STORMWATER IMPROVEMENTS FOR:

WAL-MART SUPERCENTER #3283-00

WICHITA, KANSAS

21st STREET AND MAIZE ROAD

CITY OF WICHITA - PRIVATE PROJECT #1036PPS (607861)

APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA

SANITARY SEWERS _____
STORM SEWERS VRH 8/30/00
DRIVEWAY APPROACHES _____
WATER MAINS _____
PAVING _____

NOTE TO CONTRACTORS

INSPECTION AND TESTING FOR THIS PROJECT IS TO BE PROVIDED BY A LICENSED CONSULTING ENGINEERS FIRM UNDER CONTRACT WITH THE OWNER/DEVELOPER. SAID INSPECTION TO BE IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD CONSTRUCTION ENGINEERING PRACTICES AND CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER. NO WORK SHALL BE PERFORMED IN DEDICATED EASEMENTS OR THE PUBLIC RIGHT-OF-WAY BY THE CONTRACTOR WITHOUT SUCH INSPECTION NOR SHALL ANY WORK BE CONVEYED IN DEDICATED EASEMENTS OR PUBLIC RIGHT-OF-WAY WITHOUT WRITTEN AUTHORIZATION BY THE CITY ENGINEER.

GENERAL NOTES:

A. TOPOGRAPHIC BOUNDARY SURVEY, INCLUDING PROPERTY LINES, LEGAL DESCRIPTION, EXISTING UTILITIES, SITE TOPOGRAPHY WITH SPOT ELEVATIONS, OUTSTANDING PHYSICAL FEATURES AND EXISTING STRUCTURE LOCATIONS WAS PROVIDED BY THE FOLLOWING COMPANY, AS A CONTRACTOR TO THE SELLER/OWNER:

TOPOGRAPHY: BOUNDARY: DAUGHMAN COMPANY, P.A.
315 ELLIS
WICHITA, KANSAS 67211
(316) 262-7271

CEI ENGINEERING AND ITS ASSOCIATES WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY OR FOR DESIGN ERRORS OR OMISSIONS RESULTING FROM SURVEY INACCURACIES.

B. ALL PHASES OF SITE WORK FOR THIS PROJECT SHALL MEET OR EXCEED THE OWNER / DEVELOPER SITE WORK SPECIFICATIONS.

C. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF EXISTING STRUCTURES, RELATED UTILITIES, PAVING, UNDERGROUND STORAGE TANKS AND ANY OTHER EXISTING IMPROVEMENTS AS NOTED. SEE SITE WORK SPECIFICATIONS.

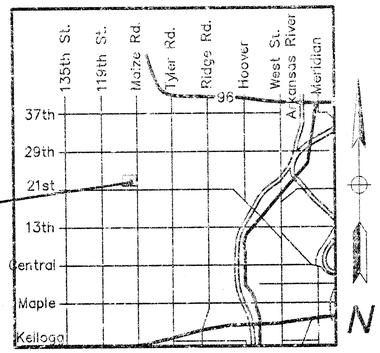
D. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS.

E. THE GENERAL CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR AND SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT.

F. WARRANTY/DISCLAIMER:
THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENDED BY THE OWNER AT THIS TIME. HOWEVER, NEITHER THE ENGINEER NOR ITS PERSONNEL CAN OR DO WARRANT THESE DESIGNS OR PLANS AS CONSTRUCTED EXCEPT IN THE SPECIFIC CASES WHERE THE ENGINEER INSPECTS AND CONTROLS THE PHYSICAL CONSTRUCTION ON A CONTEMPORARY BASIS AT THE SITE.

G. SAFETY NOTICE TO CONTRACTOR:
IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. ANY CONSTRUCTION OBSERVATION BY THE ENGINEER OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON OR NEAR THE CONSTRUCTION SITE.

H. INSPECTION SERVICES:
UPON WRITTEN REQUEST RESIDENT ENGINEERING SERVICES SHALL BE PROVIDED BY THE ENGINEERS (ON A TIME AND FREQUENCY BASIS) ACCEPTABLE TO THE CITY ENGINEER FOR IMPROVEMENTS TO PUBLIC WATER MAINS AND PRIVATE STORM DRAIN SYSTEM. AT THE COMPLETION OF CONSTRUCTION, THE ENGINEER SHALL CERTIFY, THE CONSTRUCTION TO BE IN COMPLIANCE WITH THE PLANS AND SPECIFICATIONS. THIS WORK WILL BE AT THE OWNER/DEVELOPER'S DIRECT EXPENSE AND SHALL BE COORDINATED WITH CEI ENGINEERING ASSOCIATES, INC. IT WILL BE THE CONSTRUCTION CONTRACTORS RESPONSIBILITY TO NOTIFY THE RESIDENT ENGINEER OF ANY PRECONSTRUCTION / CONSTRUCTION CONFERENCES AND ANY PUBLIC CONSTRUCTION 24 HOURS PRIOR TO SAID ACTION.



LOCATION

Vicinity Map

NOT TO SCALE

PLAN INDEX:

1. COVER SHEET
2. STORMWATER PLAN
3. STORMWATER PLAN
4. DETAIL SHEET

NOTICE TO BIDDERS:

ALL QUESTIONS REGARDING THE PREPARATION OF THE GENERAL CONTRACTOR'S BID SHALL BE DIRECTED TO THE OWNER'S CONSTRUCTION DEPARTMENT AT (501) 273-8361. SUBCONTRACTORS MUST DIRECT THEIR QUESTIONS THROUGH THE GENERAL CONTRACTOR. THE CONSULTING ARCHITECT AND/OR THE CONSULTING ENGINEER SHALL NOT BE CONTACTED DIRECTLY WITHOUT PRIOR AUTHORIZATION FROM THE OWNER/DEVELOPER.

WETLANDS CERTIFICATION:

THIS PROJECT DOES NOT REQUIRE A DEPARTMENT OF THE ARMY SECTION 404 PERMIT PER A DETERMINATION ON APRIL 10, 2000 BY THE U.S. ARMY CORPS OF ENGINEERS KANSAS CITY DISTRICT.

FLOOD CERTIFICATION:

THIS PROPERTY IS NOT LOCATED WITHIN ANY PRESENTLY ESTABLISHED 100-YEAR FLOOD PLAIN, AS SHOWN BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, FLOOD INSURANCE RATE MAP FOR THE COUNTY OF SEDGWICK, COMMUNITY PANEL NUMBER 200321 0125A EFFECTIVE DATE JUNE 3, 1986.

CALL BEFORE YOU DIG 1-800-344-7233 KANSAS ONE CALL

W. CHARLES MITCHELL 9/22/00 KANSAS PROFESSIONAL ENGINEER

RESOURCE LIST:

CITY OF WICHITA
PRINCIPAL PLANNER
DONNA GOLTRY
CITY HALL, 10TH FLOOR
455 N. MAIN
WICHITA, KS 67202
(316)-268-4421
(316)-268-4390 FAX

SENIOR PLANS EXAMINER
PAUL HAYS
OFFICE OF CENTRAL INSPECTION
CITY HALL, 7TH FLOOR
455 N. MAIN
WICHITA, KS 67202
(316)-268-4477
(316)-268-4663 FAX

CITY ENGINEER
MICHAEL LINDEBAK, P.E.
ENGINEERING DIVISION
CITY HALL, 8TH FLOOR
455 N. MAIN
WICHITA, KS 67202
(316)-268-4236
(316)-268-4114 FAX

WATER DISTRIBUTION
STEVE PALMER
SUPERINTENDENT OF WATER DISTRIBUTION
(316) 268-4940

SEWER MAINTENANCE
JOE DOTINELLY
SUPERINTENDENT OF SEWER MAINTENANCE
(316) 268-4073

ELECTRIC
WESTERN RESOURCES
SHANE PRICE
120 EAST 1ST
WICHITA, KS 67201
(316) 261-5925
(316) 261-5974 FAX

TELEPHONE
SOUTHWESTERN BELL
JIM TOBEN
154 N. BROADWAY
WICHITA, KS 67202
(316)-268-2801
(316)-268-2710 FAX

GAS
PEOPLE'S NATURAL GAS COMPANY
CALVIN BRIGGS
1811 E. HOOVER
WICHITA, KS 67209
(316)-441-1530
(316)-942-7586 FAX

GEOTECHNICAL ENGINEER
TERRACON
JOHN HEINZ, P.E.
2111 WEST HARRY STREET
WICHITA, KS 67213
(316)-262-0171
(316)-262-5997 FAX

CONSULTING ENGINEER
CEI ENGINEERING ASSOCIATES, INC.
W. CHARLES MITCHELL, P.E.
110 W. CENTRAL AVE.
BENTONVILLE, AR 72712
(501)-273-9472
(501)-271-0871 FAX

ARCHITECT
BOICE-RAIDL-PINEA ARCHITECTS
HAL HAVENS
6700 ANTIOCH PLAZA, SUITE 300
MERRIAM, KS 66204
(913)-262-9095
(913)-262-9044 FAX

SURVEYOR
DAUGHMAN COMPANY, P.A.
PRESTON STEWART
315 ELLIS
WICHITA, KS 67211
(316)-262-7271
(316)-262-0149 FAX

DEVELOPER
WAL-MART STORES, INC.
ART SCOTT, P.E., CEM (501)-273-6817
ROY COVERT, REM (501)-204-0239
2001 SE 10TH ST.
BENTONVILLE, AR 72712
(501)-273-4707 FAX

WETLANDS CERTIFICATION:

THIS PROJECT DOES NOT REQUIRE A DEPARTMENT OF THE ARMY SECTION 404 PERMIT PER A DETERMINATION ON 4/10/00 BY THE U.S. ARMY CORPS OF ENGINEERS KANSAS CITY DISTRICT.

FLOOD CERTIFICATION:

THIS PROPERTY IS NOT LOCATED WITHIN ANY PRESENTLY ESTABLISHED 100-YEAR FLOOD PLAIN, AS SHOWN BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, FLOOD INSURANCE RATE MAP FOR THE COUNTY OF SEDGWICK, COMMUNITY PANEL NUMBER 200321 0125A EFFECTIVE DATE JUNE 3, 1986

CEI ENGINEERING ASSOCIATES, INC

ENGINEERS • PLANNERS • SURVEYORS

110 W. Central Ave.
Bentonville, AR 72712

(501) 273-9472
FAX (501) 273-0844

Bentonville, Arkansas * Fresno, California * St. Augustine, Florida * Nashville, Tennessee * Atlanta, Georgia * Dallas, Texas

JOB NO.: 15242.0
DWG NAME: 5242DW

DATE	SHEET NO.
08-25-00 11:01 AM BID	1 OF 4

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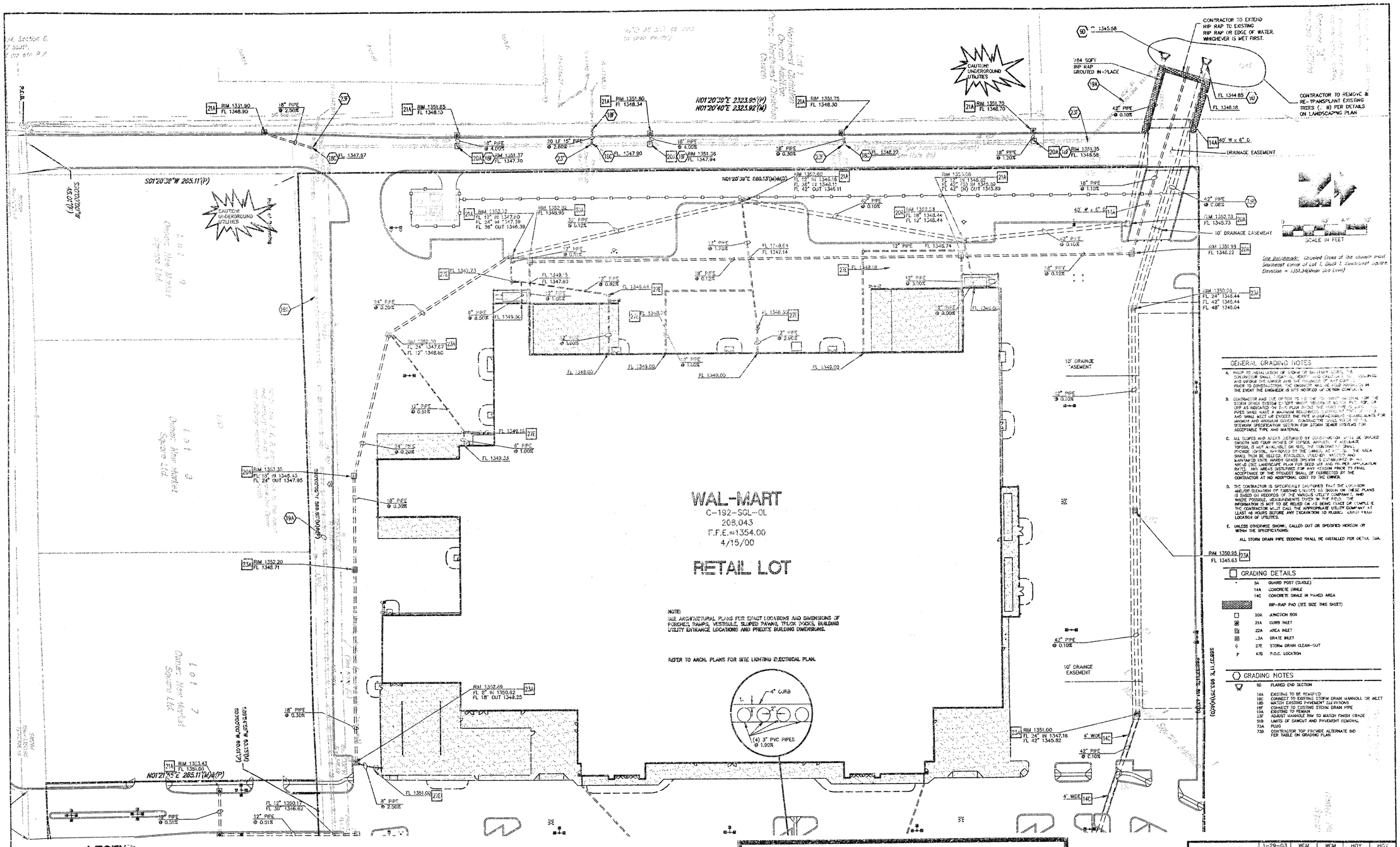


GENERAL GRADING NOTES

A. PRIOR TO INSTALLATION OF STORM OR SANITARY SEWER, THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE EXISTING AND NATURAL SITE CONDITIONS AND NOTIFY THE OWNER AND THE ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. THE ENGINEER WILL BE HELD HARMLESS IN THE EVENT THE ENGINEER IS NOT NOTIFIED OF DESIGN CONFLICTS.

B. CONTRACTOR HAS THE OPTION TO USE THE ON-SITE MATERIAL FOR THE STORM SEWER SYSTEM EXCEPT WHERE UNSUITABLE MATERIAL FOR THE CITY AS INDICATED ON THE PLAN WHERE THE PIPE IS TO BE PLACED. PIPES SHALL HAVE A MINIMUM REQUIRED COVER AS SHOWN ON THE PLANS AND SHALL MEET OR EXCEED THE PIPE MANUFACTURER'S REQUIREMENTS FOR MINIMUM AND MAXIMUM COVER. CONTRACTOR SHALL REFER TO THE SITEWORK SPECIFICATION SECTION FOR STORM SEWER SYSTEMS FOR ACCEPTABLE TYPE AND MATERIAL.

C. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION WITH A 4" SHOULD SMOOTH AND FOUR INCHES OF TOPSOIL APPLIED. IF ADEQUATE TOPSOIL IS NOT AVAILABLE ON SITE, THE CONTRACTOR SHALL PROVIDE (OPTION APPROVED BY THE OWNER) AS NEEDED. THE AREA SHALL THEN BE SEEDED, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS (SEE LANDSCAPE PLAN FOR SEED MIX AND PROPER APPLICATION RATES). ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE PROJECT SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

D. 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 ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO HAVE FIELD LOCATION OF UTILITIES.

E. UNLESS OTHERWISE SHOWN, CALLED OUT OR SPECIFIED HEREON OR WITHIN THE SPECIFICATIONS:

ALL STORM DRAIN PIPE BEDDING SHALL BE INSTALLED PER DETAIL 3/A.

GRADING DETAILS

•	3A	GUARD POST (SINGLE)
	14A	CONCRETE SWALE
	14C	CONCRETE SWALE IN PAVED AREA
		RIP-RAP PAD (SEE SIZE THIS SHEET)
□	20A	JUNCTION BOX
▣	21A	CURB INLET
▨	22A	AREA INLET
▤	23A	GRATE INLET
⊖	27E	STORM DRAIN CLEAN-OUT
P	47B	P.O.C. LOCATION

GRADING NOTES

▽	9D	FLARED END SECTION
	18A	EXISTING TO BE REMOVED
	18C	CONNECT TO EXISTING STORM DRAIN MANHOLE OR INLET
	18D	MATCH EXISTING PAVEMENT ELEVATIONS
	18F	CONNECT TO EXISTING STORM DRAIN PIPE
	19A	EXISTING TO REMAIN
	23F	ADJUST MANHOLE RIM TO MATCH FINISH GRADE
	51B	LIMITS OF SAWCUT AND PAVEMENT REMOVAL
	73A	PLUG
	73B	CONTRACTOR TO PROVIDE ALTERNATE BID PER TABLE ON GRADING PLAN

LEGEND

EXISTING

- ⊡ EB = Electric Box
- ⊡ TB = Tel Pedestal
- ⊡ Guy = Guy Anchor
- ○ LP = Light Pole
- ○ TP = Power Pole
- ○ Sign = Sign
- ⊕ SSMH = Sanitary Sewer Manhole
- ⊕ SVGV = Sanitary Sewer Gate Valve
- ⊕ FH = Fire Hydrant
- ⊕ SWMH = Storm Water Sewer Manhole
- ⊡ UMH = Utility Manhole
- ⊡ MET = Meter Pedestal
- ⊡ WV = Water Valve
- ⊡ WM = Water Meter
- ⊡ TRANS = Transformer
- ⊡ = 1/2" Iron Pipe in Utilities Found
- ⊡ = 1/2" Iron Pipe Found
- ⊡ = 3/4" PKD Nail Plug Found
- ⊡ = Utilities As Noted Found
- ⊡ = Utilities Found Unmarked
- ⊡ = #4 S.F.D. Rebar Found
- ⊡ = #4 Perpendicular Rebar Found
- ⊡ = Concrete Monument Found
- ⊡ = Chiseled Cross Set
- (M) = Measured
- (P) = Platted
- SS = Sanitary Sewer
- SD = Storm Water Sewer
- UG = Underground Utility
- OH = Overhead
- 100 = Contour Labels Pos
- TOC = Top
- PPC = Poly Pipe Crossing

PROPOSED

- BOUNDARY LINE
- RIGHT OF WAY LINE
- GRADE BREAK
- XXX CONTOUR ELEVATIONS
- STORM DRAIN
- LIMITS OF PAVING
- x XX.XX SPOT ELEVATIONS: TC = TOP OF CURB, G = GUTTER

THE STORM SEWER FOR THIS PROJECT, WICHITA #1036 PPS(OCA#607861) HAS BEEN CERTIFIED BY MR. HARLAN D. FORAKER, P.E. OF CERTIFIED ENGINEERING DESIGN, P.A. AS-BUILT NOTATIONS, CERTIFICATE OF COMPLETION, INSPECTION REPORT, TELEVISION TAPE AND LOG REPORT WERE PREPARED BY MR. FORAKAR. ALSO, A SIGNED AND SEALED MAYLAR IS PREPARED BY CEI FOR THE CITY RECORD BASED ON INFORMATION PROVIDED BY CERITIFIED ENGINEERING DESIGN, P.A.

CITY OF WICHITA, KANSAS
PRIVATE PROJECT 1085 PPS(607861)

W. Clark Mitchell
1/30/03

INITIAL DESIGN	1-29-03	WCM	WCM	HOY	HOY
	DATE	PRN	PM	DES	DRW

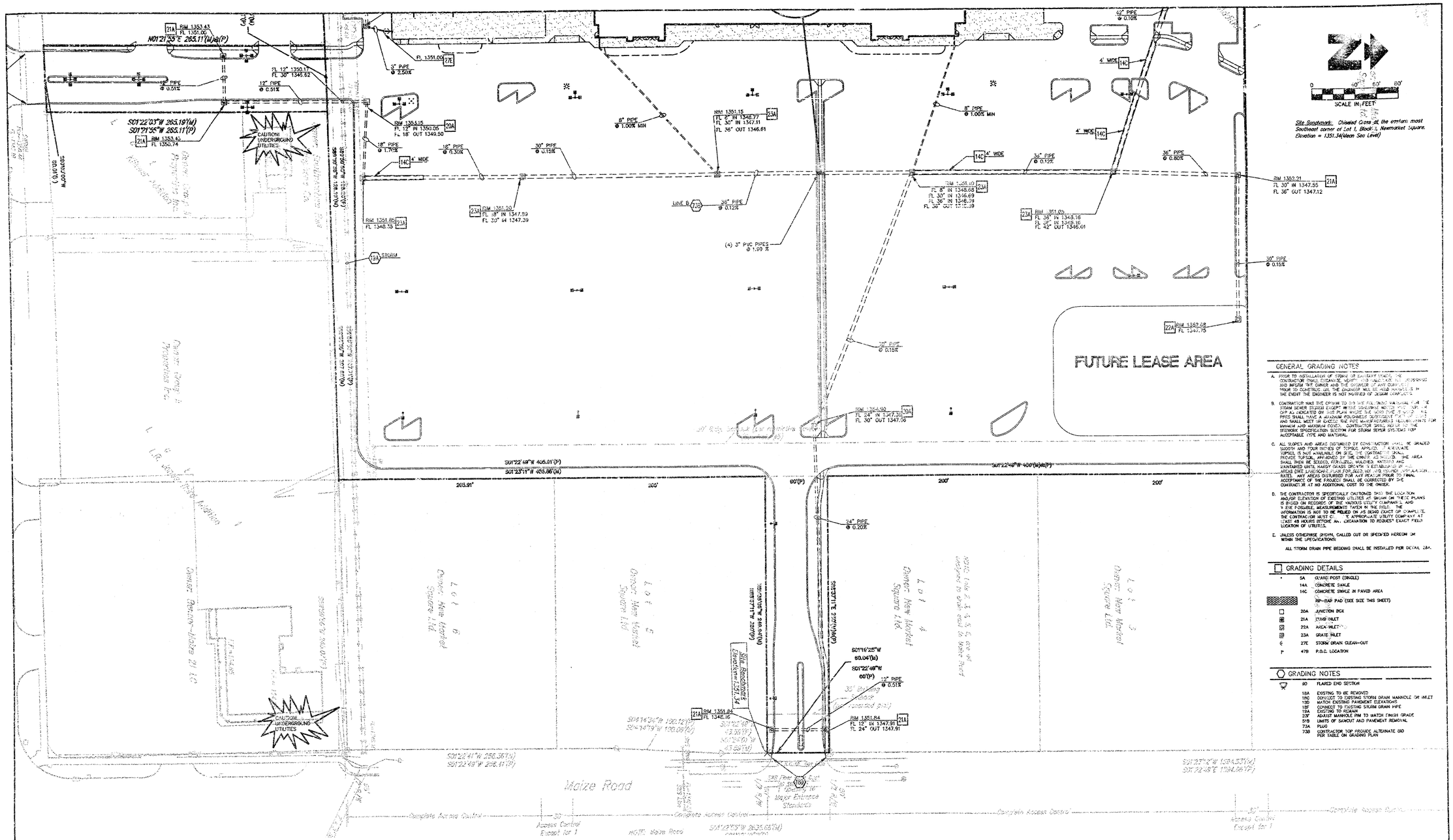
WAL-MART SUPERCENTER #3283-00

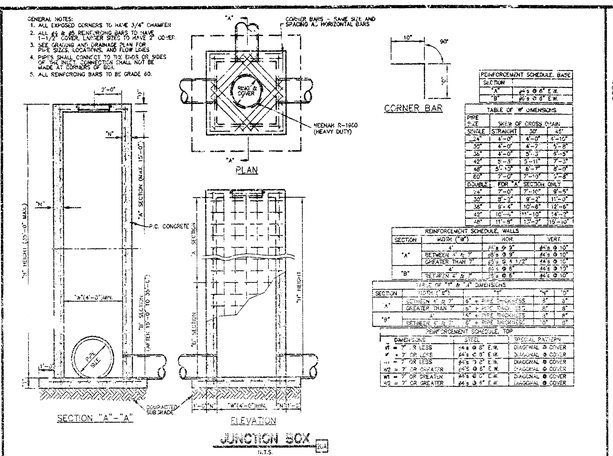
CEI ENGINEERING ASSOCIATES, INC
ENGINEERS · PLANNERS · SURVEYORS

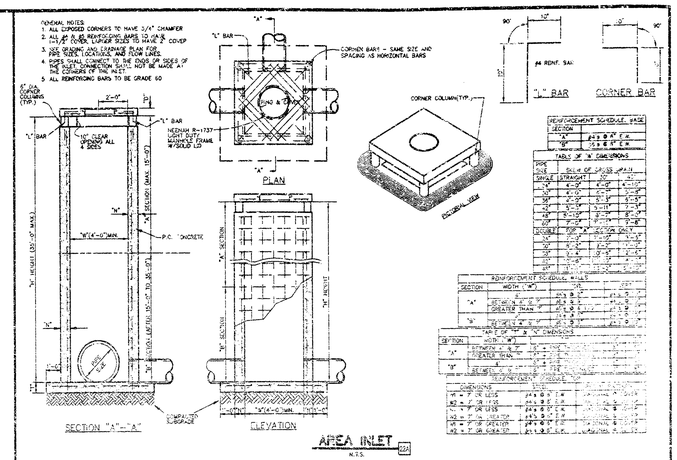
3317 SW "I" Street, Bentonville, AR 72712
(479) 273-9472 FAX (479) 273-0844
JOB NO.: 15242.0
DWG NAME: 5242PROJ

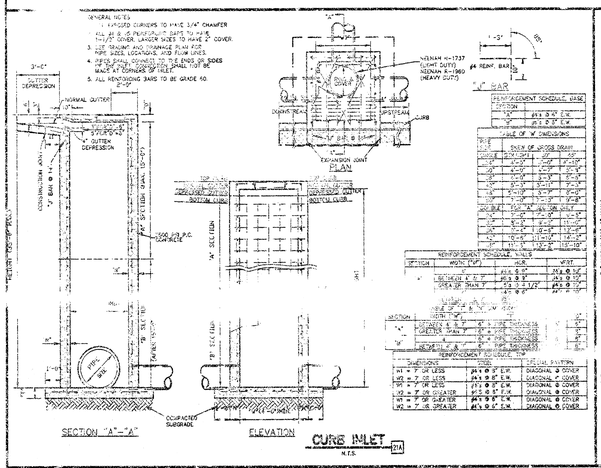
STORMWATER PLAN
21ST STREET & MAIZE ROAD
WICHITA, KANSAS

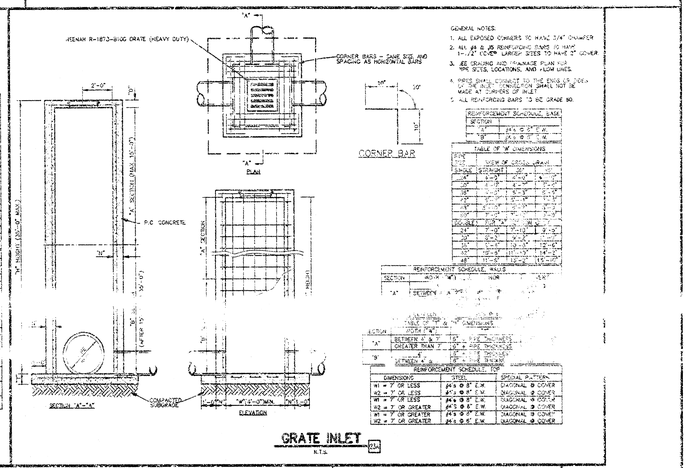
DATE: 01-29-03, 10:55 AM, AS-BUILT
SHEET NO.: 2 OF 4

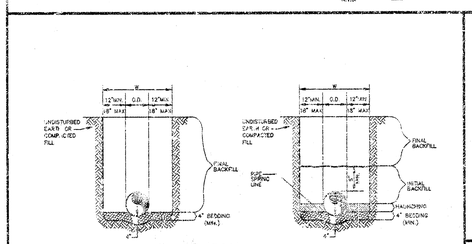

FUTURE LEASE AREA
Maize Road
SCALE IN FEET
0 40' 60' 80'
Site Benchmark: Chiseled Cross at the certain most Southeast corner of Lot 1, Block 1, Newmarket Square. Elevation = 1351.34(Mean Sea Level)
21A RIM 1353.43 FL 1351.00
N01°27'55"E 265.11'(M)&(P)
21A RIM 1353.40 FL 1350.74
S01°22'03"W 265.19'(M)
S01°21'55"W 265.11'(P)
CAUTION! UNDERGROUND UTILITIES
12" PIPE @ 0.51%
FL 12" 1350.17 FL 30" 1346.62
FL 1351.00 27E
3' PIPE @ 2.50%
RIM 1353.15 FL 12" IN 1350.05 FL 18" OUT 1349.50 20A
18" PIPE @ 1.70%
18" PIPE @ 0.30%
30" PIPE @ 0.15%
14C 4' WIDE
RIM 1351.85 FL 1348.35 21A
23A RIM 1351.20 FL 18" IN 1347.89 FL 30" IN 1347.39
9A STORM
8" PIPE @ 1.00% MIN
NIM 1351.15 FL 8" IN 1348.77 FL 30" IN 1347.11 FL 36" OUT 1346.61 23A
LINE B 73B
36" PIPE @ 0.12%
(4) 3" PVC PIPES @ 1.99 %
42" PIPE @ 0.10%
4' WIDE 14C
8" PIPE @ 1.00% MIN
4' WIDE 14C
14C 4' WIDE
34" PIPE @ 0.12%
36" PIPE @ 0.80%
RIM 1351.10 FL 8" IN 1348.68 FL 30" IN 1346.69 FL 36" IN 1345.39 FL 36" OUT 1345.39 23A
RIM 1351.03 FL 36" IN 1345.16 FL 36" IN 1345.16 FL 42" OUT 1346.01 23A
RIM 1352.21 FL 30" IN 1347.55 FL 36" OUT 1347.12 21A
36" PIPE @ 0.15%
22A RIM 1352.08 FL 1347.75
36" PIPE @ 0.15%
RIM 1350.90 FL 24" IN 1347.30 FL 30" OUT 1347.08 20A
24" PIPE @ 0.20%
S01°22'49"W 406.91'(P)
S01°23'11"W 403.86'(M)
203.91'
200'
60'(P)
200'
200'
S01°22'49"W 400'(M)&(P)
S01°22'41"W 286.36'(M)
S01°22'49"W 286.41'(P)
S01°22'53"W 1334.37'(M)
S01°22'49"E 1334.06'(P)
S01°16'25"W 60.04'(M)
S01°22'49"W 60'(P)
12" PIPE @ 0.51%
30" PIPE @ 0.15%
Site Benchmark Elevation=1351.34
21A RIM 1351.84 FL 1348.16
RIM 1351.84 FL 12" IN 1347.91 FL 24" OUT 1347.91 21A
S01°16'25"W 190.12'(M)
S01°49'49"W 190.08'(P)
S01°22'41"W 53.51'(M)
S01°22'49"W 53.51'(P)
S01°22'41"W 53.51'(M)
S01°22'49"W 53.51'(P)
SAG
Existing Access Control Except for 1
Proposed Access Control
Existing Access Control
Proposed Access Control
30' Access Control Except for 1
NOTE: Maize Road
Maize Road
Existing Median Opening
Proposed Median Opening
Existing Median Opening
Proposed Median Opening
Existing Median Opening
Proposed Median Opening

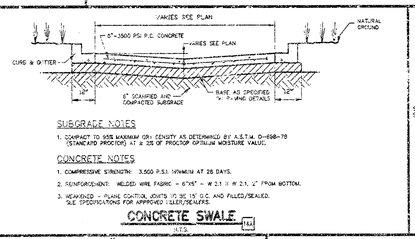


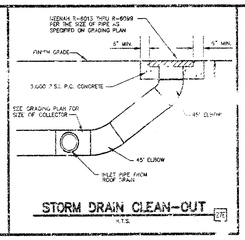


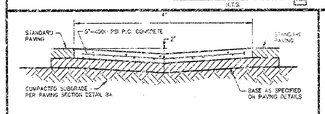












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W. CHARLES MITCHELL LICENSED 15514 PROFESSIONAL ENGINEER
6/29/00

FINAL DESIGN	6-15-00	WCM	TMM	CT	JSL
	DATE	PRN	PM	ENG	DES

WAL-MART SUPERCENTER #3283-00

CEI ENGINEERING ASSOCIATES, INC
ENGINEERS • PLANNERS • SURVEYORS

110 W. Central Ave. (501) 273-9472 JOB NO.: 15242.0
Bentonville, AR 72712 FAX (501) 273-0844 DWG NAME: 5242DET

DETAIL SHEET
21ST STREET & MAIZE ROAD
WICHITA, KANSAS

DATE 08-25-00 1:55 PM BD
SHEET NO 4 OF 4

18 08 05 04