

REVISIONS

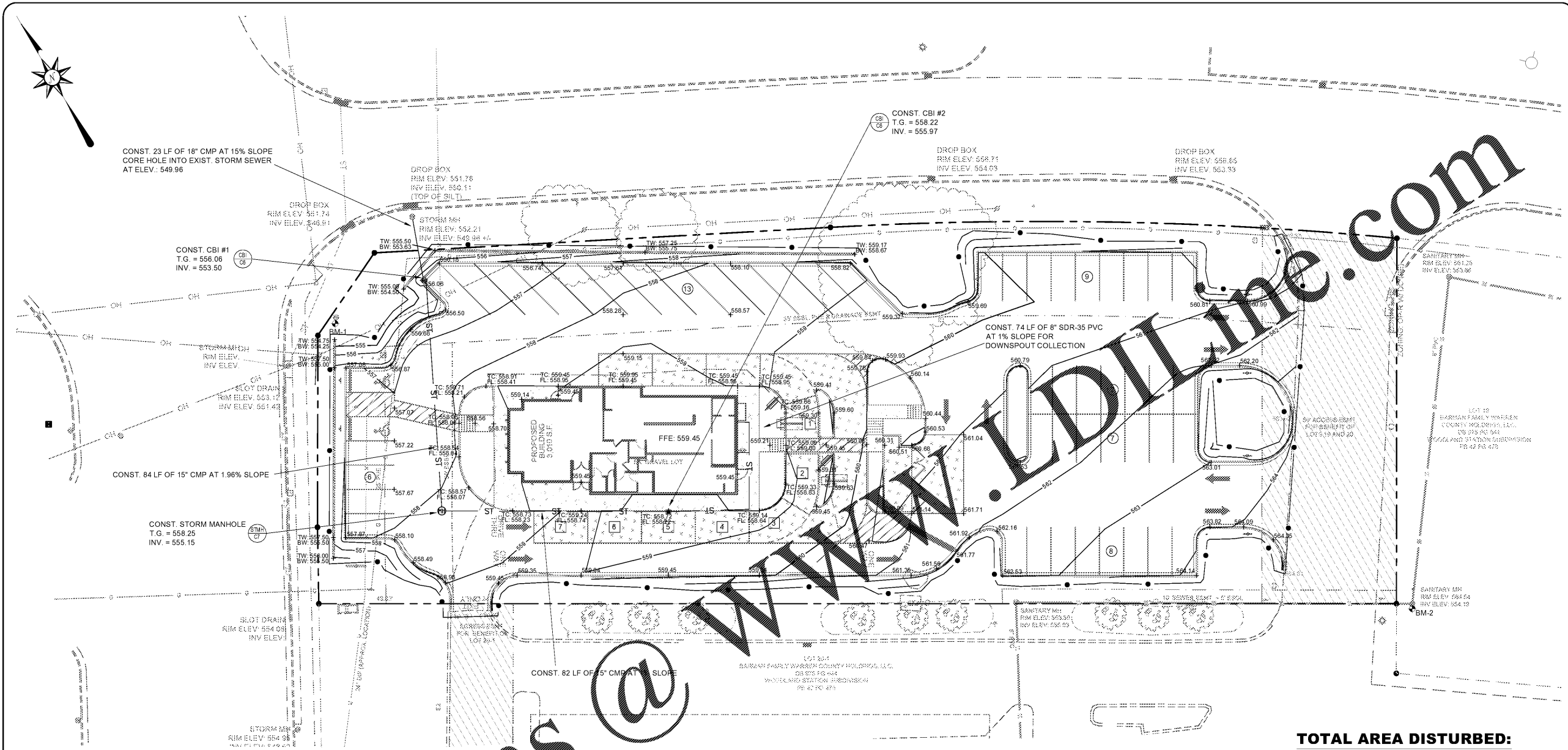
PopPeyes
 NASHVILLE ROAD
 BOWLING GREEN, KY 42103

ACES
 ARNOLD CONSULTING
 ENGINEERING SERVICES, INC.
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 BOWLING GREEN, KY 42101
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JOB NUMBER: 20-1336-L
 DATE: 04-30-2020
 SCALE: 1" = 20'
 DRAWN: A. ARNOLD
 CHECKED: A. ARNOLD
 FILE PATH:
 Z:\SITE\DEV\3-SITE GRADING & DRAIN



C3
 SITE GRADING
 AND DRAINAGE



GRADING & DRAINAGE NOTES

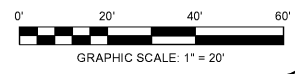
- CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES HAVING UNDERGROUND UTILITIES ON SITE OR IN RIGHT-OF-WAY PRIOR TO EXCAVATION. CONTRACTOR SHALL NOTIFY KENTUCKY 811 48 HOURS PRIOR TO EXCAVATION.
- SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
- NO CUT OR FILL SLOPES SHALL BE CONSTRUCTED STEEPER THAN 2H:1V UNLESS SPECIFICALLY NOTED ON PLANS.
- SITE GRADES AROUND THE BUILDING AND PAVEMENT AREAS SHALL BE GRADED DURING CONSTRUCTION TO PREVENT PONDING. ANY SURFACE WATER ACCUMULATION IN THE BUILDING AND PAVEMENT AREAS SHALL BE DRAINED IMMEDIATELY TO AVOID SATURATION OF THE SUBGRADE SOILS.
- FILL, INCLUDING FINAL TOPSOIL SHALL BE PLACED A MINIMUM OF 3 INCHES BELOW FFE AT BUILDING SLABS UNLESS OTHERWISE INDICATED BY ARCHITECTURAL WALL SECTION DETAILS.
- GRADES WITHIN 10' OF BUILDING SHALL HAVE A MINIMUM SLOPE OF 2% AWAY FROM THE BUILDING.
- ALL EXCAVATIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST OSHA GUIDELINES AS MANDATED IN CURRENT FEDERAL, STATE AND LOCAL REGULATIONS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE IN PROVIDING SAFE WORKING CONDITIONS IN CONNECTION WITH ANY EXCAVATION WORK.
- ENGINEERED FILL SHALL BE COMPACTED TO 98% OF STANDARD PROCTOR DENSITY IN BUILDING PAD AREAS (PROPOSED AND FUTURE EXPANSION) AND TO 95% IN PARKING AND DRIVE AREAS. VEGETATED AREAS SHOULD BE COMPACTED TO A MINIMUM OF 92% OF STANDARD PROCTOR DENSITY.
- STONE BASES SHOULD BE COMPACTED TO A DENSITY SATISFACTORY TO ENGINEER, TYPICALLY 94% OF SOLID VOLUME OR BY TEST STRIP METHODS.
- ALL EXISTING STRUCTURES, UNLESS OTHERWISE NOTED TO REMAIN, FENCING, TREES, ETC. WITHIN THE CONSTRUCTION AREA SHALL BE REMOVED AND DISPOSED OF OFF SITE.
- GRADE LINES SHOWN ARE FINISHED GRADE. CONTRACTOR SHOULD SEE DETAIL SHEET FOR APPROPRIATE PAVEMENT TYPE TO DETERMINE SUB-GRADE ELEVATIONS FOR PAVING AREAS.
- CONTRACTOR IS ADVISED THAT FINAL GRADING AND CURB PLACEMENT SHALL BE COMPLETED TO ACCOMMODATE THE FOLLOWING:
 - NO WATER WILL POND AT POINTS WHERE LANDSCAPE ISLANDS EXTEND INTO PARKING FIELDS.
 - SPACES DESIGNATED FOR HANDICAP PARKING AND ACCESS AISLE SHALL HAVE A FINAL SLOPE AFTER PAVING IS COMPLETED OF NOT MORE THAN 2.0%. IF EITHER OF THESE ITEMS ARE NOT CONSTRUCTED AS OUTLINED ABOVE, REWORK WILL BE PROVIDED BY THE CONTRACTOR TO CORRECT DEFICIENCIES AT THE CONTRACTORS EXPENSE.
- ALL SPOT ELEVATIONS SHOWN ARE FINISHED GRADE. SPOT ELEVATIONS SHOWN ALONG GUTTER LINE ARE FLOW ELEVATIONS FOR FACE OF CURB.

**TOTAL AREA DISTURBED:
 0.97 ACRES**

STORM WATER RUNOFF CALCULATIONS	
PRE-DEVELOPED	
TOTAL AREA (A _T) = 1.26 ACRES	
AREA OF IMPERVIOUS (A _I) = 0.22 ACRES	
AREA OF PERVIOUS (A _P) = 1.04 ACRES	
C _I = 0.95 C _p = 0.25	
WT. "C" = (A _I * C _I) + (A _P * C _p) = (0.22 * 0.95) + (1.04 * 0.25) = 0.37	
At 1.26	
POST-DEVELOPED	
TOTAL AREA (A _T) = 1.26 ACRES	
AREA OF IMPERVIOUS (A _I) = 0.93 ACRES	
AREA OF PERVIOUS (A _P) = 0.33 ACRES	
C _I = 0.95 C _p = 0.25	
WT. "C" = (A _I * C _I) + (A _P * C _p) = (0.93 * 0.95) + (0.33 * 0.25) = 0.77	
At 1.26	
DEVELOPMENT IS BELOW THE ALLOWABLE 90% LOT COVERAGE. NO RETENTION REQUIRED	
DEVELOPMENT IS BELOW THE ONE (1) ACRE DISTURBED AREA. NO WATER QUALITY DEVICES REQUIRED.	

CONSTRUCTION LEGEND

- CURB BOX INLET
- STORM MANHOLE
- HEADWALL



BENCHMARK DATA:

- BENCHMARK 1
 TELEPHONE MANHOLE LOCATED APPROX. 9.45' FROM A SET IRON PIN.
 N: 1866416.17
 E: 1428472.26
 KY SPC (SOUTH)
 ELEV: 554.71
- BENCHMARK 2
 SANITARY SEWER MANHOLE LOCATED APPROX. 5.88' FROM A SET IRON PIN.
 N: 1866124.04
 E: 1428765.42
 KY SPC (SOUTH)
 ELEV: 554.52

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