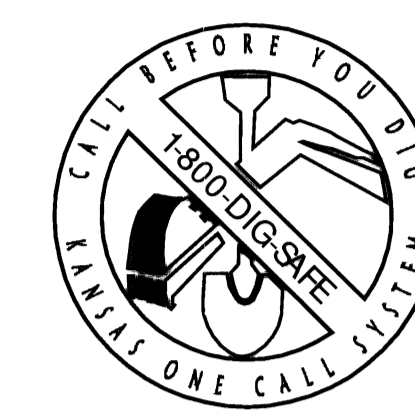
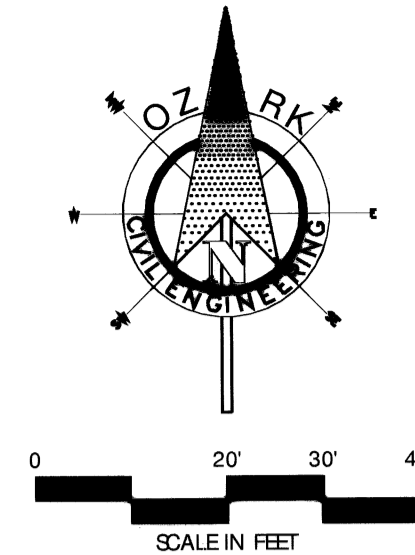


DATE	REV	DESCRIPTION
3-29-07		REVISED PER TASK ORDER COMMENTS 3-26-07
5-17-07	2	REVISED PER 3011 UNDERGROUND UTILITY SERVICE
6-11-07	3	REVISED PER 3011 UNDERGROUND UTILITY SERVICE



### 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
- UNDERGROUND ELECTRIC SERVICE
- UNDERGROUND TELEPHONE SERVICE
- OVERHEAD ELECTRIC SERVICE
- OVERHEAD TELEPHONE SERVICE
- FIBER OPTIC CABLE SERVICE
- GAS SERVICE
- SPOT ELEVATIONS
- TC - TOP OF CURB
- G - GUTTER OF CURB
- TS - TOP OF GRADE (END TOP OF WALL)
- B - BOTTOM OF GRADE (AT FRONT OF WALL)
- PH - HIGH POINT
- LP - LOW POINT
- EN - END OF MANHOLE
- FB - FLARED END SECTION
- RIP-RAP PAD (SEE EROSION PLAN FOR SIZE)
- SANITARY SEWER MANHOLE
- FIRE HYDRANT WITH GUARD POSTS
- UTILITY POLE
- WATER LINE TEE, BEND, VALVE, AND PLUG
- DRY CONCRETE CURB AND GUTTER



FOR PAVEMENT SECTIONS SEE DETAIL SHEET SD1 AND REFER TO GEO TECHNICAL REPORT PREPARED BY KLENFELDERS JANUARY 15, 2007 \*CONSULT WITH MCDONALDS PROJECT MANAGER FOR ALTERNATE SECTIONS

### DRAINAGE STRUCTURE SCHEDULE

STRUCTURE NUMBER	STRUCTURE TYPE	TOP OF	DETAIL NUMBER	INV. IN (W/SIZE & DIRECTION)	INV. IN (W/SIZE & DIRECTION)	INV. OUT (W/SIZE & DIRECTION)	DRAINAGE AREA	CFR (10 YR)	TOTAL CFS	PIPE NUMBER	PIPE LENGTH & SLOPE
SA-3	CURB INLET	1315.15	US-4	1309.98 10" PIPE	1310.56 8" PVC	1309.48 10" RCP	0.59	1.58	1.26	PA-2	147.74 LF @ 1.0%
SA-2	CURB INLET	1315.20	US-4	1307.43 10" PIPE	1303.65 60" RCP	1303.65 60" RCP	0.20	1.32	2.58	PA-1	112.5 LF @ 4.0%
SA-1	EX. CURB INLET	1313.90	US-4	1311.00 6" PIPE	1310.32 10" RCP	1310.32 10" RCP	0.33	2.18	2.18	PA-2	45.34 LF @ 10.0%
SB-3	CURB INLET	1313.70	US-4	1309.87 10" PIPE	1309.77 10" RCP	1309.77 10" RCP	0.6	0.99	3.17	PA-1	50.78 LF @ 2.0%
SB-2	CURB INLET	1314.40	US-4	1308.75 10" PIPE	1308.00 60" RCP	1308.00 60" RCP	0.5	0.99	3.17	PA-1	50.78 LF @ 2.0%
SB-1	JUNCTION BOX	1313.70	US-1	1308.75 10" RCP	1305.00 60" RCP	1304.97 60" RCP	-	-	-	-	-

### GRADING NOTES & DETAILS

- XXX - Match existing paving
- COI - Vertical separation
- V5 - Typical trench drain
- UM1 - Oil skimmer manhole

### GRADING AND DRAINAGE NOTES:

INFORMATION PERTAINING TO UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS AND FIELD LOCATIONS WHEN POSSIBLE. THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF ALL EXISTING UTILITIES BY DIGGING TEST PIT(S) HAND AT ALL UTILITIES CROSSING AN ADVANCE OF MACHINE TRACKING. IF CANNOT BE LOCATED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND DEPTH OF ALL UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF WICHITA AND THE KANSAS DEPARTMENT OF TRANSPORTATION AND HIGHWAYS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF WICHITA AND THE KANSAS DEPARTMENT OF TRANSPORTATION AND HIGHWAYS.

WHERE THE WORD "RELOCATED" IS USED ON THESE PLANS, THE CONTRACTOR HAS THE OPTION TO BID MATERIAL WITH IN-PLACE CURBS.

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 PHOTOGRAPHIC OR CONSTRUCTION CANNOT BE ACHIEVED, THE CONTRACTOR SHALL SUBMIT PHOTOGRAPHS TO OZARK ENGINEERING, INC. FOR REVIEW AND APPROVAL.

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 ADJUSTING EXISTING UTILITY LINES AS REQUIRED BY CUT AND FILL AT NO ADDITIONAL COST TO THE OWNER.

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

ALL STORM DRAIN PREPARE MEASURES FROM CENTER OF STRUCTURE AND END OF FLARED END SECTIONS.

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

STORM DRAIN PIPE BEDDING SHALL BE IN ACCORDANCE WITH DETAIL SD-9 (SEE DETAIL SHEETS)

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 MAINTAINING THE WORK.

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

STAIRY AREAS TO RECEIVE TOPSOIL TO A MINIMUM DEPTH OF 3 INCHES BEFORE PLACING TOPSOIL PER OWNER DEVELOPER, CITY AND/OR HIGHWAY DEPARTMENT STANDARDS AND SPECIFICATIONS.

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

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

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

KEEP OVERSLOPES 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 RIGHT-OF-WAY OR WAYS SHALL BE CONSTRUCTED TO THE GOVERNING AGENCY'S SPECIFICATIONS. ALL OTHER UTILITIES SHALL BE CONSTRUCTED TO THE EQUIVALENT OF THE GOVERNING AGENCY'S SPECIFICATIONS WHOEVER 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, ALL BURNING ON SITE SHALL BE SUBJECT TO LOCAL ORDINANCES AND THE OWNER'S DESIGNER'S STANDARDS AND SPECIFICATIONS.

ALL DRAINAGE STRUCTURES SHALL BE PRECAST.

ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC (H20) LOADING AND BE INSTALLED ACCORDINGLY.

CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES HAVING UNDERGROUND UTILITIES IN SITE 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 & APPROXIMATE +/- 1' OF SURROUND.

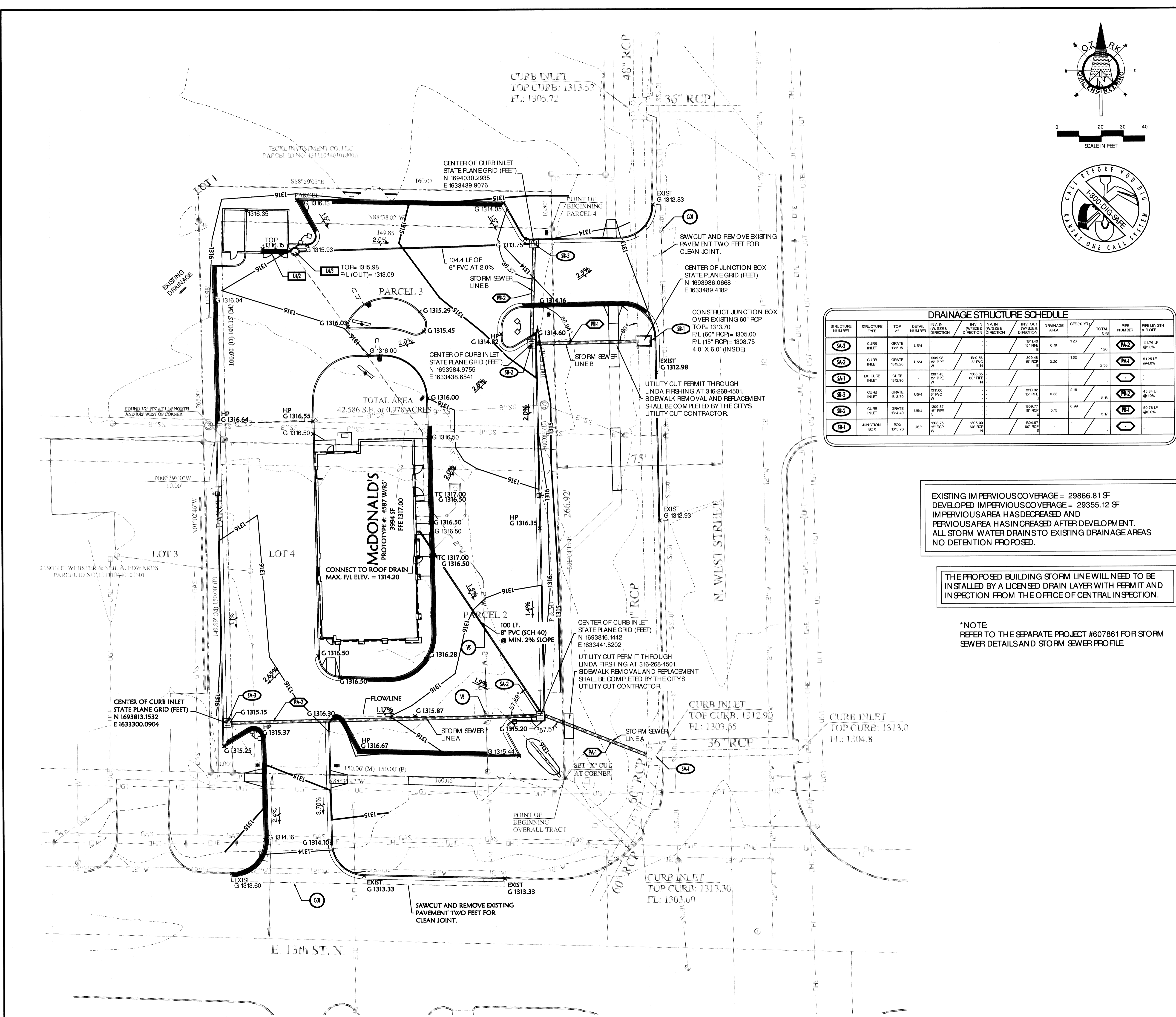
IMMEDIATELY APPLY & COMPACT STONE BASE FOR BUILDING PAD TO +/- 12" PRIOR TO EXCAVATING INTERIOR & PERIMETER FOOTINGS.

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

EXISTING IMPERVIOUS COVERAGE = 29866.81 SF  
DEVELOPED IMPERVIOUS COVERAGE = 29355.12 SF  
IMPERVIOUS AREA HAS DECREASED AND  
PERVIOUS AREA HAS INCREASED AFTER DEVELOPMENT.  
ALL STORM WATER DRAINS TO EXISTING DRAINAGE AREAS  
NO DETENTION PROPOSED.

THE PROPOSED BUILDING STORM LINE WILL NEED TO BE  
INSTALLED BY A LICENSED DRAIN LAYER WITH PERMIT AND  
INSPECTION FROM THE OFFICE OF CENTRAL INSPECTION.

\*NOTE  
REFER TO THE SEPARATE PROJECT #607861 FOR STORM  
SEWER DETAILS AND STORM SEWER PROFILE.



STREET ADDRESS		1421 N WEST STREET	
CITY	WICHITA	STATE	KANSAS
COUNTY		SEDGEWICK	
REGIONAL DWG. NO.	15-0276		
GRADING AND DRAINAGE PLAN			

10801 MASTIN BLVD., STE. 400, OVERLAND PARK, KS 66210  
OFFICE ADDRESS

# McDonald's

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF MCDONALD'S CORPORATION AND SHALL NOT BE REPRODUCED WITHOUT THEIR WRITTEN PERMISSION.

STATUS	DATE	BY
PRELIMINARY	-/-/-	-
PLAN CHECKED	-/-/-	-
AS BUILT	-/-/-	-
PROJECT NO.	06-0716	

## C6