWNER. (SEE PAVING
- AND REPLACED WITH SUITABLE MATERIAL OR OTHERWISE CORRECTED AND APPROVED BY THE GEOTECHNICAL ENGINEER OR SOILS TESTING AGENCY.

DEMOLITION NOTES

- 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 T 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.
- 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 | 2.1. 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.
- 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.

THE CONTINUOUS ACCESS SHALL BE MAINTAINED FOR THE TRUCKS AT ALL TIMES DURING

- CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY DEMOLITION PERMITS.
- DEMOLITION OF THE EXISTING FACILITIES. 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
- RFMOVAL AND REPAIR. 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.

ANY OF THE SURROUNDING PAVEMENT, ETC., THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS

- THE CONTRACTOR SHALL USE DUE CARE IN HAULING DEBRIS FROM SITE TO ENSURE THE SAFETY OF THE PUBLIC.
- DAMAGE TO ALL EXISTING CONDITIONS TO REMAIN WILL BE REPLACED AT CONTRACTOR'S EXPENSE. 3.1.). CONTRACTOR SHALL LIMIT ALL DEMOLITION ACTIVITIES TO THOSE AREAS DELINEATED ON THE CONSTRUCTION DRAWINGS UNLESS OTHERWISE DIRECTED BY THE CONSTRUCTION MANAGER.
- CONTRACTOR IS RESPONSIBLE FOR CONTROLLING AIRBORNE DUST AND POLLUTANTS BY USING WATER SPRINKLING OR OTHER SUITABLE MEANS OF CONTROL.
- 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.

DEWATERING SHOULD BE ANTICIPATED AND INCLUDED. DEWATERING SHALL BE DONE IN

ACCORDANCE WITH LOCAL AND REGIONAL REQUIREMENTS.

EARTHWORK NOTES

- . ALL EARTHWORK OPERATIONS TO CONFORM TO GEOTECHNICAL RECOMMENDATIONS IN THE GEOTECHNICAL REPORT.
- .2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE SOIL AND GROUNDWATER CONDITIONS AT THE SITE. 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 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
- 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,
- 5. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION AND PREVENT STORMWATER FROM RUNNING INTO OR STANDING IN EXCAVATED AREAS. THE FAILURE T PROVIDE PROPER DRAINAGE WILL NEGATE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT THEREOF. FINAL GRADES SHALL 4. FLEXIBLE PAVEMENT 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
- 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.
- .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
-). IF LANDSCAPE PLANTINGS ARE WITHIN OR ADJACENT TO AREAS WHERE LIME STABILIZATION OCCURS, CONTRACTOR SHALL FULLY REMOVE SOIL CONTAINING LIME STABILIZATION AND REPLACÉ WITH HIGH QUALITY PLANTING SOIL.
- 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 | 5.1. THE CONTRACTOR SHALL FOLLOW THE QUALITY CONTROL TESTING PROGRAM FOR CONCRETE 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.
- . 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
- 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 B) INCHES IN THICKNESS, AND THE WATER CONTENT SHALL BE ADJUSTED IN ORDER TO ACHIEVE REQUIRED COMPACTION.
- 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
- 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.
- MISCELLANEOUS. THE CONTRACTOR SHALL:
- 5.1. SPREAD AND COMPACT UNIFORMLY TO THE DEGREE SPECIFIED ALL EXCESS TRENCH SPOIL AFTER COMPLETION OF THE UNDERGROUND IMPROVEMENTS.

- 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
- 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 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
- 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
- MAXIMUM DEFLECTION ALLOWED IN ISOLATED AREAS MAY BE ONE (1) INCH IF NO DEFLECTION OCCURS OVER THE MAJORITY OF THE AREA.
- 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
- 2.5. PRIOR TO PLACEMENT OF THE BASE COURSE, THE SUBGRADE SHALL BE APPROVED BY THE TESTING ENGINEER
- CONCRETE WORK
- 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
- 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
- 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.
- 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
- 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 CONCRÈTE SURFACES.
- 3.9. THE COST OF AGGREGATE BASE OR SUBBASE UNDER CONCRETE WORK SHALL BE INCLUDED IN THE COST OF THE RESPECTIVE CONCRETE ITEM.
- THE PAVEMENT MATERIALS FOR BITUMINOUS STREETS, PARKING LOTS, AND DRIVE AISLES SHALL BE AS DETAILED ON THE PLANS. UNLESS OTHERWISE SHOWN ON THE PLANS, TH 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
- 4.2. ALL TRAFFIC SHALL BE KEPT OFF THE COMPLETED AGGREGATE BASE UNTIL THE INTERMEDIATE

- 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
- 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
- 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

- 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)
- 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. POSTS: SIGN POSTS SHALL BE NEW GALVANIZED STEEL PIPE IN ACCORDANCE WITH ASTM A 53
- PAVEMENT MARKINGS: ALL PAVEMENT MARKINGS IN THE ROADWAY LIMITS, SUCH AS STOP LINES, CENTERLINES, CROSSWALKS, AND DIRECTIONAL ARROWS, SHALL BE REFLECTORIZED
- PAVEMENT MARKINGS ON BIKE PATHS, PARKING LOT STALLS, AND SIMILAR "LOW-WEAR" APPLICATIONS, SHALL BE PAINT IN ACCORDANCE WITH INDOT STANDARDS.
- 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.

- 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
- 6. TESTING AND FINAL ACCEPTANCE
- 6.2. ANY UNSUITABLE AREA ENCOUNTERED AS A RESULT OF PROOF ROLLING SHALL BE REMOVED
- **PAVING NOTES**
- GENERAL
- WALKS; AND FINAL CLEAN-UP AND ALL RELATED WORK.

RESPONSIBILITY FOR THE SUBGRADE.

- SUBGRADE HAS BEEN PROPERLY PREPARED AND THAT THE FINISH TOP SUBGRADE ELEVATION
- 2.4. PRIOR TO THE CONSTRUCTION OF THE CURB AND GUTTER AND THE PLACEMENT OF THE BASE
- BROOM-FINISHED PERPENDICULAR TO THE DIRECTION OF TRAVEL. 3.2. CONCRETE CURB AND/OR COMBINATION CURB AND GUTTER SHALL BE OF THE TYPE SHOWN

- 3.5. CONCRETE SIDEWALK SHALL BE IN ACCORDANCE WITH THE ABOVE AND THE PLANS. PROVIDE
- 3.6. CONCRETE DRIVEWAY APRONS SHALL BE IN ACCORDANCE WITH THE ABOVE AND THE PLANS.
- 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
- MINIMUM COMPACTED THICKNESS.
- 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.
- TESTING AND FINAL ACCEPTANCE
- AND PAVEMENT MATERIALS ESTABLISHED BY THE ENGINEER.
- TESTING AND CHECKING REQUIREMENTS CITED ABOVE.

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. THERMOPLASTIC HOT ROLLED INTO PAVEMENT OR PAINT PER INDOT STANDARDS.
- COLOR, WIDTH, STYLE, AND SIZE OF ALL MARKINGS SHALL BE IN ACCORDANCE WITH THE MUTCD AND MUNICIPAL CODE

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

SHEET NUMBER

170278000

T&W bid set 9/13/21

ORIGINAL ISSUE: 9/07/2021 KHA PROJECT NC

0

DEMOLITION NOTES

GENERAL DEMOLITION NOTES

CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF THE EXISTING STRUCTURES, RELATED UTILITIES, PAVING, AND ANY OTHER EXISTING IMPROVEMENTS AS NOTED.

- 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
- 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 B HELD SOLELY RESPONSIBLE FOR ANY DAMAGES TO THE ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASES OF THIS
- 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.
- IF DEMOLITION OR CONSTRUCTION ON SITE WILL INTERFERE WITH THE ADJACENT PROPERTY OWNER'S TRAFFIC FLOW, THE CONTRACTOR SHAL COORDINATE WITH ADJACENT PROPERTY OWNER, TO MINIMIZE THE IMPACT ON TRAFFIC FLOW. TEMPORARY RE-ROUTING OF TRAFFIC IS BE ACCOMPLISHED BY USING INDOT APPROVED TRAFFIC BARRICADES. BARRELS, AND/OR CONES. TEMPORARY SIGNAGE AND FLAGMEN MAY BE ALSO NECESSARY.
- CONTRACTOR SHALL NOT DEMOLISH ANYTHING OUTSIDE THE OWNERS LEASE/PROPERTY LINE UNLESS SPECIFICALLY MENTIONED ON THIS
- QUANTITIES DEPICTED ON THIS SHEET SHALL SERVE AS A GUIDE ONLY. CONTRACTOR TO VERIFY ALL DEMOLITION QUANTITIES.
- 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.
- 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
- EROSION CONTROL MUST BE ESTABLISHED PRIOR TO ANY WORK ON SITE INCLUDING DEMOLITION. REFER TO THE EROSION CONTROL SHEET
- 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 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

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.

<u>DISPOSAL OF DEMOLISHED MATERIALS</u>

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 JTILITIES SERVING STRUCTURES TO BE DEMOLISHED. CONTRACTOR IS RESPONSIBLE FOR TURNING OFF, DISCONNECTING, AND SEALING INDICATED UTILITIES BEFORE STARTING DEMOLITION OPERATIONS. EXISTING UTILITIES E 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.

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. JTILITY PROTECTION SHALL BE COORDINATED WITH THE RESPECTIVE UTILIT 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 O 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 HE CONTRACT DOCUMENTS. BACKFILL MATERIAL SHALL BE INDOT APPROVED CRUSHED LIMESTONE OR APPROVED EQUAL. USE SATISFACTOR 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
- 2. BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
- REFER TO ARCHITECTURAL AND STRUCTURAL PLANS TO VERIFY ALL BUILDING DIMENSIONS, DOOR LOCATIONS, PRIOR TO ORDERING
- 4. RADII ADJACENT TO PARKING STALL AND NOT DIMENSIONED ON THIS
- 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

PLAN SHALL BE 3-FEET, TYPICAL.

- THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN.
- 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 REQUIRE BY THE ENVIRONMENTAL INSPECTOR DURING THE COURSE OF CONSTRUCTION TO CORRECT CONTROL INADEQUACIES AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL PLACE EROSION CONTROL BLANKET (NORTH AMERICAN GREEN S150 OR APPROVED EQUAL) ON ALL SITE AREAS WITI SLOPES GREATER THAN 4:1, AND IN THE BOTTOM AND SIDE SLOPES OF
- 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
- PERMANENT, FINAL PLANT COVERING OR STRUCTURES SHALL BE INSTALLED PRIOR TO FINAL ACCEPTANCE.
- 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 OF AS SOON AS FIELD CONDITIONS ALLOW ACCESS.
- ALL SEDIMENT DELTAS AND DEPOSITS MUST BE REMOVED FROM SURFACE WATERS, DRAINAGE WAYS, CATCH BASINS AND OTHER DRAINAG 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 ? 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 IMMEDIATEL BUT NO MORE THAN 7 DAYS LATER. CONTRACTOR IS RESPONSIBLE CONTACTING ALL APPROPRIATE AUTHORITIES AND RECEIVING THE APPLICABLE PERMITS PRIOR TO CONDUCTING ANY WORK.
- 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 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.
- 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, OF OFFSITE AREA EITHER DIRECTLY OR INDIRECTLY WITHOUT FILTRATION IS
- 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.
- 3. ALL TEMPORARY SESC MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED. TRAPPED SEDIMENT AND OTH DISTURBED SOILS RESULTING FROM TEMPORARY MEASURES SHALL BE PROPERLY DISPOSED OF PRIOR TO PERMANENT STABILIZATION.
- 4. 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

- CONTRACTOR TO VERIFY ALL EXISTING TOPOGRAPHY AND STRUCTURES ON THE SITE AND IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING WORK.
- . ALL PAVEMENT SPOT GRADE ELEVATIONS AND RIM ELEVATIONS WITHIN OR ALONG CURB AND GUTTER REFER TO EDGE OF PAVEMENT ELEVATIONS UNLESS OTHERWISE NOTED.
- . 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
- 4. NO EARTHEN SLOPE SHALL BE GREATER THAN 3:1, UNLESS OTHERWISE NOTED.
- MAXIMUM SLOPE IN ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL NOT EXCEED 2.0% IN ALL DIRECTIONS.
- . MAXIMUM RUNNING SLOPE SHALL NOT EXCEED 5% AND CROSS SLOPE SHALL NOT EXCEED 2% ON ALL SIDEWALKS AND ACCESSIBLE ROUTES UNLESS OTHERWISE NOTED.
- 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
- 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).
- CONTRACTOR SHALL COORDINATE ANY DISRUPTIONS TO EXISTING UTILITY SERVICES WITH ADJACENT PROPERTY OWNERS.
- 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.
- 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.
- 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.
- PRIOR TO THE CONSTRUCTION OF OR CONNECTION TO ANY STORM DRAIN, SANITARY SEWER, WATER MAIN OR ANY OTHER UTILITIES, TH 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 T CONTRACTOR FAILS TO MAKE SUCH NOTIFICATION. THE MUNICIPALITY SHALL BE NOTIFIED OF ANY AND ALL CHANGES TO THE DESIGN
- 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 AN 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

14. STORMWATER FACILITIES MUST BE FUNCTIONAL BEFORE BUILDING CONSTRUCTION BEGINS.

SUPPORTING INFORMATION

- 1. SURVEY INFORMATION PROVIDED BY FOREFRONT SURVEYING ENGINEERING; PROJECT NUMBER: 21SE-392; DATED: 07-20-21.
- 2. AERIAL INFORMATION PROVIDED BY NEARMAP; DATED: 06-12-21.
- 3. PLANS BY ROBERTSON LOIA ROOF (KMART #4913). PROJECT NUMBER: 92-217; DATED: 04-07-93.



Hor ey

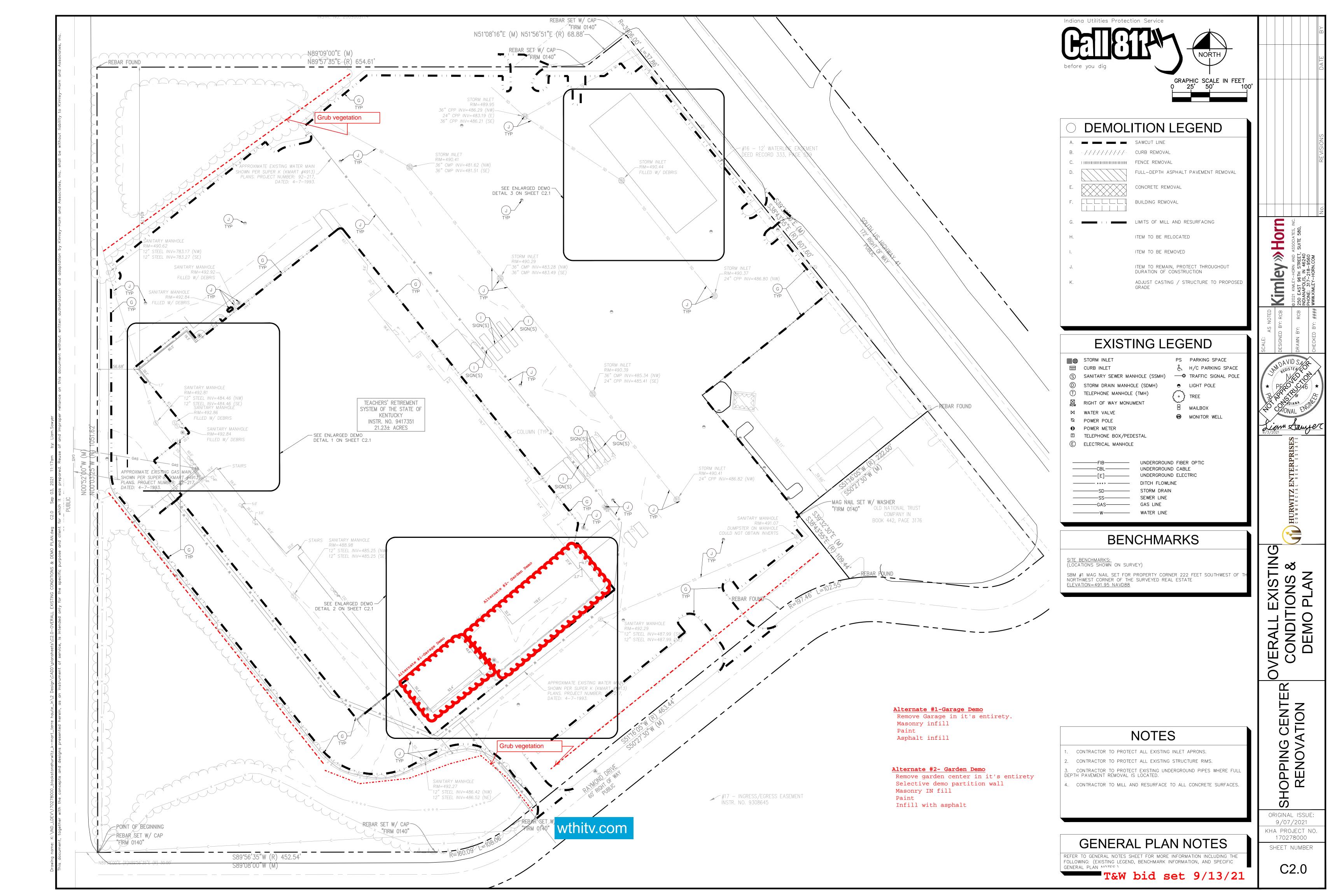
N O

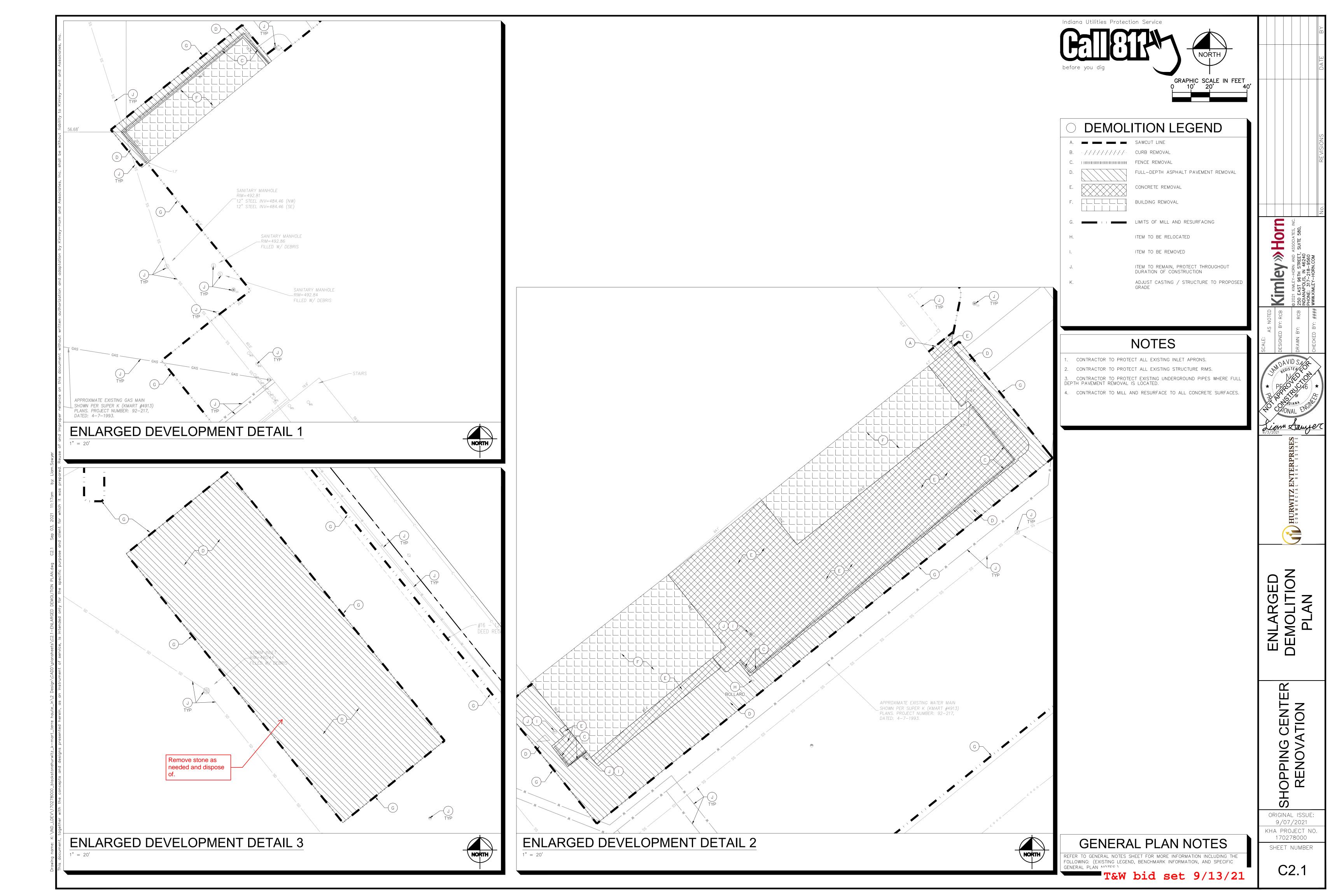
HURWITZ

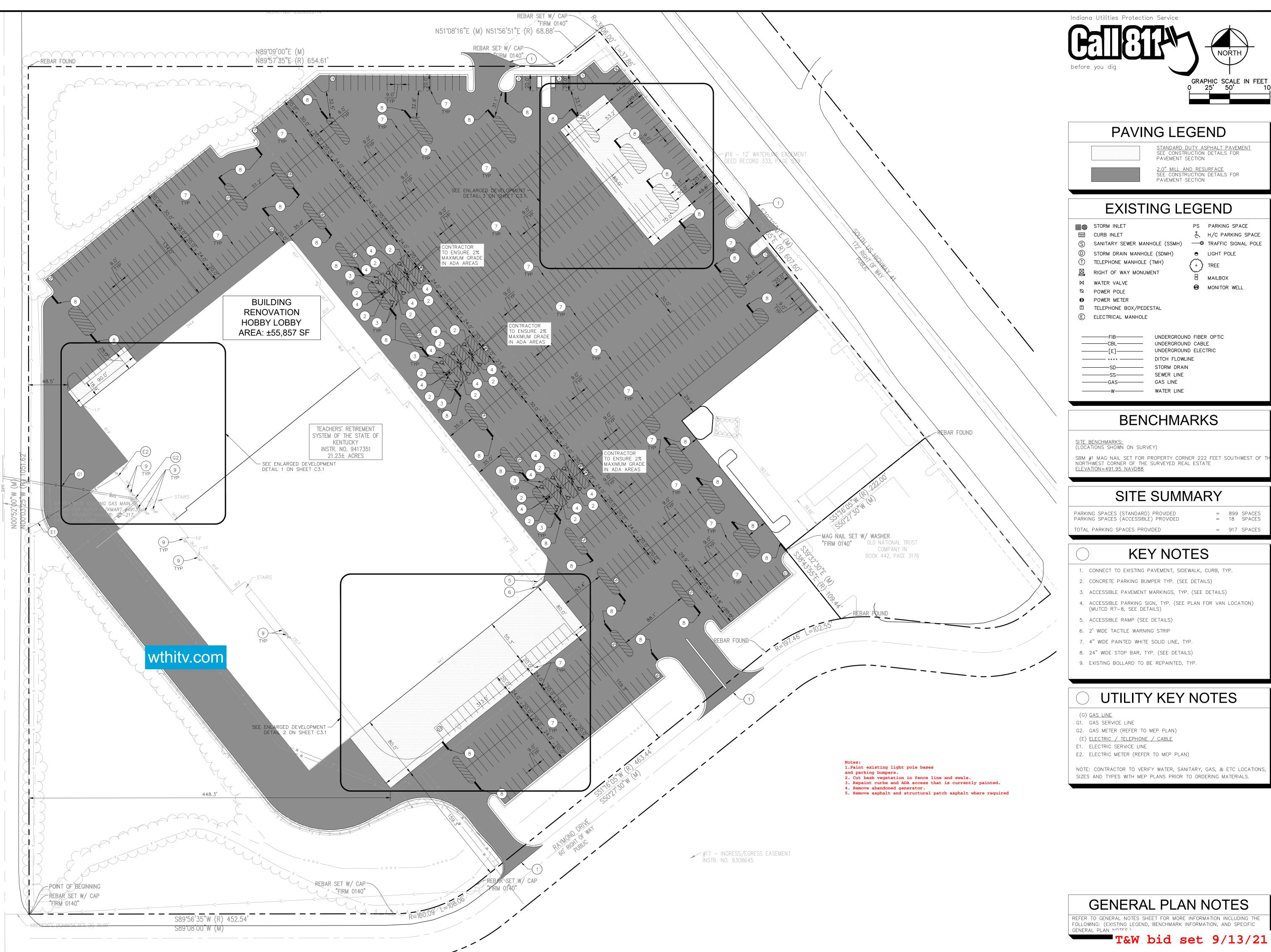
ORIGINAL ISSUE: 9/07/2021 KHA PROJECT NO. 170278000

SHEET NUMBER

C1.1







PAVING LEGEND

STANDARD DUTY ASPHALT PAVEMENT SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION

ட் H∕C PARKING SPACE

● LIGHT POLE

MAILBOX

MONITOR WELL

(·) TREE

EXISTING LEGEND

BENCHMARKS

SBM #1 MAG NAIL SET FOR PROPERTY CORNER 222 FEET SOUTHWEST OF TH NORTHWEST CORNER OF THE SURVEYED REAL ESTATE ELEVATION=491.95 NAVD88

SITE SUMMARY

= 899 SPACES = 18 SPACES

= 917 SPACES

KEY NOTES

- 1. CONNECT TO EXISTING PAVEMENT, SIDEWALK, CURB, TYP.
- 2. CONCRETE PARKING BUMPER TYP. (SEE DETAILS)
- 3. ACCESSIBLE PAVEMENT MARKINGS, TYP. (SEE DETAILS)

- 8. 24" WIDE STOP BAR, TYP. (SEE DETAILS)

UTILITY KEY NOTES

NOTE: CONTRACTOR TO VERIFY WATER, SANITARY, GAS, & ETC LOCATIONS, SIZES AND TYPES WITH MEP PLANS PRIOR TO ORDERING MATERIALS.

GENERAL PLAN NOTES

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

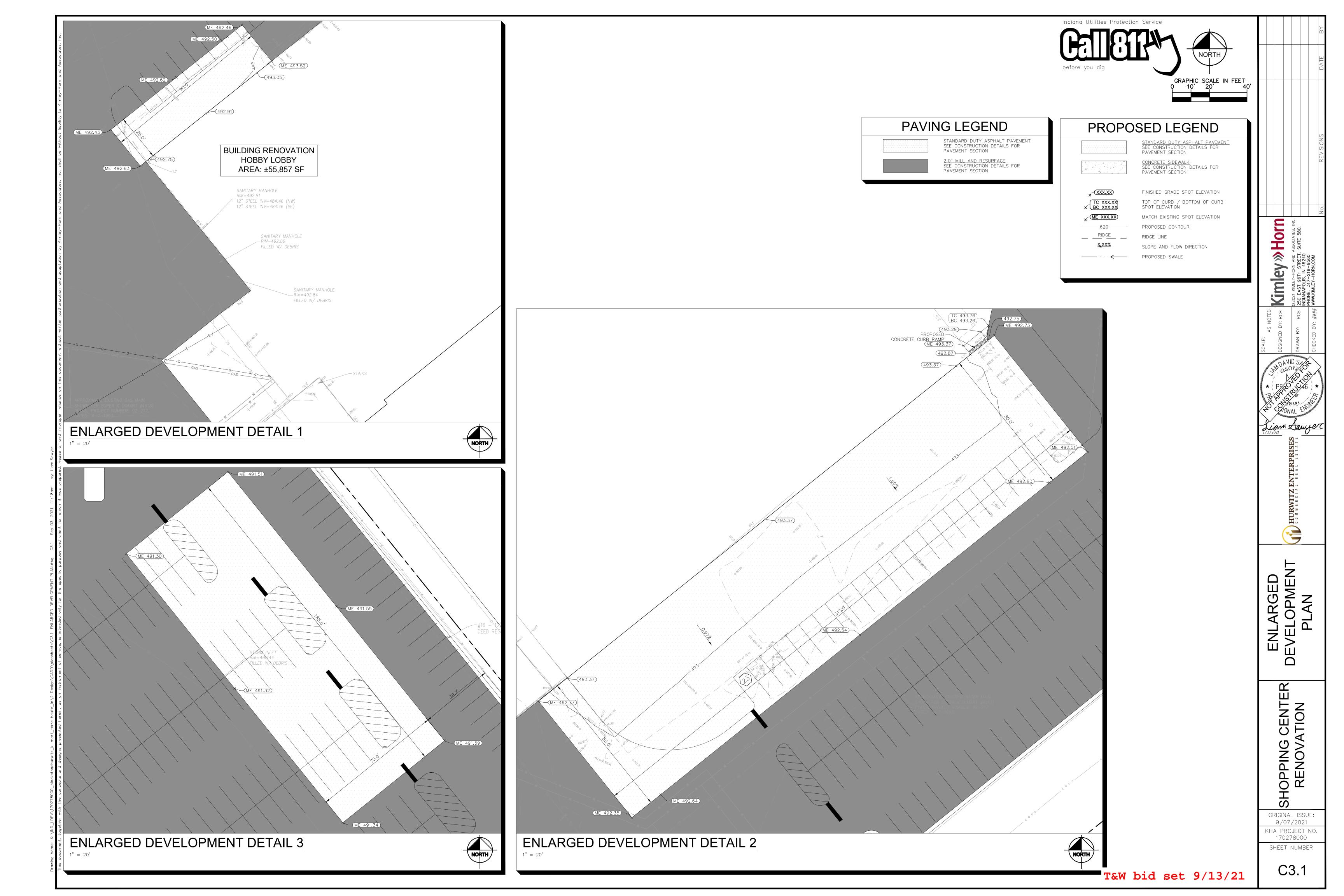
C3.0

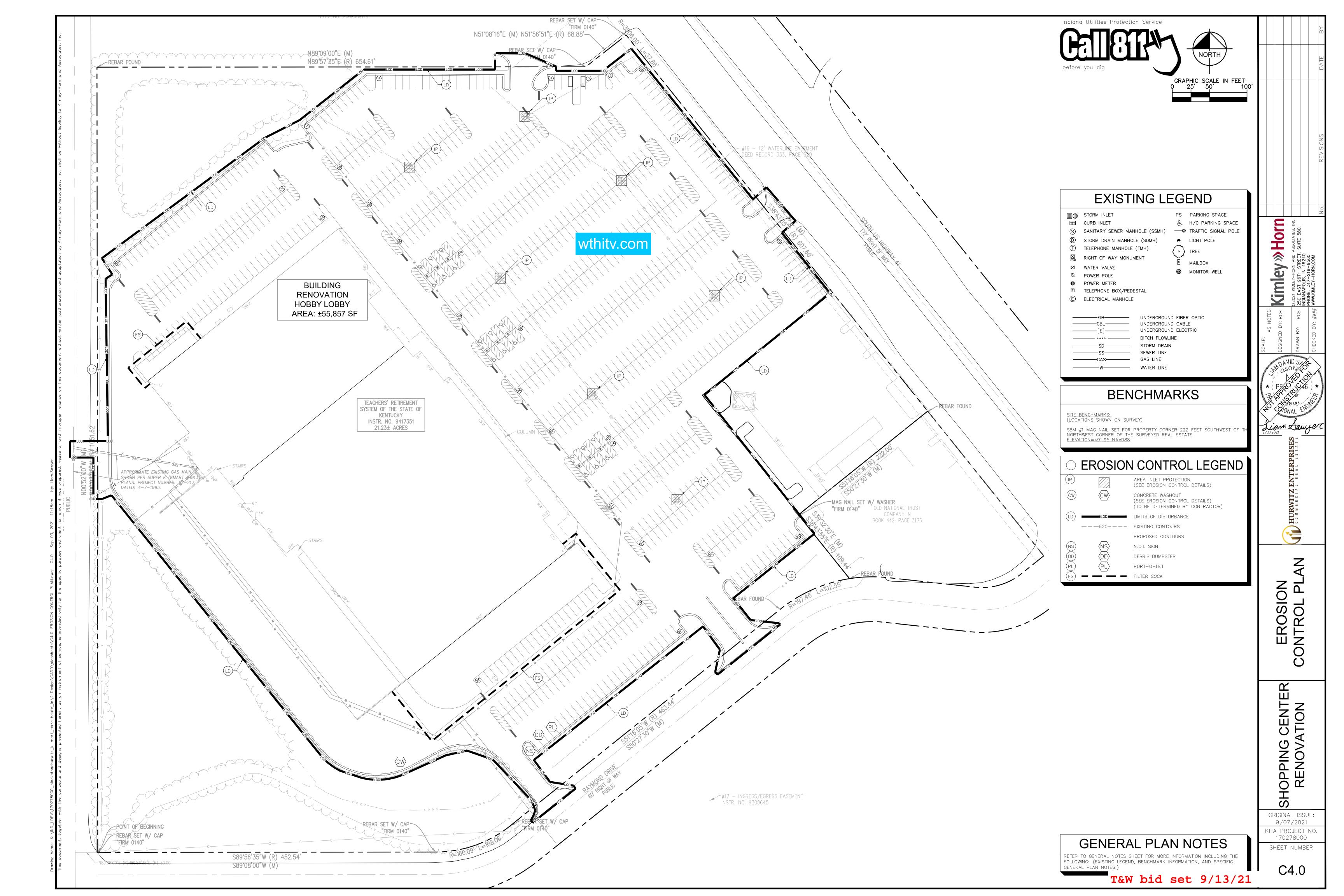
Lign Dange

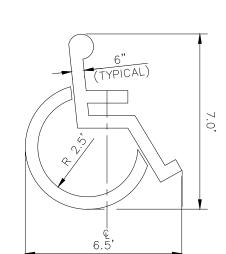
Kimley » Horn

ORIGINAL ISSUE: 9/07/2021 KHA PROJECT NO. 170278000

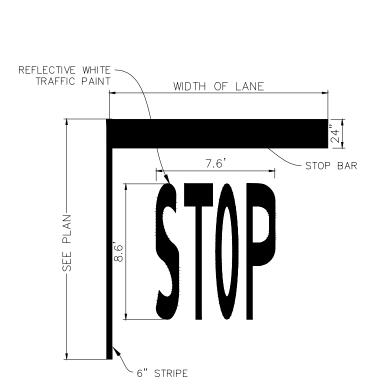
SHEET NUMBER



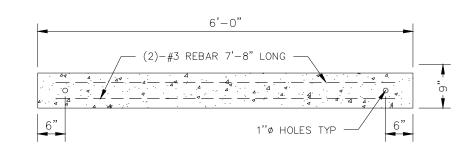




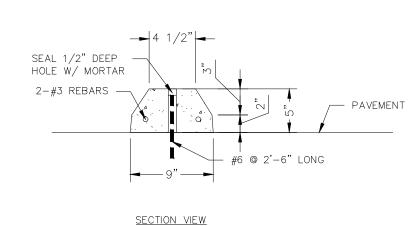
ACCESSIBLE PARKING SYMBOL N.T.S.



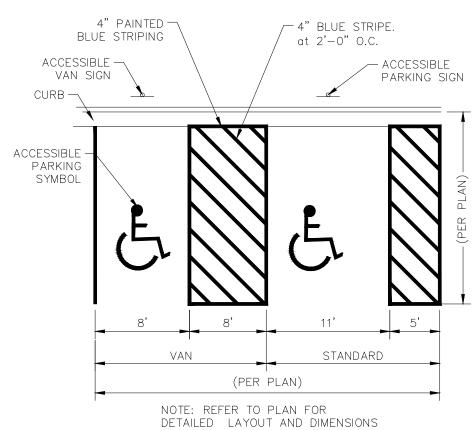
24" WIDE STOP BAR N.T.S.



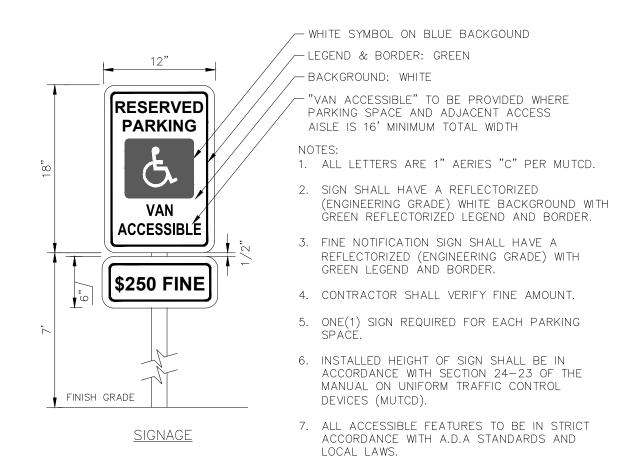
<u>PLAN VIEW</u>



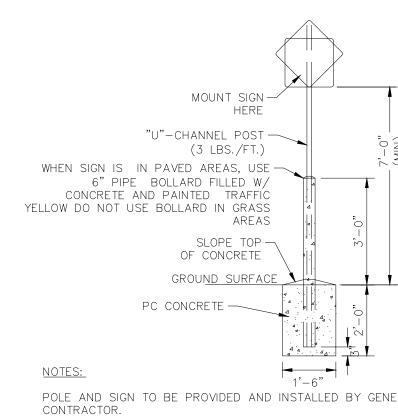
CONCRETE PARKING BUMPER



ACCESSIBLE PAVEMENT MARKINGS N.T.S.



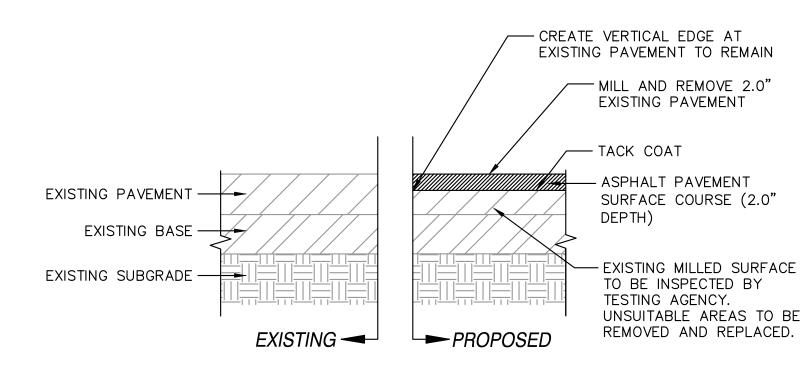
ACCESSIBLE PARKING SIGNAGE N.T.S.



POLE AND SIGN TO BE PROVIDED AND INSTALLED BY GENERAL

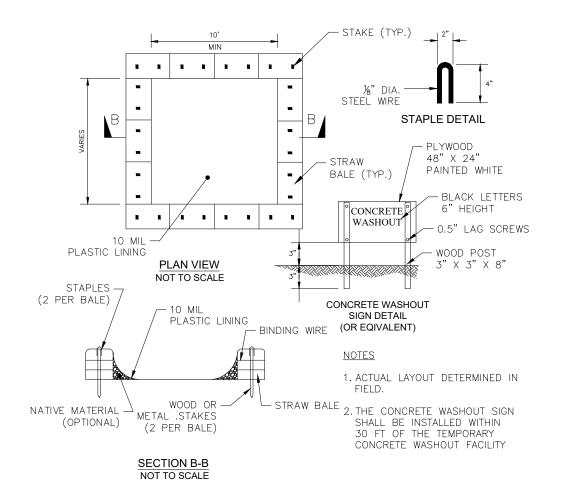
ALL SIGNS SHALL COMPLY WITH U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", LOCAL CODES AND AS SPECIFIED. MOUNT SIGNS TO POST IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

STANDARD SIGN BASE N.T.S.

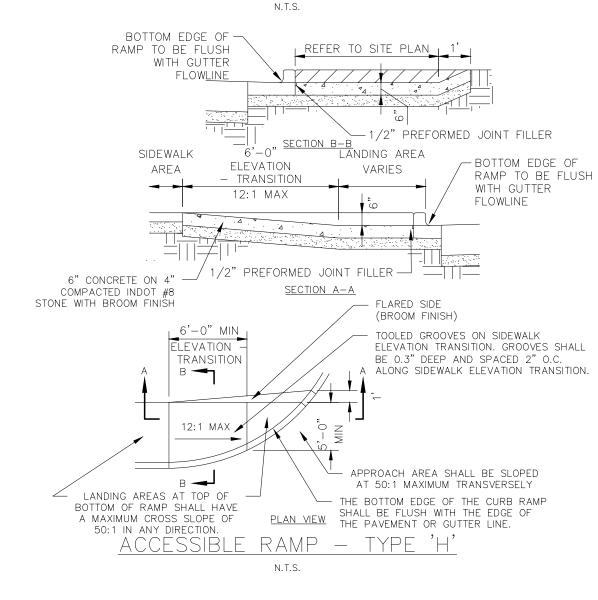


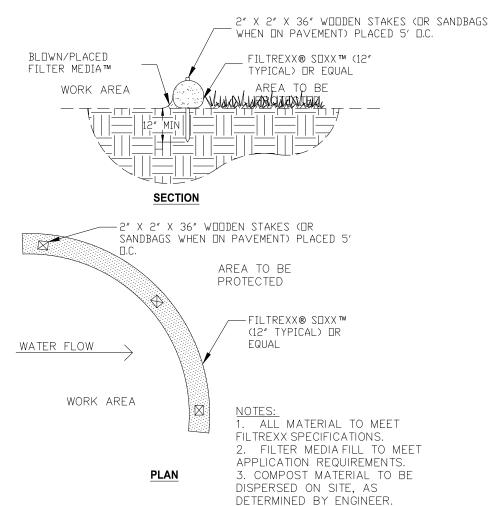
1. SURFACE COURSE TO BE INSTALLED AT SAME TIME AS ADJACENT ASPHALT REPAIRS SURFACE COURSE.



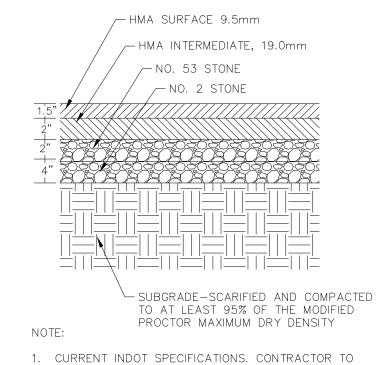


CONCRETE WASHOUT



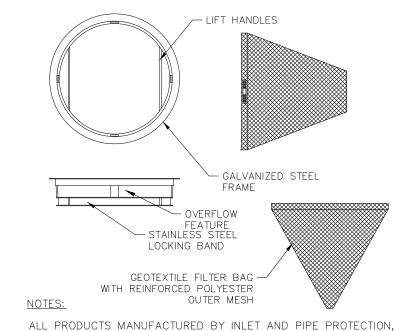


DETERMINED BY ENGINEER. FILTER SOCK SEDIMENT CONTROL N.T.S.



ENSURE COMPLIANCE WITH GEOTECHNICAL ENGINEERING RECOMMENDATIONS





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

ALL IPP INLET FILTERS TO CONFORM TO INDOT SPECIFICATIONS. INLET PROTECTION

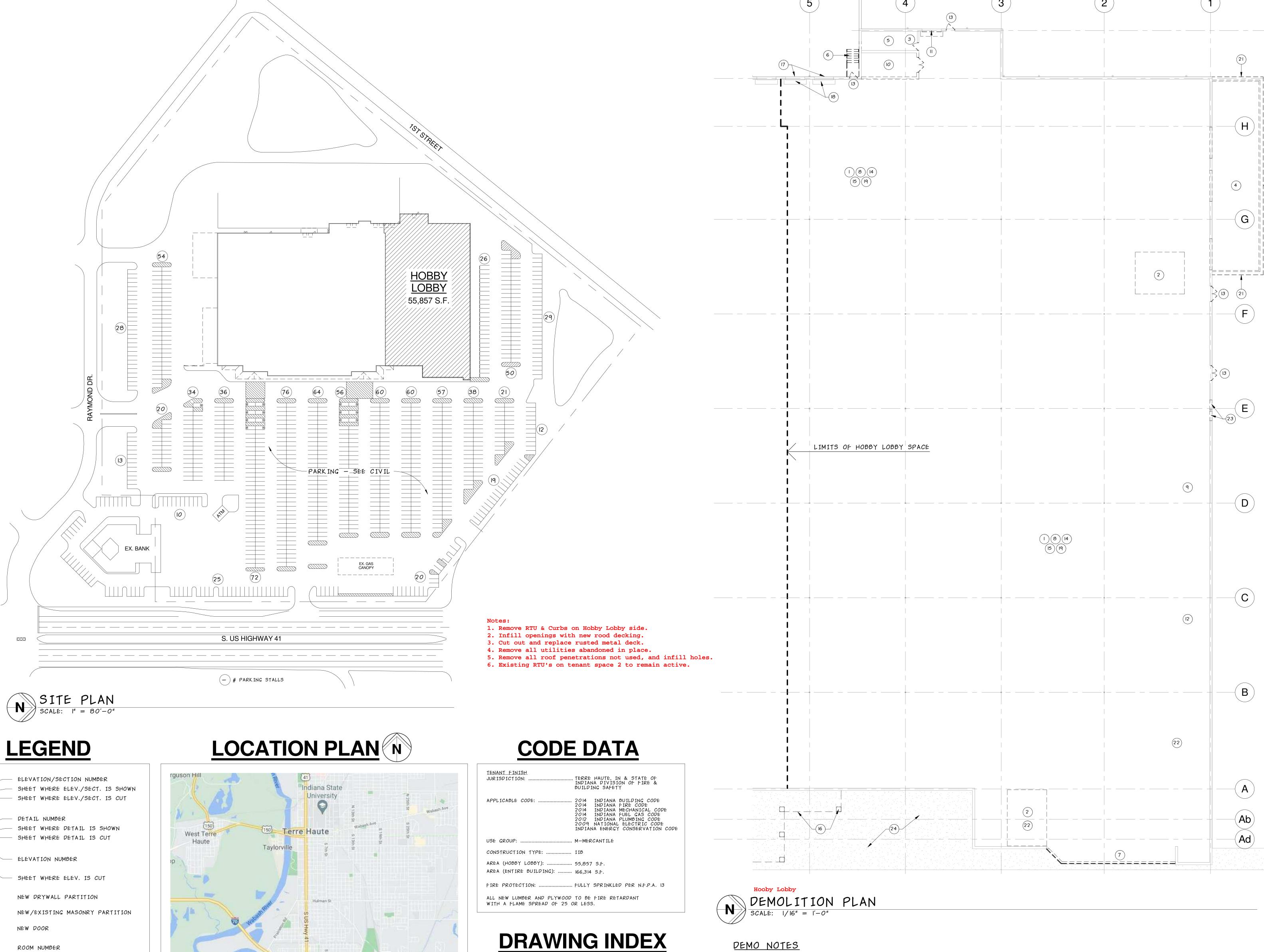
HURWITZ COMMERCIA

Horn

Kimley

SHOPPING CENTER RENOVATION

ORIGINAL ISSUE: 9/07/2021 KHA PROJECT NO. 170278000 SHEET NUMBER



ARCHITECTURAL

E Margaret Ave

Rea Park Golf Course

4651 US-41, Terre Espringhill or Spring Hill

Haute, IN 47802

Southwood

Chick-fil-A

W Springhill Dr.

DOOR TYPE

KEYED NOTE

PARTITION TYPE

A-I COVER SHEET, SITE PLAN & DEMO PLAN

FRONT FLOOR PLAN, PARTIAL ELEVATION & DETAILS REAR FLOOR PLAN, DETAILS & DOOR SCHEDULE

ROOF PLAN & DETAILS

OVERALL BUILDING - DEMOLITION & ROOF PLAN

MECHANICAL / ELECTRICAL / PLUMBING

MEP-2 MEP UTILITY PLANS MEP-3 MEP SCHEDULES AND SPECIFICATIONS

MEP-I MEP DEMOLITION PLAN

(6) REMOVE EXISTING LANDING AND STAIR.

REMOVE EXISTING PARTITIONS, FIXTURES, SHELVES, ETC. IN THEIR ENTIRETY AT INTERIOR OF BUILDING. 2 EXISTING TOILET ROOMS TO BE REMOVED. CAP ALL PLUMBING LINES BELOW FLOOR OR AT ROOF DECK.

(3) REMOVE EXISTING DOOR AND FRAME - CLOSE OPENING TO MATCH EXISTING.

REMOVE EXISTING EXTERIOR COOLER. FILL IN OPENINGS IN BUILDING WALL WITH CMU CONSTRUCTION TO MATCH EXISTING — SEE DETAIL. (5) EXISTING SPRINKLER RISER ROOM TO REMAIN.

7) REMOVE EXISTING "ATRIUM" STOREFRONT. INFILL WITH MASONRY TO MATCH EXISTING. REMOVE CEILING GRID, TILES, LIGHTING, SMOKE DETECTORS, ETC. REMOVE ALL WIRING AND (9) REMOVE EXISTING WATER HEATERS AND ASSOCIATED PIPING.

(10) REMOVE EXISTING MECHANICAL ROOM AND EQUIPMENT.

(II) REMOVE EXISTING SECTIONAL O.H. DOOR & PREPARE FOR NEW SECTIONAL O.H. DOOR. REMOVE EXISTING STAINLESS STEEL VENT HOOD AND ASSOCIATED ROOF TOP EQUIPMENT.
PROVIDE TEMPORARY WEATHERPROOF CLOSER AT ROOF WHERE EQUIPMENT PENETRATES ROOF (13) REMOVE EXISTING DOOR AND FRAME - PREPARE FOR NEW HOLLOW METAL DOOR & FRAME.

REMOVE OR FILL ALL FLOOR OUTLETS, WALKER DUCTS, ETC. PATCH FLOOR AND PREPARE FOR NEW FINISHES.

REMOVE ALL EXISTING FLOOR COVERINGS, VCT, QT, ETC. CLEAN MASTIC AND MORTAR FROM CONCRETE SLAB AND PREPARE FOR NEW FINISHES. REMOVE EXISTING COLUMNS & CANOPY. PREPARE BUILDING WALL FOR NEW FINISHES. PATCH SIDEWALK WHERE COLUMNS ARE REMOVED.

(17) REMOVE EXISTING DOCK SEALS & REPLACE WITH NEW.

(24) EXISTING SIDEWALK TO REMAIN.

(18) DOCK LEVELERS TO REMAIN & BE REFURBISHED - REPLACE IF BEYOND REPAIR. (19) REMOVE FURRING FROM EXISTING INTERIOR BUILDING COLUMNS.

REMOVE PORTION OF EXISTING EXTERIOR WALL FOR INSTALLATION OF NEW STOREFRONT

SYSTEM - BY TENANT. (21) REMOVE EXISTING CURB & GUARDRAIL - SEE CIVIL. (22) REMOVE ALL CERAMIC WALL & FLOOR TILE. PREP SURFACES TO RECEIVE NEW FINISHES. (23) REMOVE EXISTING WALL LOUVER. INFILL WITH CONCRETE BLOCK TO MATCH EXISTING.

T&W bid set 9/13/21

I HE PHOFESSIONAL WHOSE SIGNATURE AND PERSONAL SEAL APPEAR HEARON, ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS DRAWING, AND

DISCLAIMS ANY RESPONSIBILITY FO

ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE REFERENCED

PROFESSIONAL RELATING TO, OR

THIS DRAWING REFERS

OR PARTS OF THE PROJECT TO WHICH

project no. 2210488 drawn by JDS

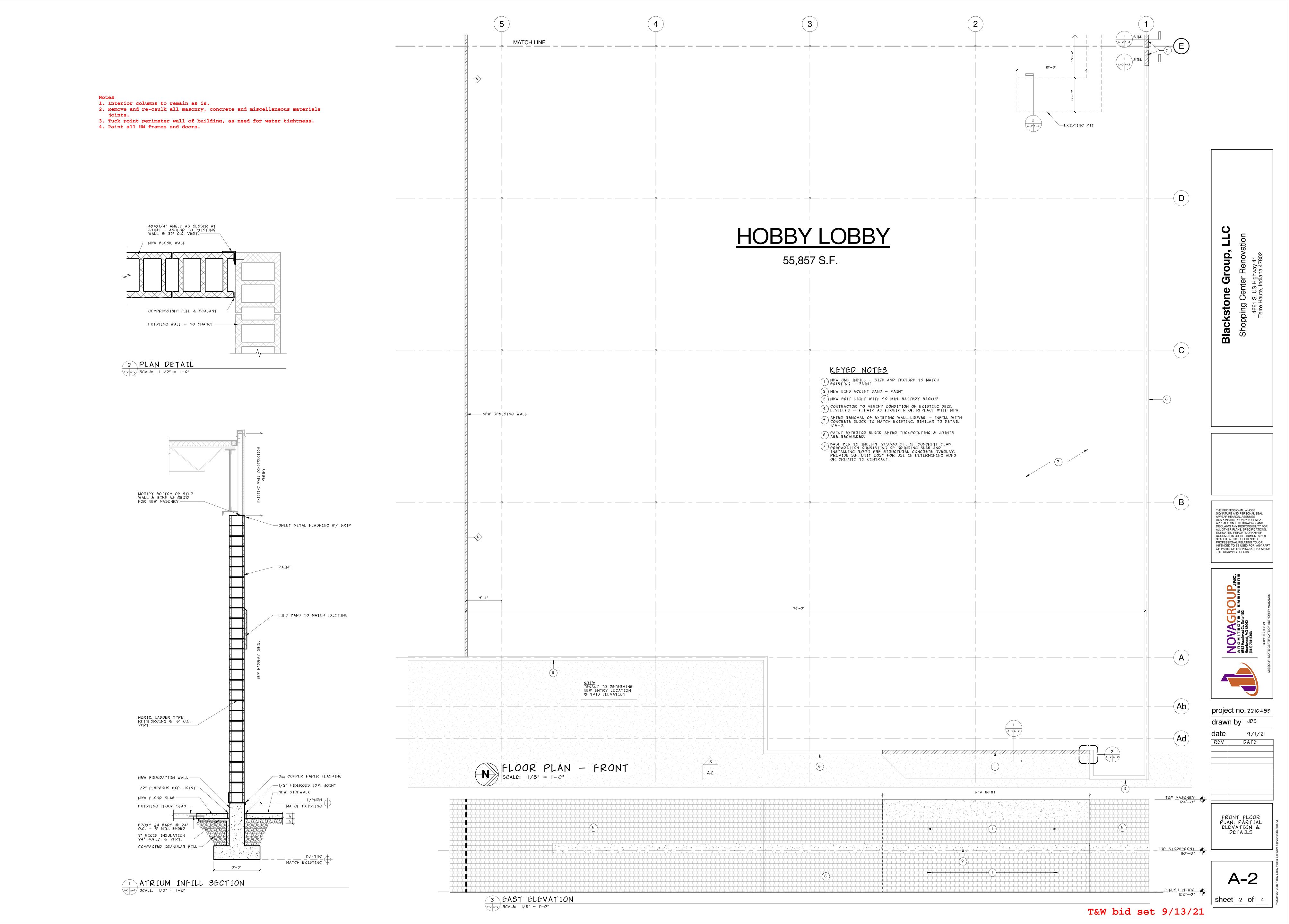
DATE

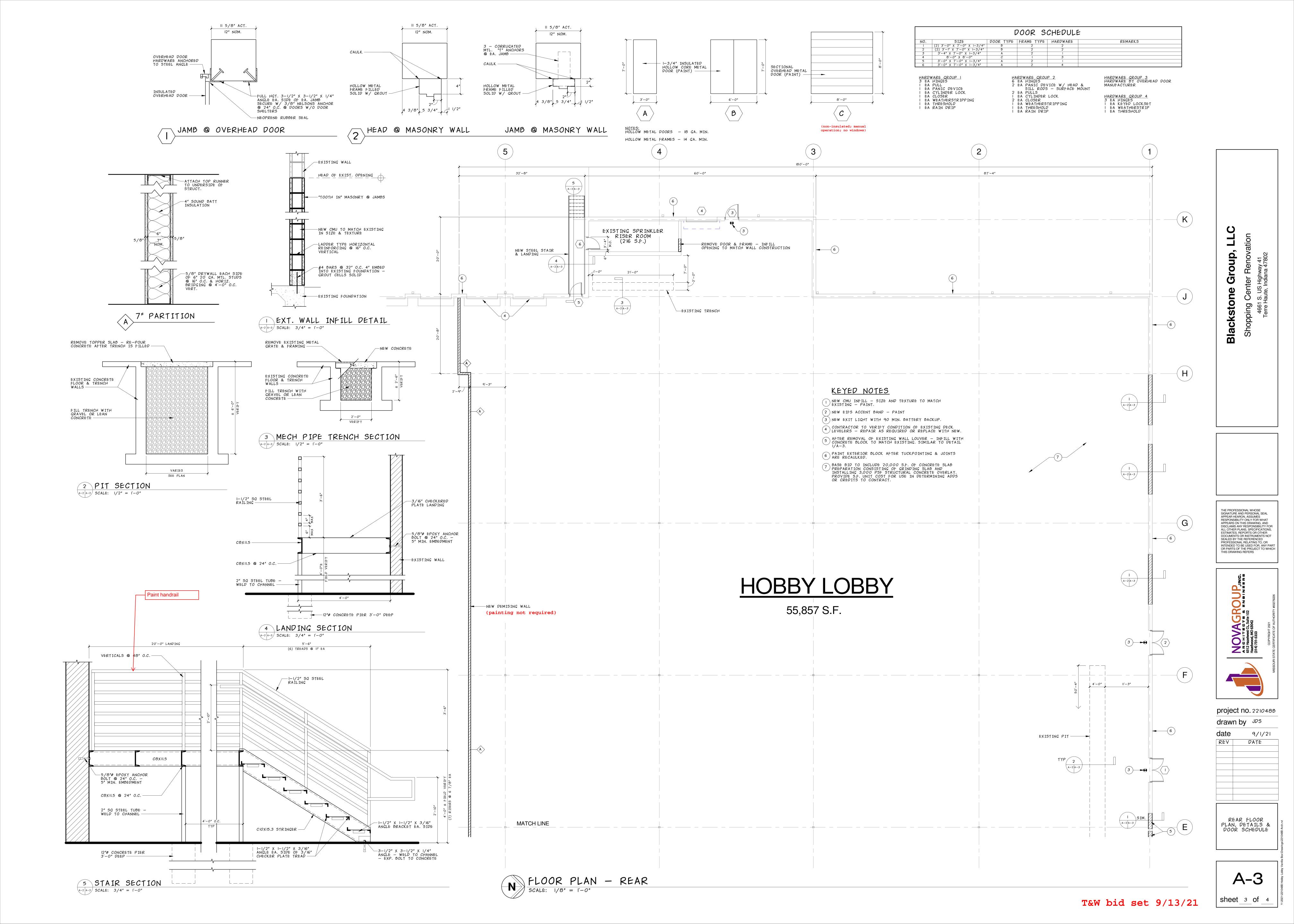
COVER SHEET,

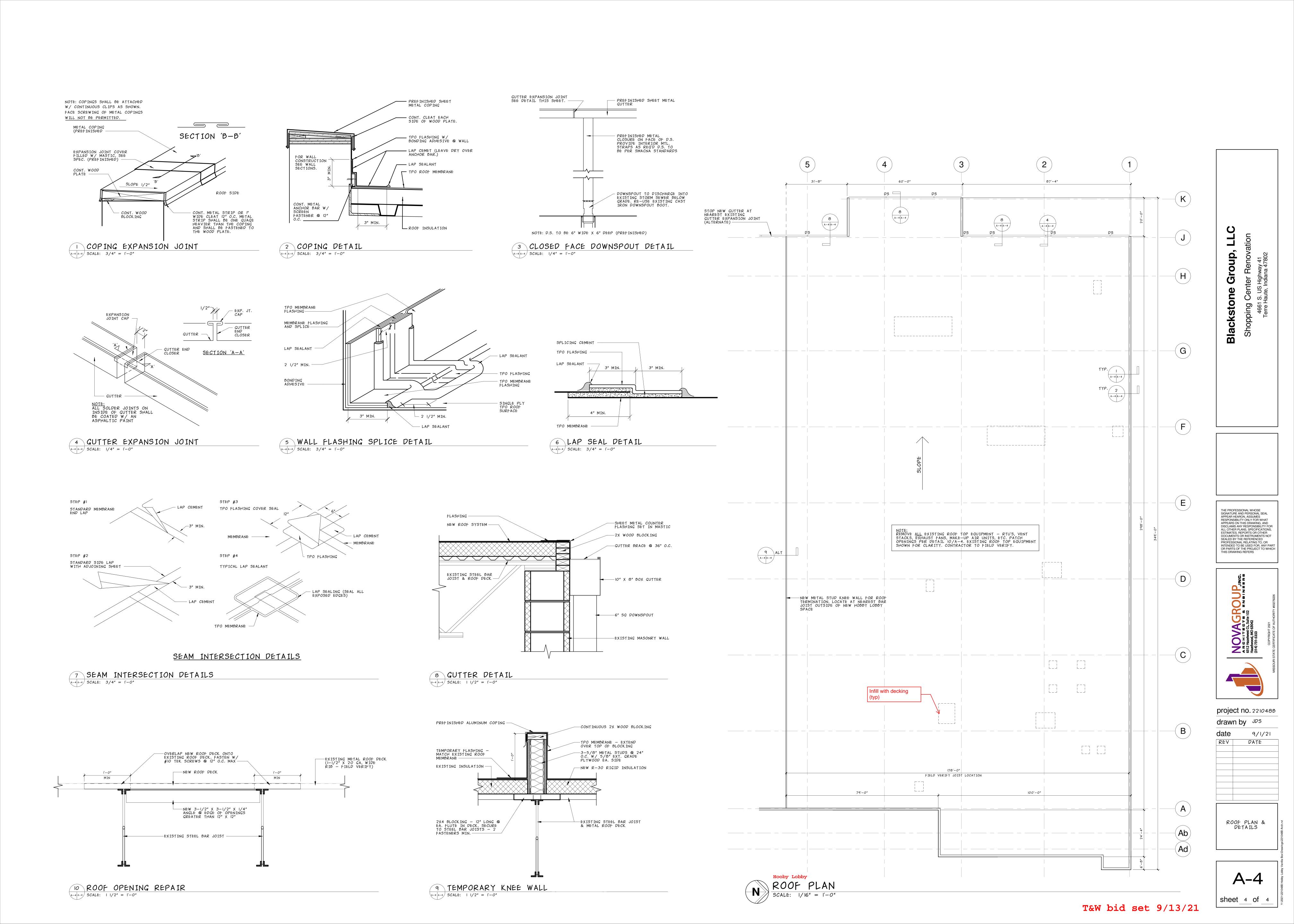
SITE PLAN &

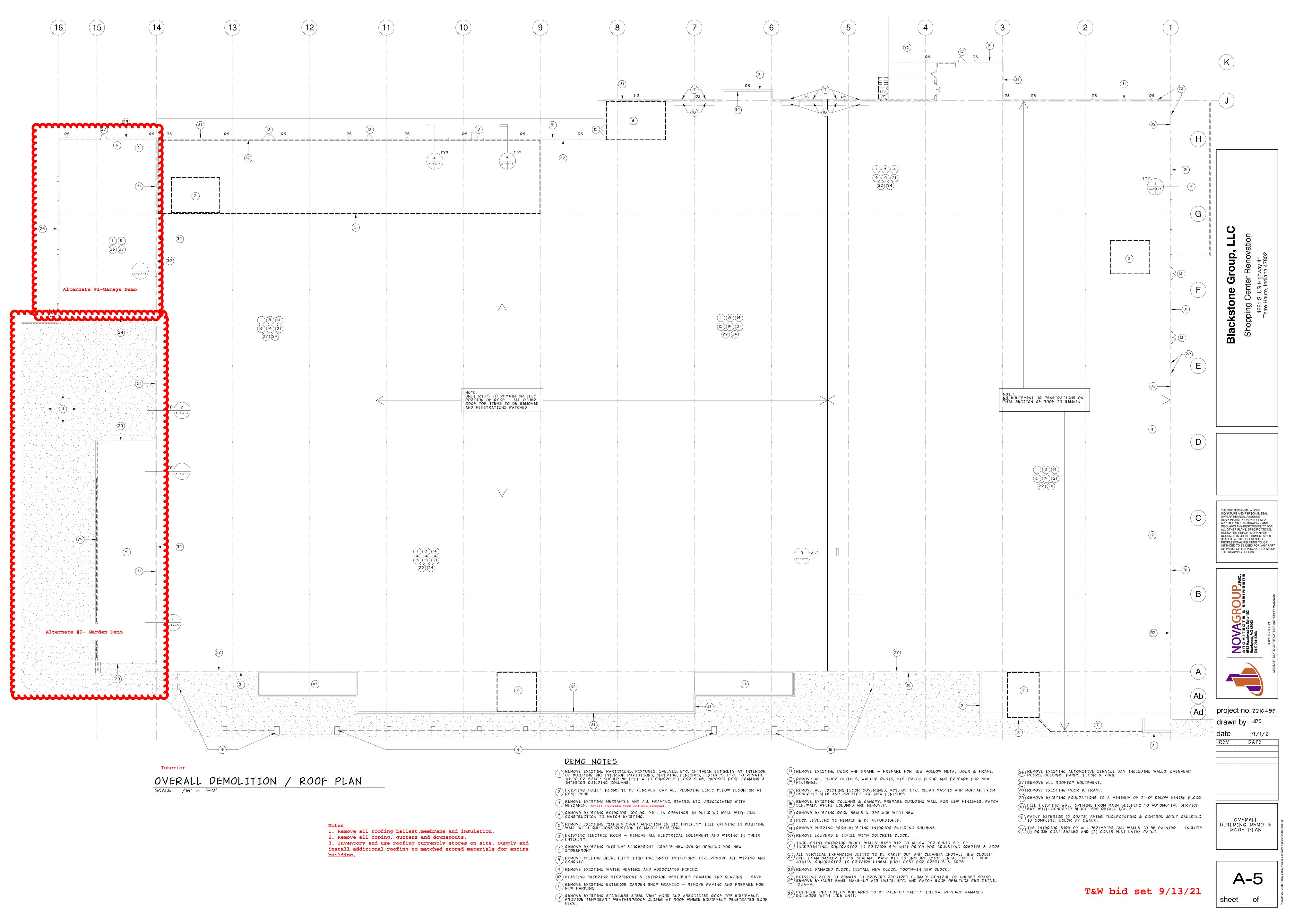
DEMO PLAN

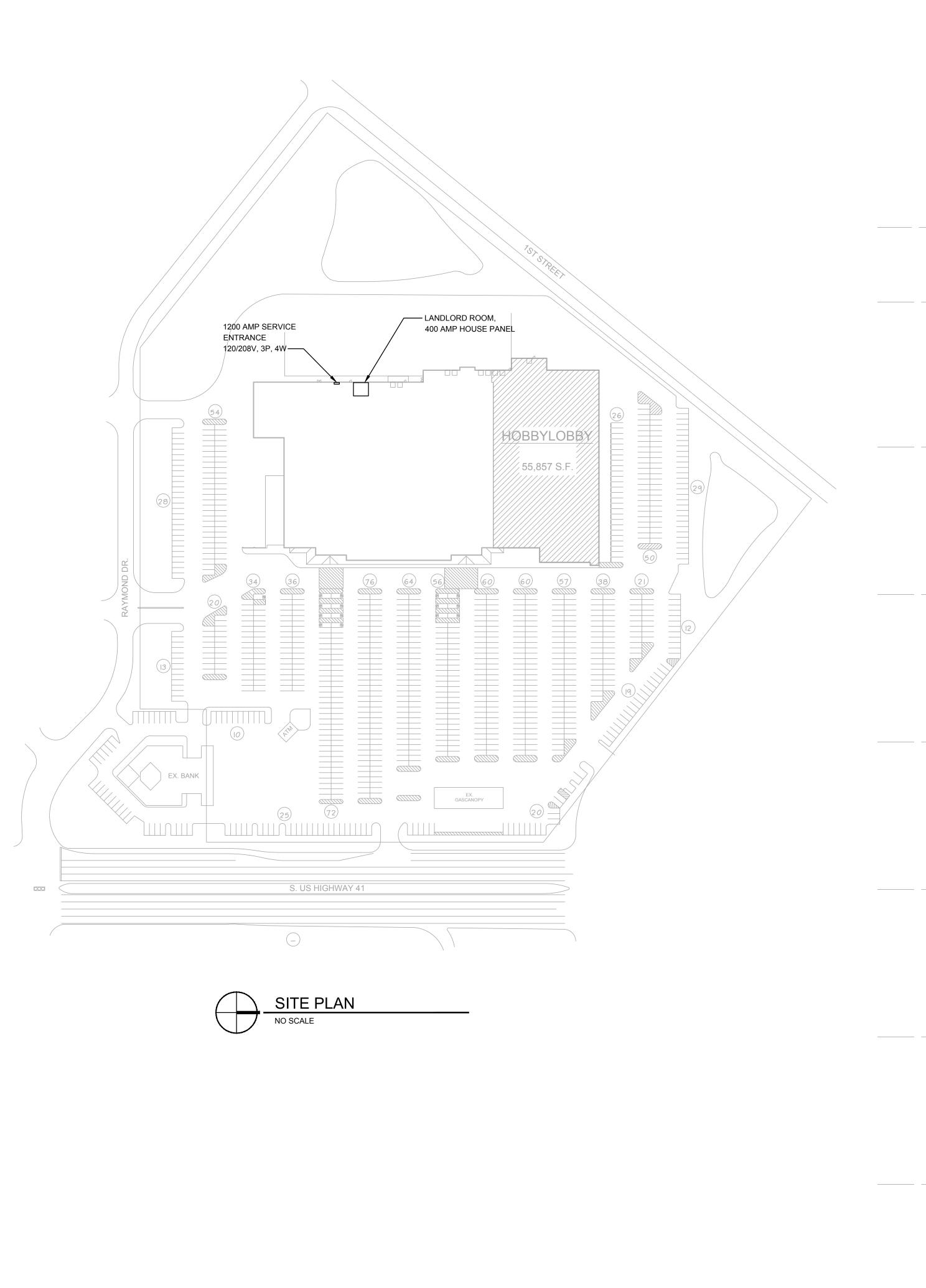
sheet I of 4

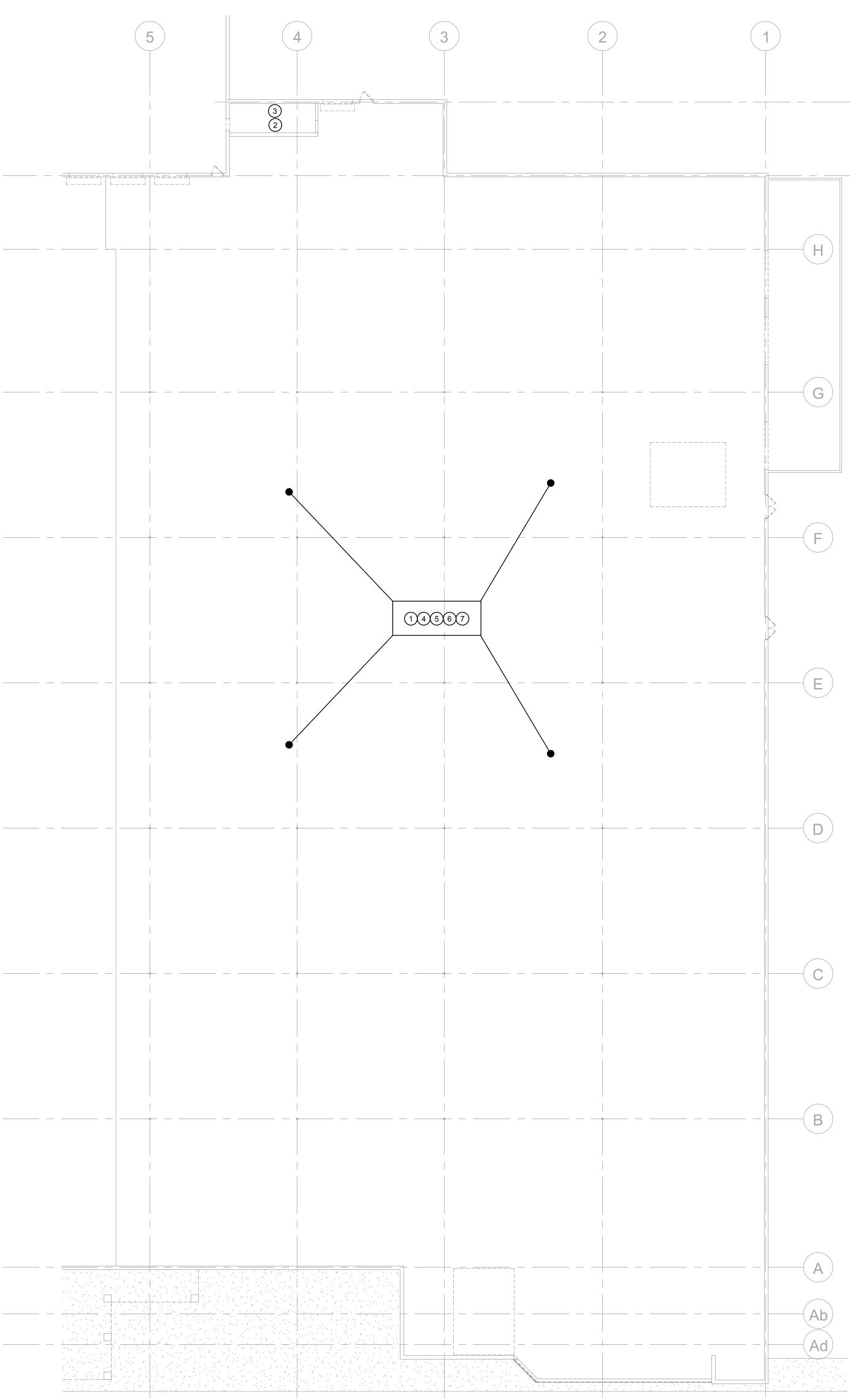


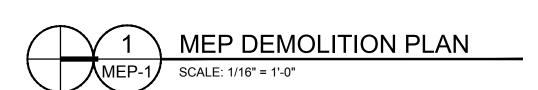




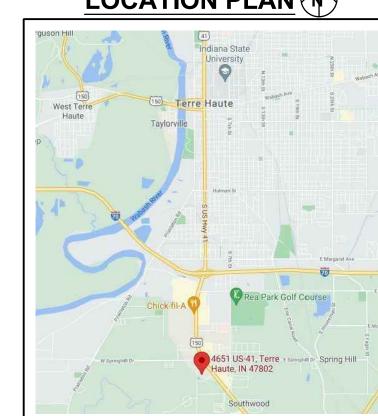








LOCATION PLAN



DEMOLITION KEYED NOTES:

- 1) PLUMBING FIXTURES AND PLUMBING EQUIPMENT, WATER, WASTE AND VENT SHALL BE REMOVED FROM THE BUILDING AND THROUGH THE ROOF. ALL WASTE PIPING THAT BE CAPPED BELOW FLOOR AIR AND WATER TIGHT.
- 2 THE DOMESTIC WATER ENTRANCE RISER SHALL BE REMOVED BACK TO THE 4" RISER OUT OF THE FLOOR AND PREPARED FOR NEW VALVE AND PRV UNDER RENOVATION WORK.
- (3) INSTALL NEW FIRE SUPPRESSION SYSTEM IN ACCORDANCE WITH NFPA 13.
- 4) ALL DOMESTIC WATER PIPING AT JOIST LEVEL OR DROPS TO PLUMBING FIXTURES SHALL BE REMOVED.
- 5 ALL FIRE PROTECTION PIPING, SPRINKLER HEADS AND ASSOCIATED PIPING IN THIS AREA SHALL BE REMOVED.
- 6 ALL SUPPLY AND RETURN DUCTWORK BELOW ROOF AND ROOFTOP UNIT CONTROLS SHALL BE REMOVED.
- 7 ALL ELECTRICAL CONDUIT, WIRE, RECEPTACLES, DISCONNECTS, LIGHT FIXTURES, PANEL BOARDS, SHALL BE REMOVED BACK TO ELECTRICAL SWITCHGEAR ROOM.

Notes

- 1. Make safe all utilities for selective demo.
- Existing RTU on tenant #2 space to remain and operational.
 Provide temporary water and electric for construction services.



kstone Group, LLC
pping Center Renovation

THE PROFESSIONAL WHOSE SIGNATURE AND PERSONAL SEAL APPEAR HEARON, ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS DRAWING, AND DISCLAIMS ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE REFERENCED PROFESSIONAL RELATING TO, OR INTENDED TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS DRAWING REFERS

NOWAGROUP, INC.
ARCHITECTS & ENGINEERS
6312 Hazelwood, MO 63042
(314) 731-5353



drawn by JDS

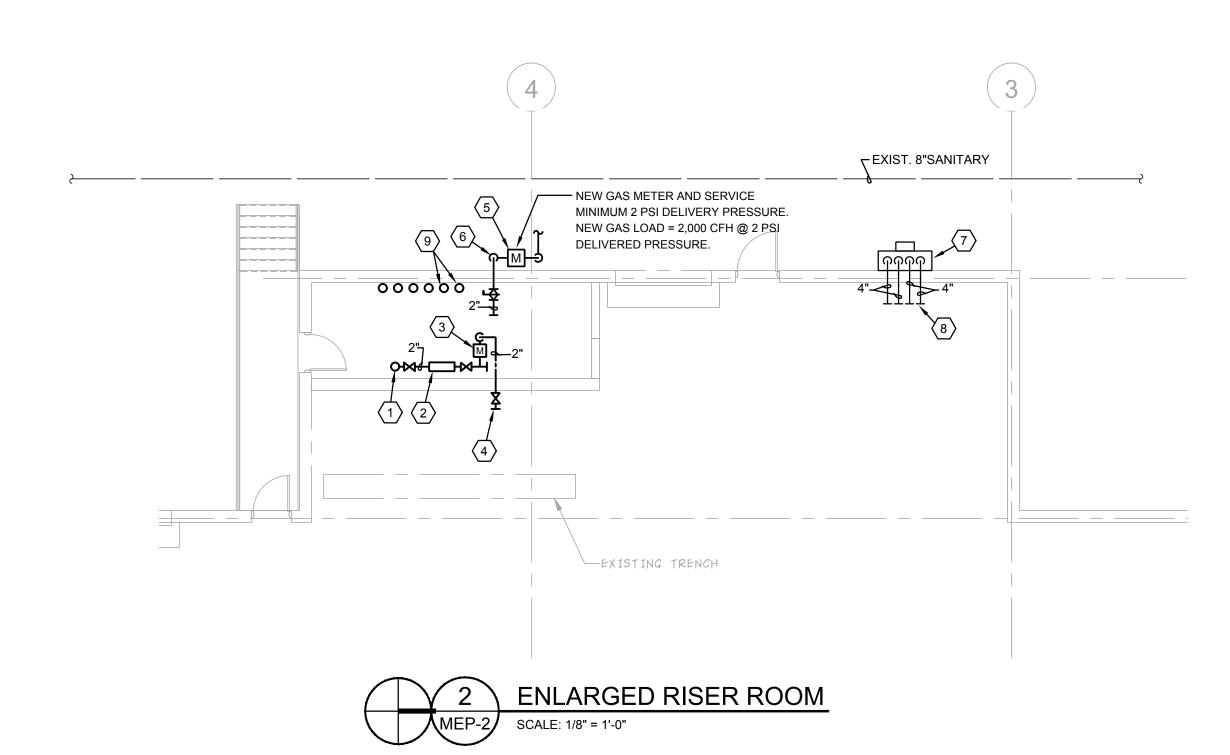
date 8/5/21

REV DATE

MEP DEMOLITION PLAN

Motes

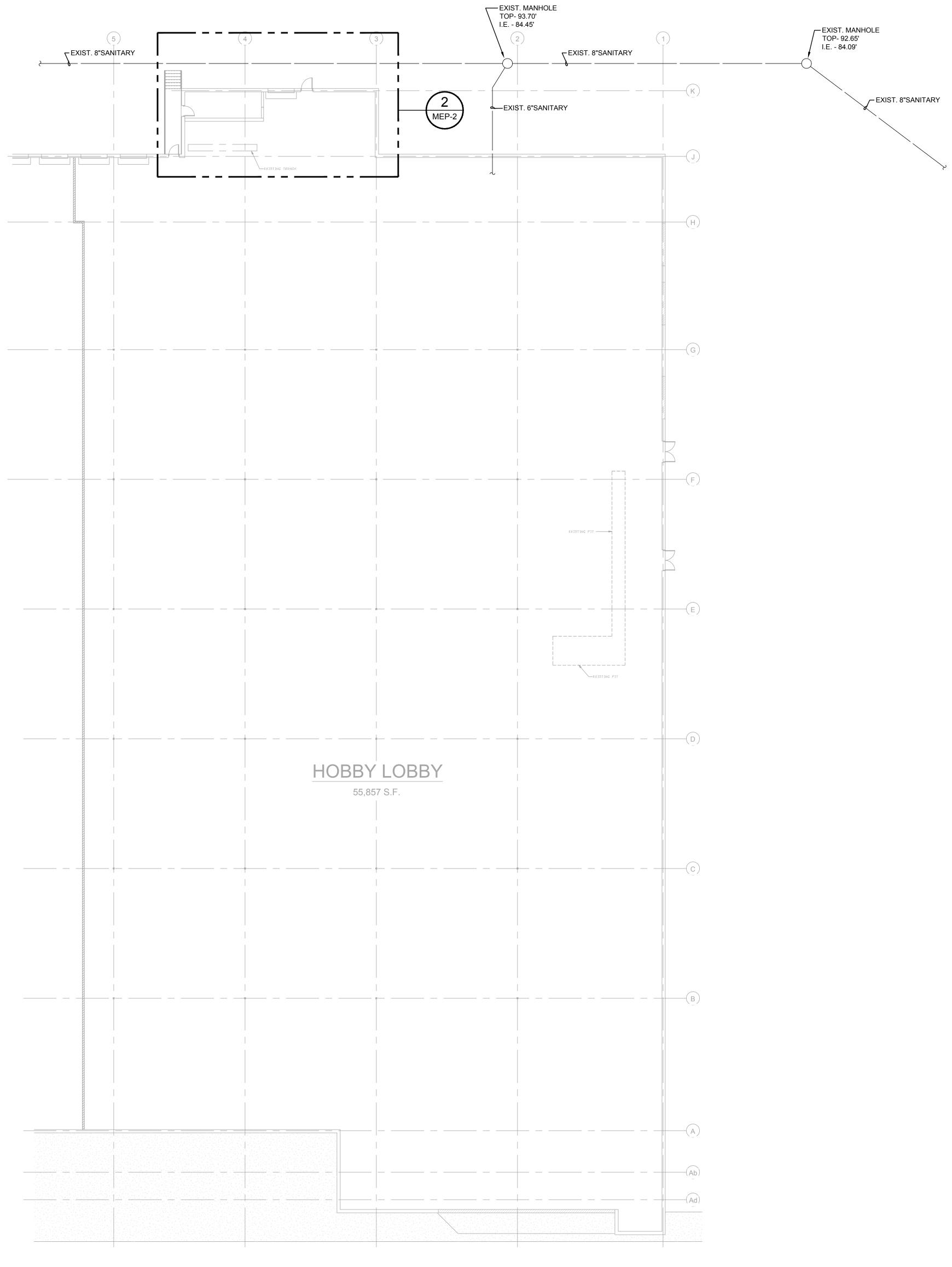
Plumber disconnect and make safe all plumbing. Plumbing to be capped below grade and in-filled.
 Remove and reconfigure gas lines for remaining service.
 Provide power as needed for fire protection work.

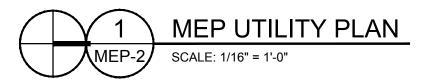


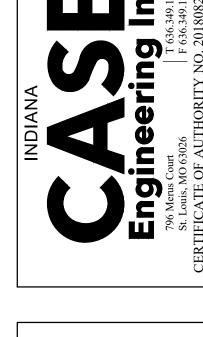
- KEYED NOTES:
- CONTRACTOR TO CONNECT TO THE EXISTING 4" WATER LINE RISER AND PROVIDE THE NEW ELBOW AND SHUTOFF VALVE.
- CONTRACTOR TO FURNISH AND INSTALL A NEW 4" REDUCED PRESSURE BACKFLOW PREVENTER COMPLETE WITH STRAINED AND VALVE AT EACH END OF THE BACKFLOW PREVENTER.
- ONTRACTOR TO FURNISH AND INSTALL A NEW 2" METER WITH VALVES ON EACH SIDE WITH UNION ON ONE SIDE FOR MAINTENANCE.
- CONTRACTOR SHALL FURNISH AND INSTALL A NEW 2" COLD WATER LINE FROM WATER METER UP TO THE JOIST FOR FUTURE EXTENSION BY HOBBY LOBBY.

PSI DELIVERED PRESSURE.

- CONTRACTOR TO COORDINATE WITH NATURAL GAS PROVIDER TO PROVIDE A GAS METER AND REGULATOR FOR 2
- 6 CONTRACTOR SHALL FURNISH AND INSTALL 2" NATURAL GAS PIPING FROM THE METER UP THE EXTERIOR WALL TO THE JOIST SPACE FOR EXTENSION TO NEW ROOFTOP UNITS BY HOBBY
- 7 CONTRACTOR TO FURNISH AND INSTALL NEW 1200 METER AND DISCONNECT SWITCH PER THE LOCAL ELECTRIC UTILITY REQUIREMENTS.
- (8) CONTRACTOR TO FURNISH FOUR (4) 4" CONDUITS FROM THE EXTERIOR METER AND DISCONNECT SWITCH TO 12'-0" (VERIFY DIMENSION WITH HOBBY LOBBY) ABOVE FINISH FLOOR FOR EXTENSION BY HOBBY LOBBY.
- © CONTRACTOR TO FURNISH NEW FIRE RISERS FOR THE HOBBY LOBBY STORE USING THIS TWO VALVED RISER CONNECTIONS.

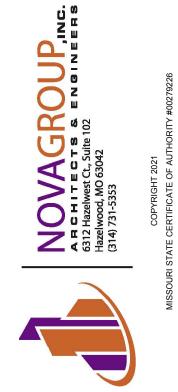






Shopping Center Renovation

THE PROFESSIONAL WHOSE SIGNATURE AND PERSONAL SEAL APPEAR HEARON, ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS DRAWING, AND DISCLAIMS ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE REFERENCED PROFESSIONAL RELATING TO, OR INTENDED TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS DRAWING REFERS



project no. 2210488

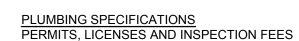
drawn by JDS

date 8/5/21

REV DATE

MEP UTILITY PLANS





All work shall be done in strict accordance with all local, county and state codes, applicable laws, rules and regulations governing the installation of the plumbing systems. This Contractor shall obtain and pay all permits, licenses and inspection fees as required for the installation of all work shown on the drawings or as specified.

FIRESTOPPING

All glass and insulated pipe which penetrates floors and fire walls shall be fire stopped using 3M intumescent firestopping systems including restricting collar RC-1, FS-195 intumescent wrap, and CP 25 caulk or 303 putty. Assembly shall be installed in accordance with manufacturer's written instructions in accordance with their U.L. listing. Alternate firestopping systems as manufactured by Nelson, SpecSeal, or Dow Corning shall be considered equal only if they are U.L. classified for the application. After installation of pipe or conduit through floors or fire walls, fill space around pipes with Chase Foam Sealant as manufactured by Chase Foam Technology Corporation, 3M CP-25 caulk, SpecSeal sealant, or Tremco Fyre-Shield.

PIPING Domestic water piping shall be Type "L" copper and shall conform to ANSI H23.1. Wrought copper and bronze solder-joint fittings shall conform to ANSI B16.22. Joints shall be made with 95-5 solder. All connections to steel piping shall be made with dielectric unions. Sanitary waste & vent piping 1-1/2 inches and smaller shall be Type "L" copper DWV. Storm, sanitary waste and vent as shown on the drawings shall be PVC pipe and fittings except as noted. All sanitary sewer lines are to have a video camera to inspect these lines twice (once after backfill, once after slab pour)

All new waste piping shall be tested either hydrostatically or pneumatically in the general contractor's presence to 10 psig for 8 hours, and repaired where required prior to installation of insulation.

and provide these video CD's to the ARCO National New England on completion of the project along with all as-build drawings.

Provide access panels in chases where required or as directed by the General Contractor.

All stop valves shall be Nibco Model S595Y ball valves.

Above ground, the sizes up to and including 2" shall be schedule 40 A-120 black steel pipe with threaded joints and 150 lb. black malleable fittings. Support al gas piping on the roof with treated wood blocking on a carey tread. As an alternate, provide type "L" hard drawn copper pipe and fittings. All gas piping installed exterior and on the roof shall be painted with two coats of rust resistant paint.

Shall be black steel, 1560 lb. ground bevel seats. Flanges shall serve as unions in welded pipe.

In threaded piping, they shall be "Lubroseal" by Mueller Company, or approved equal. In welded pipe, they shall be "Lubroseal", flanged.

GAS PRESSURE REGULATORS

Gas pressure regulators shall be ITRON or equal for 5 psi inlet gas pressure. Regulator shall have a vent up through roof or 18" above roof for roof mounted equipment. Regulators for small equipment located outdoors may be ITRON Model B42R or Model B31R.

PIPE CLEANING

Clean piping system by using alkaline cleaner (Nalco N-2567). The pipes shall be filled with soft water and Nalco 2567 at 3% solution strength by weight. Water shall be circulated for 24 hours and drained. Pipes shall be flooded with soft water to assure that the cleaner is out of system. TDS of draining water can be compared to TDS of soft water to determine when solution is gone. Pipes shall then be drained of water.

INSTALLATION OF PIPING

All pipe shall be run parallel to or at right angles to walls, beams, or columns. Pipe shall be run as direct as possible avoiding unnecessary offsets and maintain maximum headroom. Piping drawings are to be considered schematic and are not intended to indicate all changes in direction and necessary fittings to be furnished and installed by this Contractor. Branch take-offs shall be made with swing connections as required to avoid stress at these points. All holes required through existing floors and masonry walls shall be core drilled. Piping supports shall be spaced per manufacturer's recommendations and adjusted so that the weight of the piping is on the supports and not on the joints. Hangers for copper pipe shall be copper plated. Hanger for individual pipe hangers for pipes shall be anchored to the top chord of the roof joist members.

Excavate, as necessary, for all underground piping, etc., as indicated on drawings and/or necessary under this section. Material to be excavated hereunder in trenches for utilities shall be non-classified and shall include all earth or other materials encountered. The contract price is understood to cover the removal of all such material to the depth and extent indicated on the drawings and/or herein specified. All excavation layouts shall be approved by the General Contractor. Unless otherwise shown, provide separate trenches for each utility. Lay all piping in open trench except when the consultant gives written permission of tunneling. Excavation of trenches from surface to top of pipe shall be kept to a minimum but shall be of sufficient width for proper installation of the work. The excavation from bottom of trench to top of pipe shall be not more than twenty (20) inches wider then the outside diameter of the pipe to be laid therein, or where depth of backfill over sewer pipe exceeds ten (10) feet width or trench at top of pipe shall not exceed 3/4 of nominal diameter of pipe, plus eight inches. For larger pipe, the bottom of trench shall be shaped to conform to the lower half of pipe to be laid, and recesses four (4) inches in length shall be cut for pipe bells as required to give uniform bearing making certain that the pipe is properly supported throughout. Provide ample excavation under and around all pipe joints to permit proper caulking, sealing, welding or thread tightening. All excavations shall be properly protected by the necessary bracing and timbers to prevent and cave-ins or injury to adjacent improvements and workmen. The sides of all trenches shall be securely held by bracing or sheeting, which bracing or sheeting shall not be removed until the level of the backfill has reached the point where such removal can be safely carried out. The thickness of the sheeting and the dimensions of the cross-braces, shoes, etc., to be used by the subcontractor shall be satisfactory to protect properly, the sides of the trench and to prevent injurious cave-ins or erosions. Grading in the area of the excavation will be such that it shall prevent surface water from flowing into the excavated trench. Under no circumstances lay pipe or install appurtenances in water. Keep trench free from water until pipe joint materials have hardened. The presence of ground water in the soil or the necessity of sheeting or bracing trenches shall not constitute a condition for which an increase may be made in the contract price. Where underground lines cross, the trench of the lower pipe shall be backfilled with sharp sand, well tamped, to provide bed for higher pipe. Lines which run parallel and at different levels shall be adequately separated, to provide firm bedding for the lines. Sewer, water and gas lines shall be run in completely separate trenches, and at least three (3) feet apart at center lines, except as approved by the Consultant. Whenever possible, water lines shall be installed above sewer lines. Spoils shall be removed by the subcontractors to outside the building line. The Plumbing Contractor shall remove the spoils to off site.

BACKFILLING

Impervious fill material is required to the underside of concrete floors to six foot outside the building and all paving base. Impervious fill material shall be 1" or less granular material or onsite native material as acceptable by the geotechnical report. Where impervious fill material is required, sewer trenches shall be backfilled for a depth of at least one (1) foot over the top of pipe with clean sand or clean stone. It shall be carefully deposited in uniform layers not exceeding six (6) inches in depth. Each layer shall be carefully and solidly tamped with appropriate tools, in such a manner as to avoid injuring or disturbing the completed work. Backfill shall be placed beneath haunches of piping and thoroughly compacted to prevent lateral displacement. Compaction shall be at least 95% of the maximum dry density as determined by Standard Proctor Test. No jetting shall be permitted. Backfilling for the remainder of trench shall be done with impervious materials to the underside of the paving. All backfilling shall be deposited as directed and shall be spread in layers and solidly tamped.

Where piping is installed in ditch that has been overdug to a greater depth than required for the proper elevation or where trenches are dug under drives, walks or parking areas for sewers, water, etc., all backfill shall be granular to a point 2'-0" above pipe, and the balance of backfill shall be tamped to 95% compaction of the maximum dry density as determined by Standard Proctor Test. All surplus excavated materials shall be removed from the premises by this contractor.

All pipe insulation shall be 1" thick Owens Corning Fiberglass or approved equal. All cold and hot water above floor shall be insulated. All insulation shall comply with NFPA 90A, flame spread of 25 or less, smoke developed rating of 50 or less, ASTM E-84.

FIXTURES AND TRIM

Fixtures have not been installed.

SHOP DRAWINGS A complete schedule of materials and equipment for installation shall be submitted to the General Contractor in a suitable binder, with all sheets permanently attached, for approval before orders are placed. Seven copies of the schedules shall be required within ten days of awarding the contract, and shall include catalog numbers, cuts, diagrams, fan curves, and other descriptive data.

Shop drawings shall be submitted on the following equipment:

- Insulation
- 2. Piping Specialties
- 3. Piping and Fittings
- 4. Backflow Preventer **END OF SECTION**

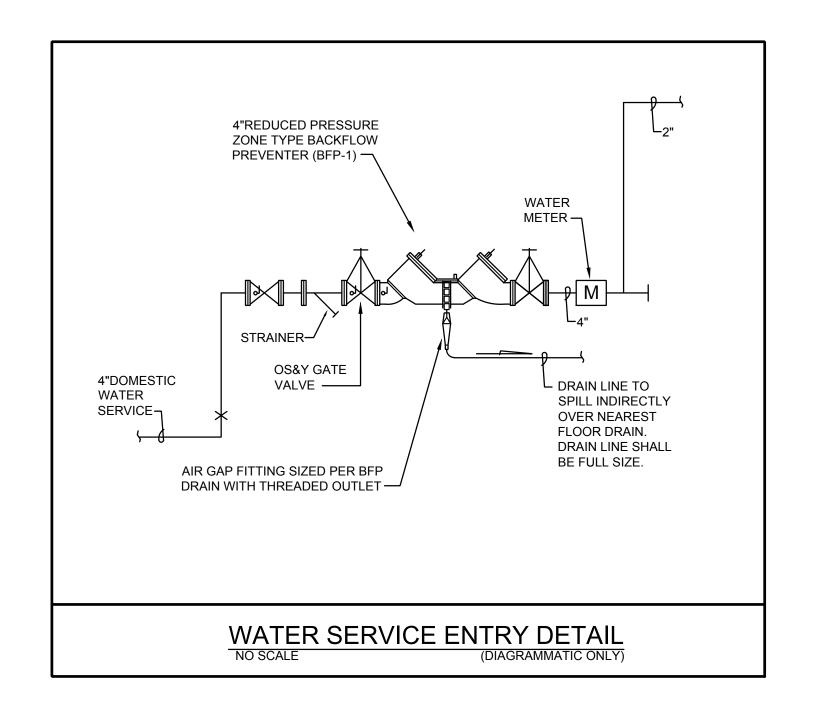
PLUMBING FIXTURE SCHEDULE							
ITEM	FIXTURE	WASTE	TRAP	VENT	CW	HW	REMARKS
BFP-1	BACKFLOW PREVENTER	-	-	-	4"	-	WATTS MODEL NO. LF909-OSY LEAD-FREE REDUCED PRESSURE ZONE ASSEMBLY WITH OS&Y SHUT-OFF VALVES AND STRAINER. EPOXY COATED CAST IRON BODY WITH STAINLESS STEEL INTERNAL PARTS. ROUTE DRAIN LINE TO MOP BASIN OR FLOOR RECEPTOR WITH AIR GAP. 175 PSI MAX PRESSURE. ASSE 1013 APPROVED.
WM-1	WATER METER	1	1	1	4"	-	NEPTUNE 4" TURBINE METER OR EQUAL BY BADGER. MAGNETIC DRIVEN, LOW TORQUE REGISTRATION, IMPACT-RESISTANT REGISTER DESIGN, TAMPER-PROOF SEAL PINS, MADE OF LEAD-FREE, HIGH-COPPER ALLOY, NSF/ANSI 61 & 372 CERTIFIED. STURDY, DURABLE, CORROSION-RESISTANT. RESISTS INTERNAL PRESSURE STRESSES AND EXTERNAL DAMAGE. DIRECT COUPLING OF ROTOR TO GEAR TRAIN PREVENTS SLIPPAGE AND ACCURATE REGISTRATION.

PLUMBING MATERIALS SCHEDULE							
MATERIAL	UNDERGROUND DRAIN, WASTE, VENT AND FITTINGS	ABOVE GROUND DRAIN, WASTE, VENT AND FITTINGS		BUILDING SUPPLY PIPE AND FITTINGS	WATER DISTRIBUTION PIPE AND FITTINGS (HW,CW)	REFERENCED STANDARD(S) PIPE	REFERENCED STANDARD(S) FITTINGS
CAST IRON(C.I.)						ASTM A74, ASTM A888, CISPI 301	ASME B16.12, ASTM A74, ASTM A888, CISPI 301
COPPER (TYPE DWV)	✓	✓				ASTM B75	ASME B16.23
PVC (SCHED. 40)	✓	✓	✓			ASTM D1785, ASTM D2665, ASTM F794 ¹	ASTM D2665, ASTM F794 ¹ , ASTM F1866
BRASS				✓	✓	ASTM B43, ASTM B135	ASME B16.23
COPPER				✓	✓	ASTM B42, ASTM B75, ASTM B88, ASTM B251, ASTM B302, ASTM B447	ASME B16.15, B16.18, ASME B16.22, ASME B16.26

HANGER SPACING FROM TABLE 308.5					
MAX. HORIZONTAL SPACING (FT.)	MAX. VERITCAL SPACING (FT.)				
10	10				
5 a	15				
12	15				
6	10				
10	10				
4	10 b				
12	15				
	FROM TABLE 308.5 MAX. HORIZONTAL SPACING (FT.) 10 5 a 12 6 10 4				

- For S1: 1 inch = 25.4 mm. 1 foot = 304.8 mm. a. The maximum horizontal spaing of cast-iron pipe hangers shall be
- increased to 10 feet where 10-foot lengths of pipe are installed. b. Midstory guide for sizes 2 inches and smaller.

W.C.O.	WALL CLEANOUT	DWH	DOMESTIC WATER HEATER	①	TEMPERATURE GAUGE
F.C.O.	FLOOR CLEANOUT	DN.	DOWN	ø	BALANCE VALVE (BV)
WC- UR-	WATER CLOSET URINAL	BFP ET	BACKFLOW PREVENTER EXPANSION TANK		CONNECT TO EXISTING
LAV- FD-	LAVATORY FLOOR DRAIN	GV BV	GATE VALVE BALL VALVE	CW	COLD WATER (CW)
. –		BG	BELOW GRADE	v	VENT (V)
V.T.R.	VENT THRU ROOF	S	STORM	— —SAN——	SANITARY SEWER (BELOW FLOOR)
A.C. AJ	ABOVE CEILING AT JOIST	T&P	TEMPERATURE AND PRESSURE RELIEF VALVE		— PRESSURE REGULATING VALVE
A.V.	ACID VENT	TD	TRENCH DRAIN	──	— BALL VALVE
A.W.	ACID WASTE	WHA	WATER HAMMER ARRESTOR		
BF	BELOW FLOOR	V	VENT		
E	EXISTING	VTR	VENT THRU ROOF		
SAN	SANITARY	AFG	ABOVE FINISH GRADE		
TP	TRAP PRIMER	AFF	ABOVE FINISH FLOOR		
CW	COLD WATER	I.E.	INVERT ELEVATION		
HW	HOT WATER	WCO	WALL CLEANOUT		
W	SANITARY WASTE				



T&W bid set 9/13/21

THE PROFESSIONAL WHOSE SIGNATURE ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS DRAWING, AN DISCLAIMS ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS,

ALL OTHER PLANS, SPECIFICATIONS,
ESTIMATES, REPORTS OR OTHER
DOCUMENTS OR INSTRUMENTS NOT
SEALED BY THE REFERENCED
PROFESSIONAL RELATING TO, OR
INTENDED TO BE USED FOR, ANY PART
OR PARTS OF THE PROJECT TO WHICH
THIS DRAWMING DEEEDS

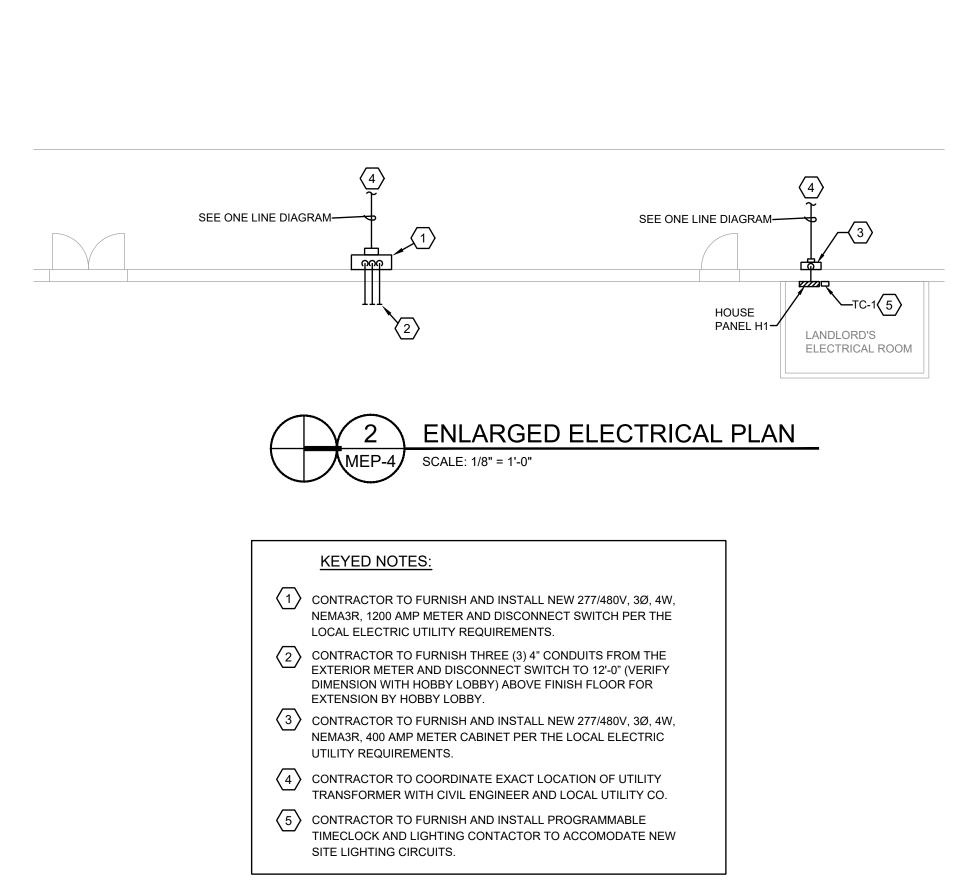
THIS DRAWING REFERS

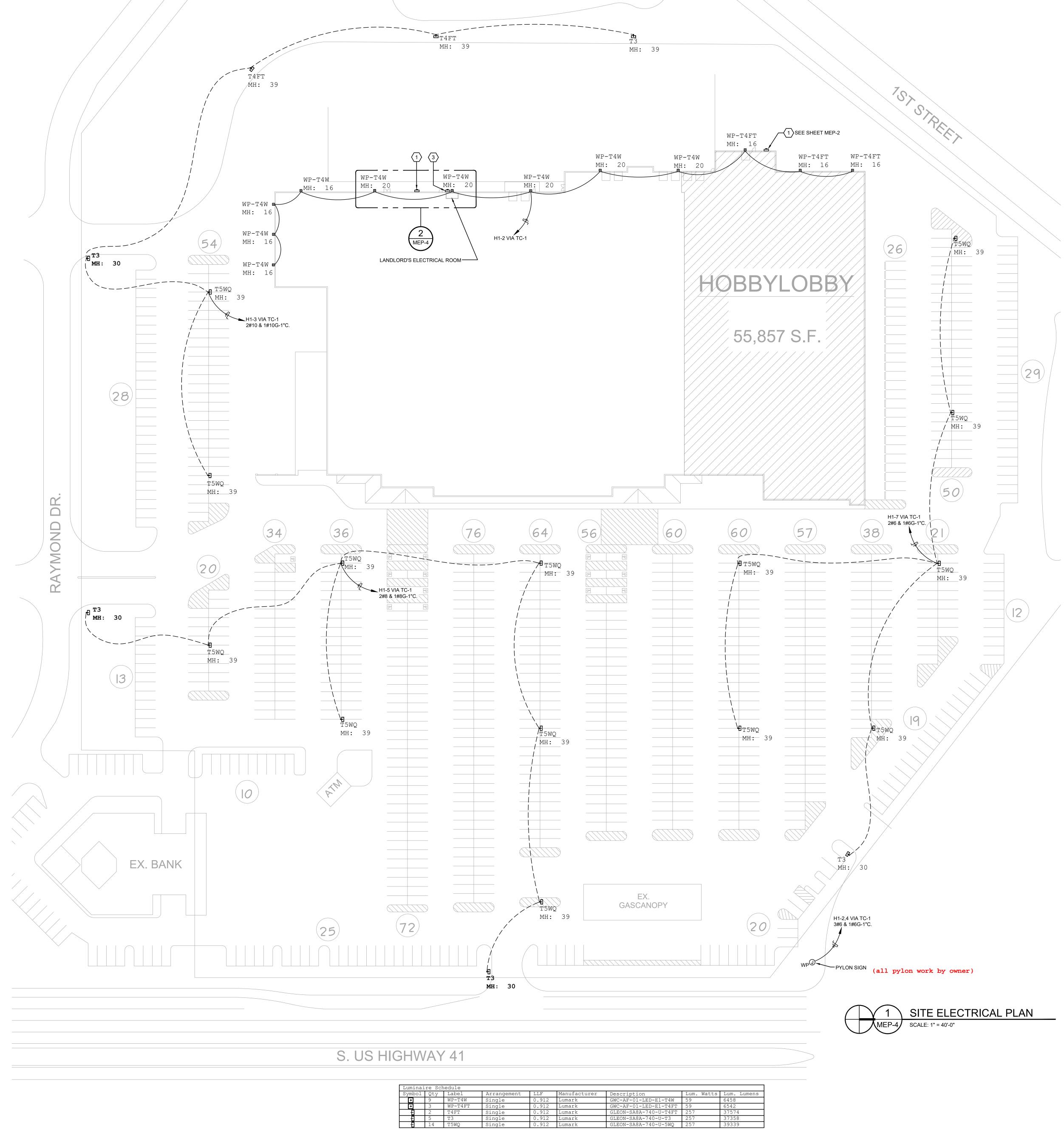


project no. 2210488 8/5/21

MEP SCHEDULES AND SPECIFICATIONS

MEP-3





INDIANA

Engineering Inc.
796 Merus Court
St. Louis, MO 63026
F 636.349.1600
St. Louis, MO 63026
F 636.349.1730

kstone Group, LLC

THE PROFESSIONAL WHOSE SIGNATURE AND PERSONAL SEAL APPEAR HEARON, ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS DRAWING, AND DISCLAIMS ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE REFERENCED PROFESSIONAL RELATING TO, OR INTENDED TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS DRAWING REFERS

NOVAGROUP, inc.
ARCHITECTS & ENGINEERS
6312 Hazelwood, MO 63042
(314) 731-5353

project no. 2210488

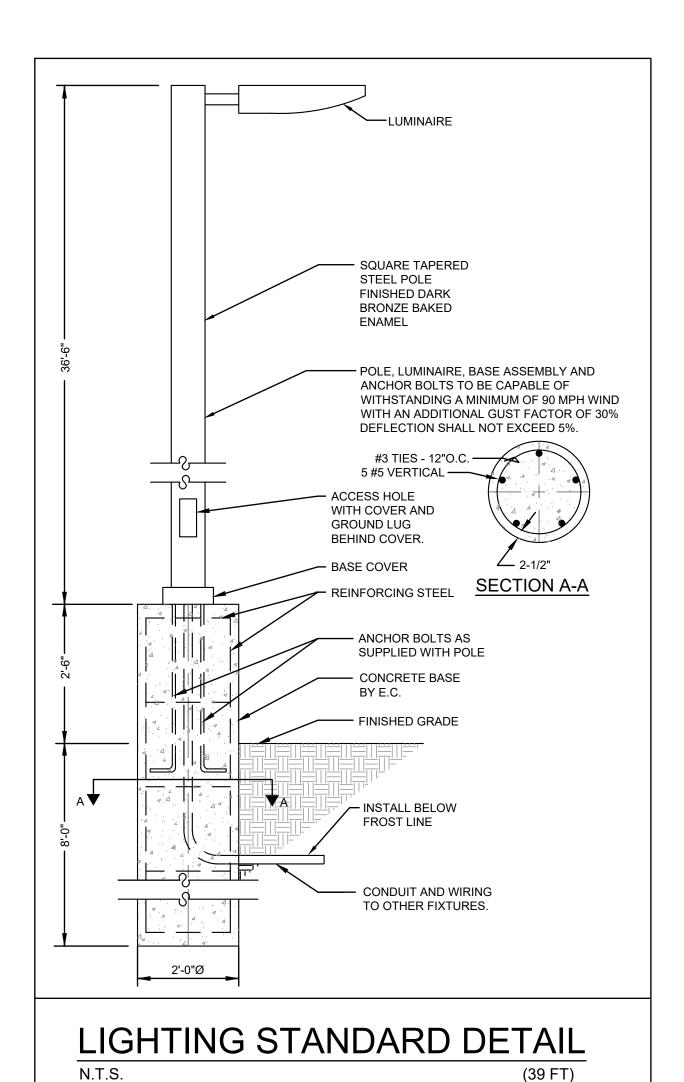
drawn by JDS

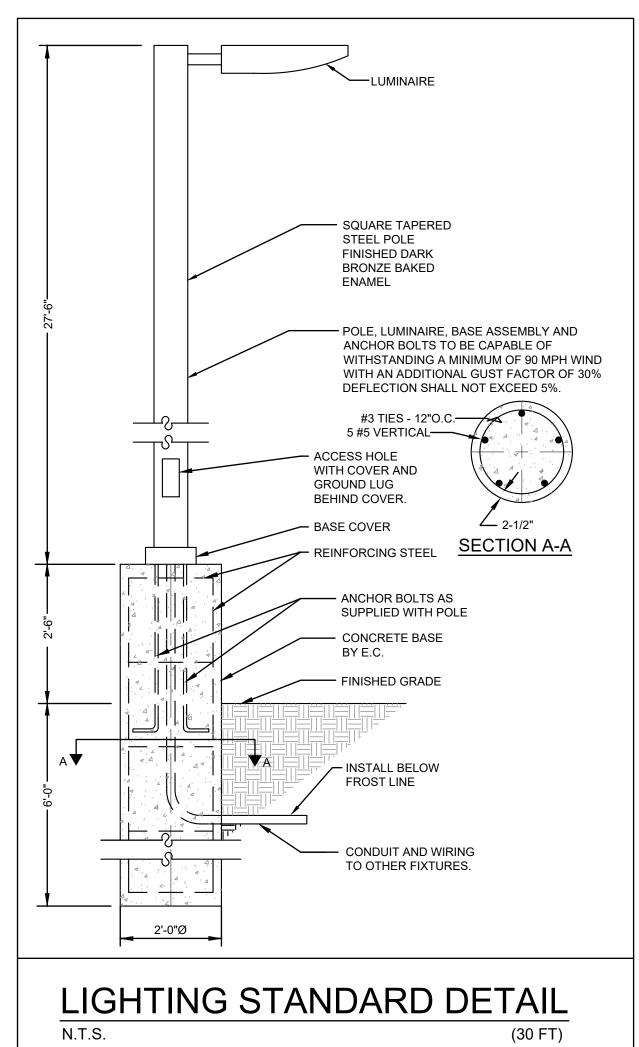
date 8/5/21

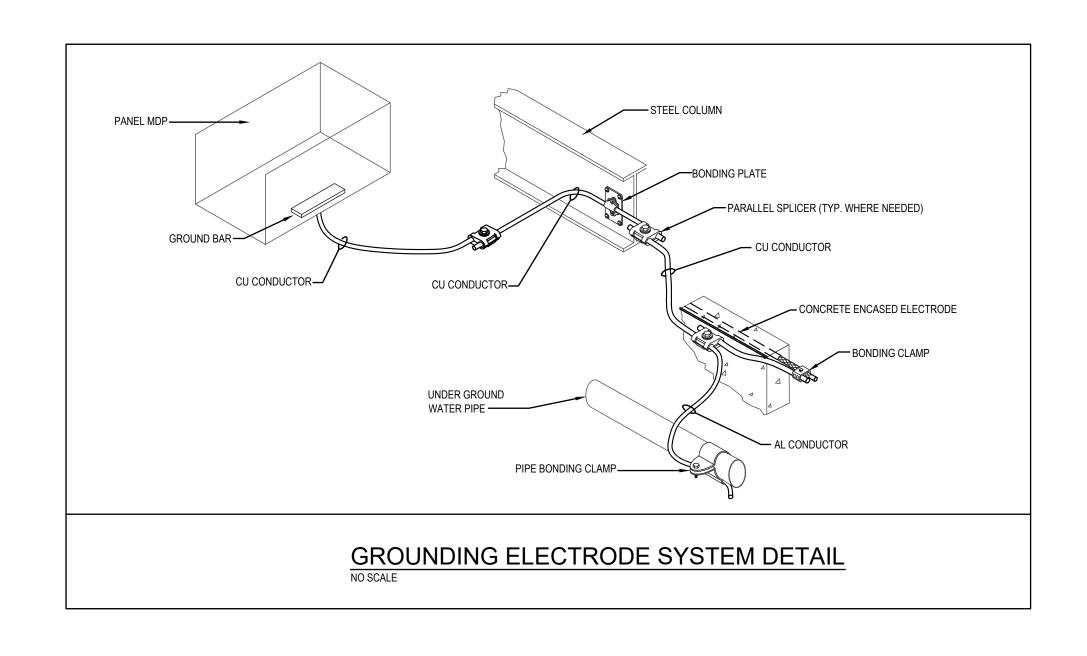
REV DATE

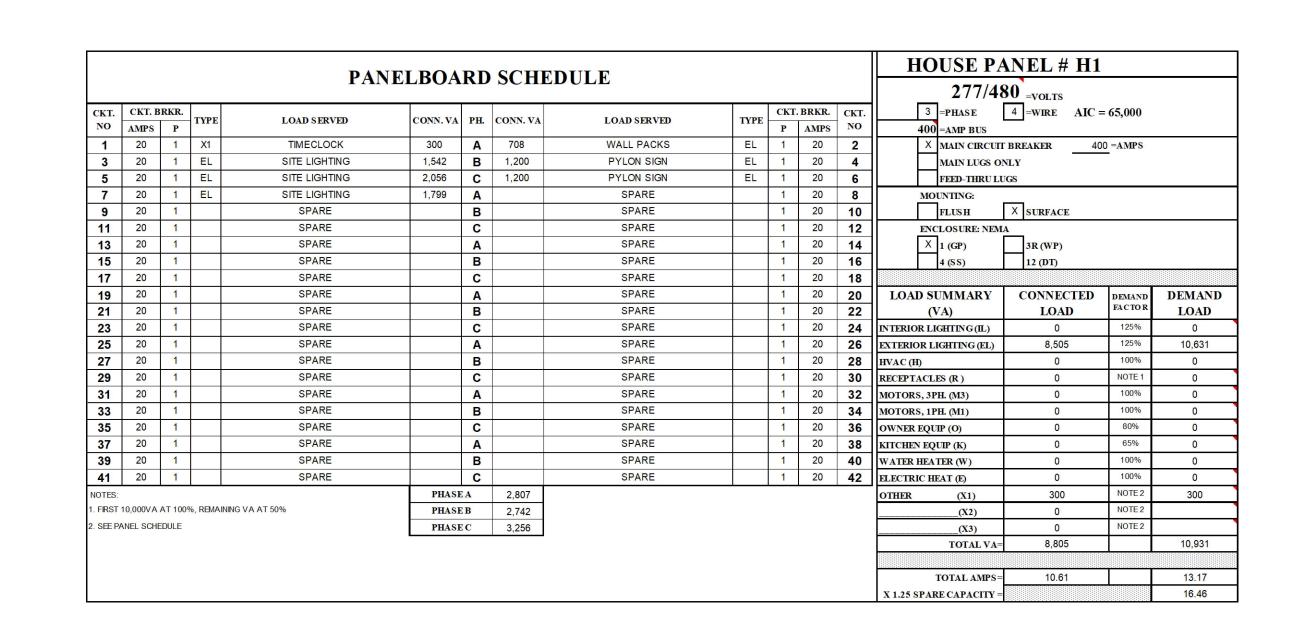
SITE LIGHTING PLAN

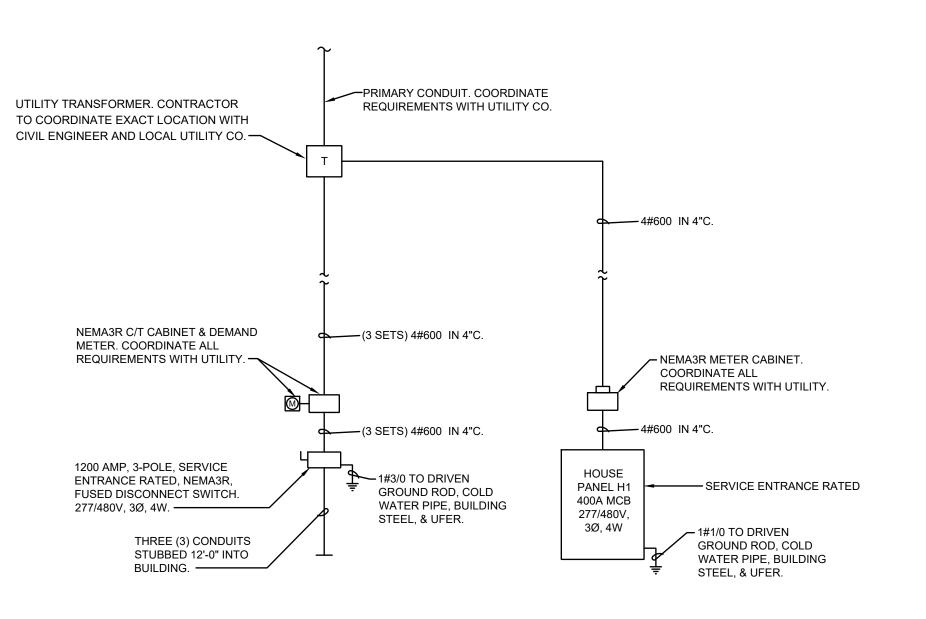


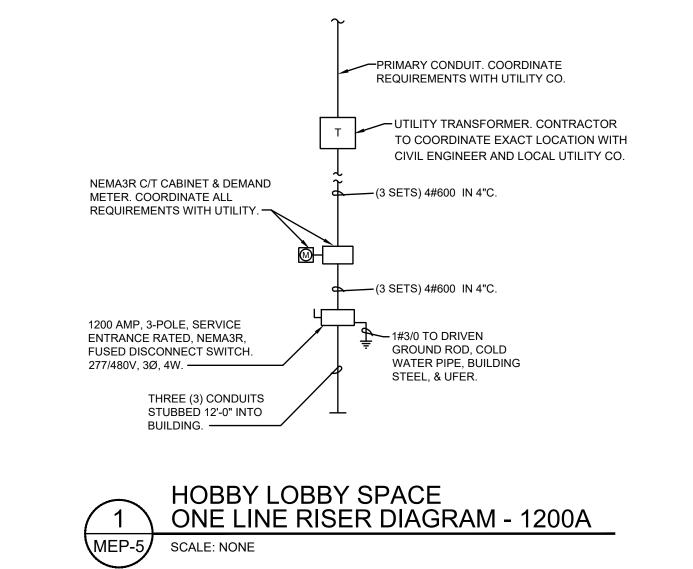












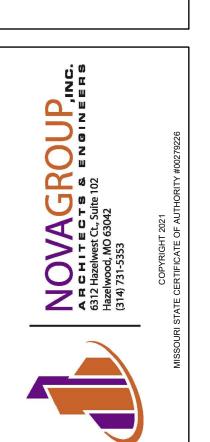
UNOCCUPIED SPACE / HOUSE SERVICE ONE LINE RISER DIAGRAM - 1200A / 400A

MEP-5 SCALE: NONE



Blackstone Group, LLC
Shopping Center Renovation
4661 S. US Highway 41

THE PROFESSIONAL WHOSE SIGNATURE AND PERSONAL SEAL APPEAR HEARON, ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS DRAWING, AND DISCLAIMS ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE REFERENCED PROFESSIONAL RELATING TO, OR INTENDED TO BE USED FOR, ANY PART OR PARTS OF THE PROJECT TO WHICH THIS DRAWING REFERS



project no. 2210488

drawn by JPS

date 8/5/21

REV DATE

BY DATE

SCHEDULES & DETAILS