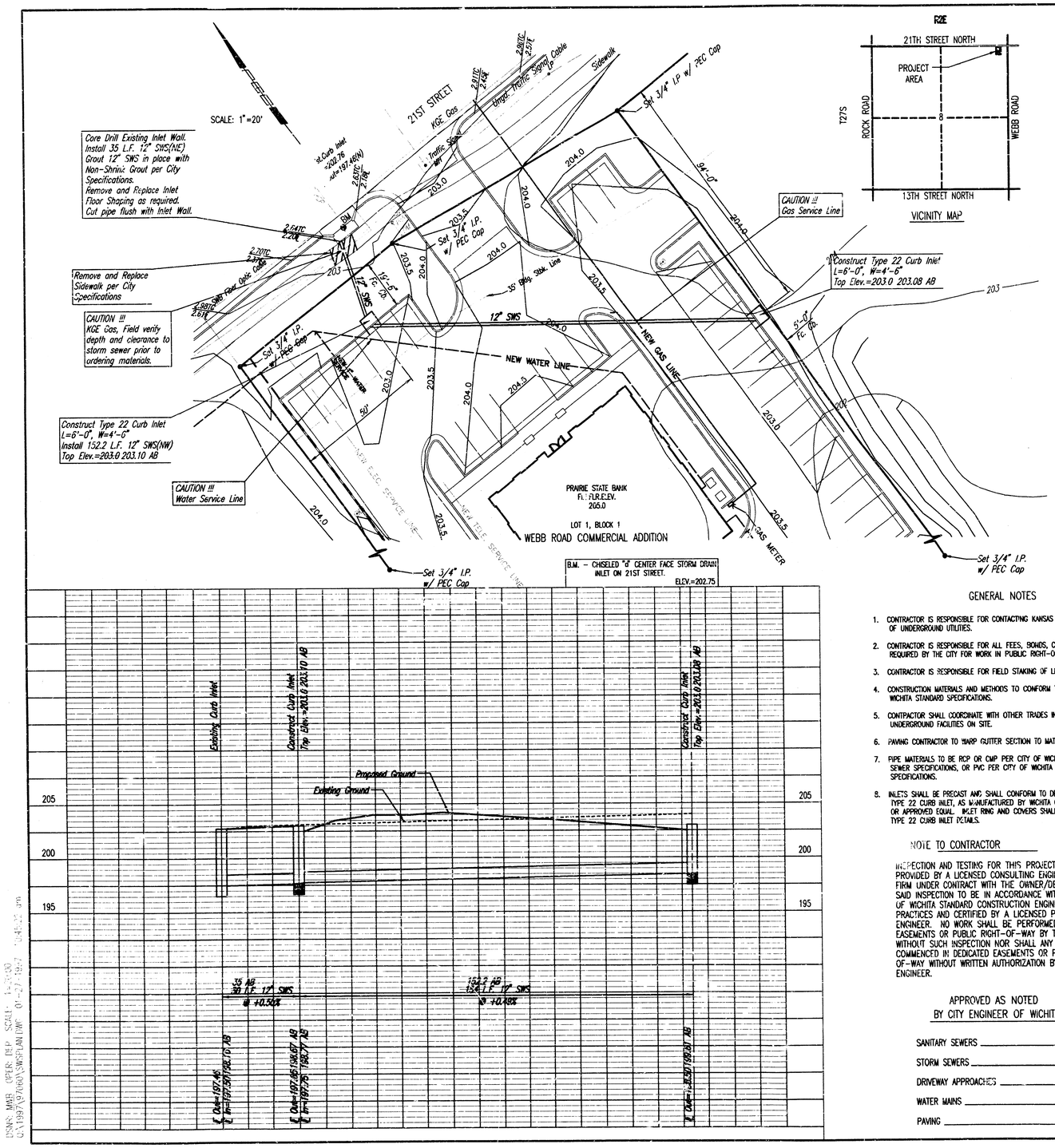
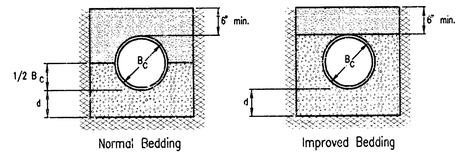
| SHEET NO. | TOTAL SHEETS |
|---|---|
| 1 | 1 |



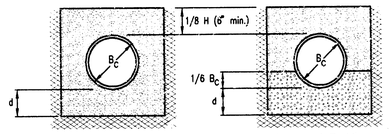




VICINITY MAP




CLASS B




CLASS C

## PIPE ZONE BACKFILLING

$B_C$ = Outside Pipe Diameter

H = Backfill from Top of Pipe to Existing Ground

D = Inside Pipe Diameter

d = Depth of Bedding Material Below Pipe

= Granular Bedding Material or Sand-Gravel Bedding

= Compacted Embedment

= Concrete

| Depth of Bedding Material Below Pipe | | |
|---|---|---|
| D | d(min) Soil | d(min) Rock |
| 27" & smaller | 4" | 6" |
| 30" to 60" | 5" | 9" |
| 66" & larger | 6" | 12" |

Granular Bedding Material shall be an approved material consisting of durable crushed rock conforming with the requirements of the latest revision of ASTM C-33 Size No. 67 (3/4" to No. 4); to be placed in not more than 6" layers and compacted by slicing with a shovel or vibrating. Soundness, abrasion, and absorption limits shall be as required for coarse aggregates for Concrete Work in the specifications.

Sand-Gravel Bedding Material – sand-gravel mix meeting Type UD-1 of the 1990 Kansas Standard Specifications for State Road and Bridge Construction.

Compacted Embedment shall be an approved sand material free from debris, organic material, and stones with 100% passing the 3/4" sieve to be placed in uniform layers not more than 6" thick and compacted to 95 percent maximum density as determined by ASTM D698. Granular Bedding Material may be substituted for all or part of Compacted Embedment Materials.

Class B Bedding shall be used for all flexible pipe.

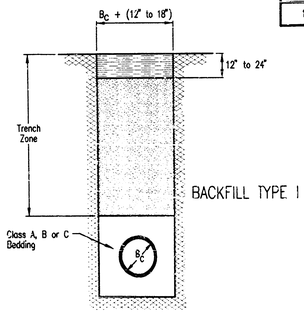
a. Class B Normal Bedding shall be used for PVC Pipe unless wet conditions are encountered.

b. Class B Improved Bedding shall be used for other flexible pipe, and for PVC pipe in wet conditions.

Class C Bedding shall be used for all rigid pipe.

a. Class C Ordinary Bedding shall be used for all rigid pipe unless wet conditions are encountered.

b. Class C Improved Bedding shall be used for wet conditions existing in the trench, as directed by the Engineer, at no additional cost to the Owner. The dimensions shall be equal to that required for "rock" excavation (see specifications).




## TRENCH ZONE BACKFILLING

$B_C$ = Outside Pipe Diameter

= Compacted Granular Backfill

= Uncompacted Earth Backfill

= Compacted Earth Backfill

Compacted Granular Backfill material shall be an approved sand material free from debris, organic material and stones with 100% passing the 3/4" sieve and not more than 15% passing a No. 200 sieve; to be jetted and mechanically vibrated into place and compacted to 95% density as determined by ASTM D698.

Uncompacted Earth Backfill material may be natural soil free from large clods or stones, brush, roots more than 2 inches in diameter, debris, and junk. Flooding with water shall be provided as directed by the Engineer.

Compacted Earth Backfill shall consist of material existing prior to trenching or selected material as directed by the Engineer, and shall be compacted to 90% density as determined by ASTM D698.

Backfill: Backfill material and compaction requirements shall conform to either Type I, Type II or Type III as specified in the plans. One years maintenance will be required on all backfill.

Backfilling Under Pavement: Backfilling under existing or proposed pavement shall be performed as Backfill Type I to a level of two (2) feet from the bottom of the pavement. The remainder of the trench

properly compacted in layers not exceeding six (6) inches in depth, compaction shall be performed with mechanical tampers and continued until a relative density of 100 percent of standard density, in conformance with ASTM D698 is obtained.

## GENERAL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR CONTACTING KANSAS ONE-CALL FOR LOCATION OF UNDERGROUND UTILITIES.
2. CONTRACTOR IS RESPONSIBLE FOR ALL FEES, BONDS, COORDINATION, ETC. AS REQUIRED BY THE CITY FOR WORK IN PUBLIC RIGHT-OF-WAY AND EASEMENTS.
3. CONTRACTOR IS RESPONSIBLE FOR FIELD STAKING OF LINES AND GRADES.
4. CONSTRUCTION MATERIALS AND METHODS TO CONFORM TO THE CITY OF WICHITA STANDARD SPECIFICATIONS.
5. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES IN CONSTRUCTION OF UNDERGROUND FACILITIES ON SITE.
6. PAVING CONTRACTOR TO SHARP GUTTER SECTION TO MATCH INLET.
7. PIPE MATERIALS TO BE RCP OR CMP PER CITY OF WICHITA STORM WATER SEWER SPECIFICATIONS, OR PVC PER CITY OF WICHITA SANITARY SEWER SPECIFICATIONS.
8. INLETS SHALL BE PRECAST AND SHALL CONFORM TO DETAILS FOR KDOT TYPE 22 CURB INLET, AS MANUFACTURED BY WICHITA CONCRETE PIPE, OR APPROVED EQUAL. INLET RING AND COVERS SHALL CONFORM TO KDOT TYPE 22 CURB INLET DETAILS.

NOTE TO CONTRACTOR

INSPECTION AND TESTING FOR THIS PROJECT IS TO BE PROVIDED BY A LICENSED CONSULTING ENGINEERING 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 PUBLIC RIGHT-OF-WAY BY THE CONTRACTOR WITHOUT SUCH INSPECTION NOR SHALL ANY WORK BE COMMENCED IN DEDICATED EASEMENTS OR PUBLIC RIGHT-OF-WAY WITHOUT WRITTEN AUTHORIZATION BY THE CITY ENGINEER.

APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA

SANITARY SEWERS _____

STORM SEWERS _____

DRIVEWAY APPROACHES _____

WATER MAINS _____

PAVING _____

BOOKED
3-10-98
MCG
D-385

AS BUILT
3/6/97

| DATE | INITIALS | REVISION |
|---|---|---|
| MARCH 1997 | TLT | AS BUILT (MID KANSAS ENGINEERING CONC. INC.) |

LOT 1, BLOCK 1
WEBB ROAD COMMERCIAL ADDITION

# PRIVATE STORM WATER SEWER

CITY OF WICHITA PRIVATE PROJECT NO. 683PWS (607861)

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

| Designed by | MWB | Checked by | MWB | |
|---|---|---|---|---|
| Drawn by | DEP | Date | JAN., 1997 | Job No. 97060 |

DSNG: MWB OPER: DEP SCALE: 1=20'(30)
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