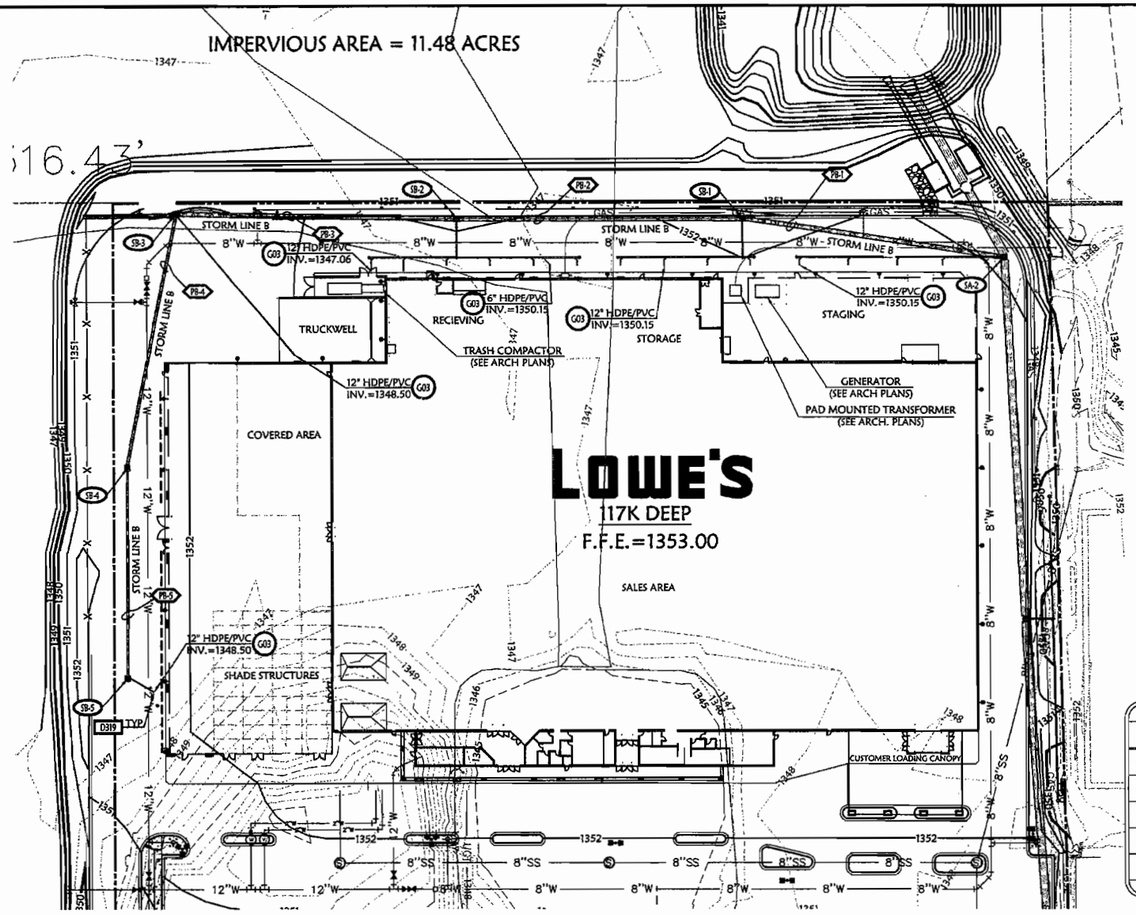
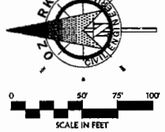




CALL BEFORE YOU DIG
1-800-DIG-SAFE
KANSAS ONE CALL SYSTEM

BENCHMARK
City of Wichita Disc on the northwest corner of 29th St. N. and Maize Rd.

Elevation = 1349.32 (M.S.L)
Elevation = 161.92 (City Datum)

GRADING PROPOSED FEATURES

- BOUNDARY LINE
- RIGHT OF WAY LINE
- EASEMENT LINE
- CONCRETE CURB AND GUTTER
- FENCE
- GUARD RAIL
- RETAINING WALL
- SANITARY SEWER SERVICE
- WATER SERVICE
- UGE — UNDERGROUND ELECTRIC SERVICE
- UGT — UNDERGROUND TELEPHONE SERVICE
- OHE — OVERHEAD ELECTRIC SERVICE
- OHT — OVERHEAD TELEPHONE SERVICE
- FO — FIBER OPTIC CABLE SERVICE
- GAS — GAS SERVICE
- SPOT ELEVATIONS:
  - TC=TOP OF CURB
  - G =GUTTER OF CURB
  - TG=TOP OF GRADE (BEHIND TOP OF WALL)
  - BG=BOTTOM OF GRADE (AT FRONT OF WALL)
  - HP=HIGH POINT
  - LP=LOW POINT
  - EP=EDGE OF PAVEMENT
  - FES=FLARED END SECTION
- RIP-RAP PAD (SEE EROSION PLANS FOR SIZE)
- SANITARY SEWER MANHOLE
- FIRE HYDRANT WITH GUARD POSTS
- UTILITY POLE
- WATER LINE TEE, BEND, VALVE, AND PLUG

GRADING DETAILS

Items labeled by the following symbols are shown on this sheet and referenced on detail sheets, which are included as part of this set of plans.

- D318 — FRENCH DRAIN DETAIL
- D319 — CLEANOUT DETAIL
- D500 — CITY OF WICHITA, KANSAS DROP INLET DETAIL
- VTX — VORTECHS STORMWATER TREATMENT SYSTEM

GRADING AND DRAINAGE NOTES:

INFORMATION PERTAINING TO UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS AND FIELD LOCATIONS WHEN POSSIBLE, BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF ALL EXISTING UTILITIES BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS IN ADVANCE OF MACHINE TRENCHING. IF CLEARANCES ARE LESS THAN SPECIFIED ON THESE PLANS OR 18", WHICH EVER IS LESS, CONTACT THE ENGINEER AND THE OWNER/ DEVELOPER PRIOR TO PROCEEDING WITH CONSTRUCTION.

ALL STRUCTURES LOCATED WITHIN R.O.W/ OR OTHERWISE NOTED ON THESE PLANS SHALL BE CONSTRUCTED PER THE HIGHWAY DEPARTMENT STANDARDS. IF STRUCTURES ARE NOT PROTOTYPICAL OR CONSTRUCTION CANNOT BE ACHIEVED CONTRACTOR SHALL SUBMIT SHOP DRAWING TO CLEARK CIVIL ENGINEERING, INC. FOR REVIEW AND APPROVAL.

WHERE THE WORD PIPE IS USED ON THESE PLANS, THE CONTRACTOR HAS THE OPTION TO BID MATERIAL WITH n=0.012 OR LESS.

CONTRACTOR SHALL BE RESPONSIBLE FOR RELOCATION OR REMOVAL OF EXISTING UNDERGROUND UTILITIES SHOWN OR NOT SHOWN AT NO ADDITIONAL COST TO THE OWNER.

CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES ON ADJUSTING EXISTING UTILITY LINE AS REQUIRED BY CUT AND FILL AT NO ADDITIONAL COST TO THE OWNER.

CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF SHEETING, SHORING, BRACING AND SPECIAL EXCAVATION MEASURES REQUIRED TO MEET OSHA, FEDERAL STATE AND LOCAL REGULATIONS PURSUANT TO THE INSTALLATION OF THE WORK INDICATED ON THESE DRAWINGS.

ALL STORM DRAIN PIPES ARE MEASURED FROM CENTER OF STRUCTURES AND END OF FLARED END SECTIONS.

RETAINING WALL(S) SHALL BE CONSTRUCTED TO EXTEND A MINIMUM OF 6 INCHES ABOVE THE TOP OF FINISHED GRADE. CONTRACTOR SHALL REFER TO THE RETAINING WALL PLANS FOR CONSTRUCTION AND DESIGN SPECIFICATIONS. CONTRACTOR SHALL NOTIFY CLEARK CIVIL ENGINEERING, INC. IF RETAINING WALL PLANS DIFFER FROM THIS.

ALL DISTURBED AREAS AND SLOPES SHALL BE GRADED SMOOTH AND (4") OF TOP SOIL APPLIED. THE AREA SHALL BE SEEDED AND WATERED UNTIL HARDY GRASS GROWTH HAS BEEN ESTABLISHED. (SEE LANDSCAPING GENERAL NOTES FOR SEEDING SPECIFICATIONS)

STORM DRAIN FREE BEDDING SHALL BE INSTALLED PER DETAIL D526 (SEE DETAIL SHEET)

SEE EROSION CONTROL PLAN FOR RIP RAP PAD SIZES.

CONTRACTOR SHALL CONSTRUCT AND MAINTAIN ALL EROSION AND SEDIMENTATION CONTROL PRACTICES IN ACCORDANCE WITH THE EROSION CONTROL PLAN AND CONSTRUCTION SCHEDULE. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR IMPLEMENTING THE SWPPP.

REMOVE GOOD TOPSOIL FROM AREAS TO BE GRADED AND FILLED, AND PRESERVE IT FOR USE IN FINISHING THE GRADING OF ALL CRITICAL AREAS.

SCARIFY AREAS TO RECEIVE TOPSOIL TO A MINIMUM DEPTH OF 3 INCHES BEFORE PLACING TOPSOIL PER OI NER/DEVELOPER, CITY AND/OR HIGHWAY DEPARTMENT STANDARDS AND SPECIFICATIONS

CLEAR AND GRUB AREAS TO BE FILLED, REMOVE TREES, VEGETATION, ROOTS, OR OTHER DEBRIS, AND OTHER MATERIALS THAT WOULD AFFECT THE STABILITY OF THE FILL.

ENSURE THAT FILL MATERIAL IS FREE OF BRUSH, RUBBISH, SOOD, LOGS, STUMPS, BUILDING DEBRIS, AND OTHER MATERIALS INAPPROPRIATE FOR CONSTRUCTING STABLE FILLS.

DO NOT INCORPORATE FROZEN MATERIAL OR SOFT, MUCK, OR HIGHLY COMPRESSIBLE MATERIALS INTO FILL SLOPES.

KEEP DIVERSIONS AND OTHER WATER CONVEYANCE MEASURES FREE OF SEDIMENT DURING ALL PHASES OF DEVELOPMENT.

PERMANENTLY STABILIZE ALL GRADED AREAS AFTER FINAL GRADING IS COMPLETED ON EACH AREA OF THE GRADING PLAN. APPLY TEMPORARY STABILIZATION MEASURES ON ALL GRADED AREAS WHEN WORK IS TO BE INTERRUPTED OR DELAYED (SEE EROSION CONTROL PLANS).

CONTRACTOR SHALL MATCH TOP OF PROPOSED DRAINAGE STRUCTURES WITH PROPOSED GRADES. IF A DISCREPANCY OCCURS BETWEEN PROPOSED GRADES AND PROPOSED STRUCTURE TOPS, THE GRADING SHALL GOVERN. IF THE DISCREPANCY IS MORE THAN 4 INCHES THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD.

ALL UTILITIES, INCLUDING STORM SEWER, SHOWN WITHIN PUBLIC EASEMENTS OR RIGHT OF WAYS SHALL BE CONSTRUCTED TO THE GOVERNING AGENCY'S SPECIFICATIONS. ALL OTHER UTILITIES SHALL BE CONSTRUCTED TO THE CLIENT'S OR THE GOVERNING AGENCY'S SPECIFICATIONS, WHICHEVER IS MORE STRINGENT, IF THERE IS A QUESTION AS TO WHICH SPECIFICATIONS SHOULD APPLY THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD.

ALL EXISTING STRUCTURES, UNLESS OTHERWISE NOTED TO REMAIN, ALL FENCING, TREES, & ETC., WITHIN CONSTRUCTION AREA SHALL BE REMOVED & DISPOSED OF OFF SITE. UNLESS OTHERWISE NOTED. ANY BURNING ON SITE SHALL BE SUBJECT TO LOCAL ORDINANCES AND/OR THE OWNER/DEVELOPERS STANDARDS AND SPECIFICATIONS. (SEE DEMOLITION PLAN)

ALL DRAINAGE STRUCTURES SHALL BE PRE-CAST.

ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC (HDT) LOADING AND BE INSTALLED ACCORDINGLY.

CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES HAVING UNDERGROUND UTILITIES ON SITE OR IN RIGHT-OF-WAY PRIOR TO EXCAVATION. CONTRACTOR SHALL CONTACT UTILITY LOCATING COMPANY (STATE ONE CALL SYSTEM) AND LOCATE ALL UTILITIES PRIOR TO GRADING START.

SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.

AFTER PERMITS HAVE BEEN OBTAINED & EROSION CONTROL MEASURES INSTALLED, THE CONTRACTOR SHALL GRADE BUILDING PAD, GARDEN CENTER & APRONS TO 0' TO -1/2' OF SUBGRADE AS PER SECTION 02300, DIVISION 2 OF LOWES STANDARD SITE SPECIFICATIONS.

IMMEDIATELY APPLY & COMPACT STONE BASE FOR BUILDING PAD TO +/- 1/2' PRIOR TO EXCAVATING INTERIOR & PERIMETER FOOTINGS.

FRENCH DRAINS SHALL BE INSTALLED IF DIRECTED BY THE GEOTECHNICAL ENGINEER OR AS SHOWN ON PLANS PER DETAIL D318. (SEE DETAIL SHEET)

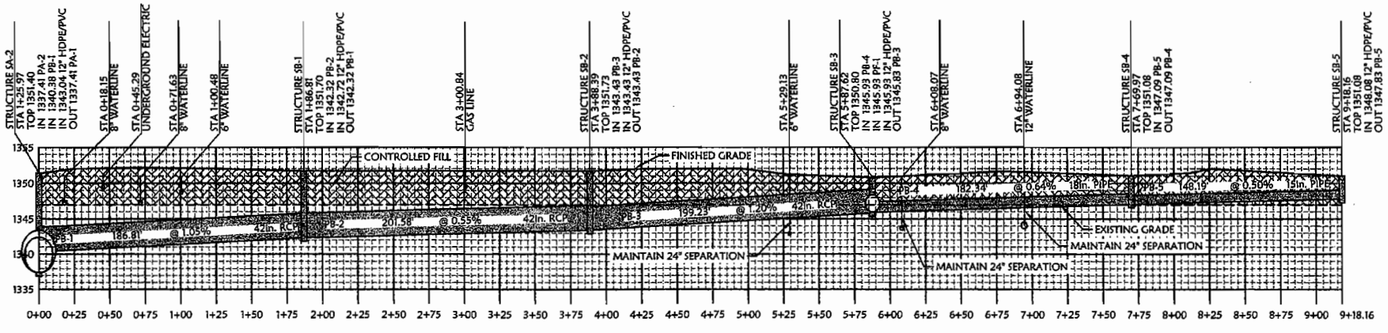
GENERAL CONTRACTOR SHALL PROVIDE 2' x 2' x 6" THICK CONCRETE APRON AT ALL CLEANOUTS OUTSIDE OF BUILDING AND IN PAVED AREAS.

ALL ROOF DRAINS TO BUILDING SHALL ENDS' OUTSIDE THE BUILDING LIMITS AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AT THE ENDS. (SEE ARCH'S. PLANS FOR EXACT SIZE AND LOCATION OF ROOF DRAINS)

ALL WORK TO BE DONE IN STRICT ACCORDANCE WITH DIVISION 2 OF LOWES STANDARD SITE SPECIFICATIONS.

DRAINAGE STRUCTURE SCHEDULE

STRUCTURE NUMBER	STRUCTURE	TOP of	DETAIL NUMBER	INV. IN (SIZE) & DIRECTION	INV. IN (SIZE) & DIRECTION	INV. IN (SIZE) & DIRECTION	INV. OUT (SIZE) & DIRECTION	DRAINAGE AREA	CFS	TOTAL CFS	PIPE NUMBER	PIPE LENGTH & SLOPE
SB-5	DROP INLET	GRATE 1351.08	D316	1348.08 12" HDPE/PVC			1347.83 15" RPE	.49 AC.	4.55	4.55	PB-5	148 L.F. @ 0.50%
SB-4	DROP INLET	GRATE 1351.08	D316	1347.09 15" RPE			1347.09 15" RPE	.40 AC.	3.72	8.27	PB-4	182 LF @ 0.64%
SB-3	CURB INLET	CURB 1351.30	D317	1345.93 15" RPE 'B'	1345.93 20' RCP N	1345.93 12" HDPE/PVC 'B'	1345.03 42" RCP S	4.54 AC.	30.03	38.30	PB-3	709 LF @ 1.20%
SB-2	CURB INLET	CURB 1352.23	D317	1343.42 42" RCP N		1343.43 12" HDPE/PVC 'B'	1343.43 42" RCP S	0.19 AC.	11.88	49.68	PB-2	202 L.F. @ 0.55%
SB-1	CURB INLET	CURB 1352.20	D317	1342.35 42" RCP N		1342.72 12" HDPE/PVC 'B'	1342.37 42" RCP S	0.36 AC.	8.91	57.59	PB-1	187 LF @ 1.05%



STORM SEWER PROFILE B
VERTICLE SCALE: 1"=5'
HORIZONTAL SCALE: 1"=50'

REVISIONS
◇ PRE-BID SET ISSUE DATE | △ POST BID SET ISSUE DATE

DATE	DESCRIPTION

SCOTT P. McGEE LICENSED 13947 KANSAS PROFESSIONAL ENGINEER
5/15/08

Civil Engineering Inc.
Bentonville • Kansas City • Austin

LOWE'S HOME CENTERS, INC.
1605 CURTIS BRIDGE ROAD
REEC DOCK
WILKESBORO, NC 28697
336.658.4000 (V) 336.658.3257 (F)

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LOWE'S

STORM SEWER PLAN & PROFILE
STORM RUN B

LOWE'S OF
N.W. WICHITA
MAIZE RD. & CENTRAL PARK ST. WICHITA, KS.

PROJECT No: 04-0460 | DRAWN BY: JC | CHECKED BY: SM

ORIGINAL ISSUE DATE:	
PERMIT SET ISSUE DATE:	
CONSTRUCTION SET ISSUE DATE:	8-17-07

DRAWING NUMBER:
8.5

04-0460-REV 3(For City)