SANITARY SEWER IMPROVEMENTS
FOR RETAIL & OFFICE BLDG'S ON LOTS 3–7, WEST PARK GARDENS ADDITION, WICHITA, SEDGWICK COUNTY, KANSAS
COW PRIV. PROJ. NO. 1743 PPS (607861)
JAMES L. ARMOUR, P.E., CITY ENGINEER
MARCH 2007

GENERAL NOTES

1. ALL ELEVATIONS SHOWN ARE BASED ON MEAN SEA LEVEL ELEVATION

2. CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF FORTY–EIGHT(48)HOURS TO UTILITY COMPANIES PRIOR TO STARTING ANY EXCAVATION AS FOLLOWS:

KANSAS ONE CALL	687–2470

THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY:

Cox Communications	262–4270 or 263–2061
SBC	1–800–870–8390
Kansas Gas Service	1–888–482–4950
Westar	1–800–383–1183
Aquila	1–800–303–0752
City of Wichita(Water & Sewer)	268–4555

THE CONTRACTOR SHALL NOTIFY PIPELINE COMPANIES AT LEAST 24 HOURS IN ADVANCE OF ANY WORK BEING PERFORMED ACROSS AND/OR ADJACENT TO PIPELINES.

3. COST OF EXCAVATION, HAULING AND DUMPING OF EXCESS EXCAVATION SHALL BE SUBSIDIARY TO OTHER ITEMS OF WORK.

4. THE CONTRACTOR SHALL NOTIFY THE INSPECTOR FOR THIS PROJECT 48 HOURS PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL NOT START WORK ON THE PROJECT UNTIL THE PROJECT INSPECTOR ASSIGNED TO THE PROJECT IS PRESENT ON SITE. ANY WORK DONE WITHOUT INSPECTION WILL BE REQUIRED TO BE UNCOVERED FOR INSPECTION.

5. THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY DIRECTLY ABUTTING THE CONSTRUCTION OF THIS PROJECT A MINIMUM OF TEN (10) DAYS ADVANCE NOTICE PRIOR TO START OF CONSTRUCTION.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR WILL BE REQUIRED TO REESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS SUCH IRONS SHALL BE REESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.

7. THE CONTRACTOR SHALL RESTORE ALL DITCHES, SWALES, ROAD SHOULDERS, ENTRANCES AND BANK LINES TO THEIR ORIGINAL SLOPES AND GRADES EXCEPT AS SHOWN OTHERWISE.

8. INTERURBAN TRAFFIC GENERATED OUTSIDE THE PROJECT AREA SHALL BE CARRIED THROUGH CONSTRUCTION. LOCAL RESIDENTIAL TRAFFIC GENERATED WITHIN THE PROJECT AREA SHALL BE CARRIED THROUGH CONSTRUCTION AS FURTHER PROMULGATED BY PROJECT SPECIAL PROVISIONS.

9. UNDERGROUND UTILITY SERVICE LINES AND OVERHEAD UTILITY POLE LINES ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO CONSTRUCTION UNLESS THE PLANS SPECIFICALLY CALL FOR THEIR ADJUSTMENT BY THE CONTRACTOR OR UNLESS THE PLANS SPECIFICALLY IDENTIFY A UTILITY TO BE ADJUSTED BY ITS OWNER DURING CONSTRUCTION. EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS UTILITY COMPANIES AND IS EITHER FROM COMPANY RECORD DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT–OF–WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.

10. RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS, THAT IN THE OPINION OF THE ENGINEER, WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOODPLAIN WOULD REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS WOULD REQUIRE ADDITIONAL ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION.

11. PROPERTIES WITHIN THE PROJECT LIMITS MAY HAVE UNDERGROUND SPRINKLER SYSTEMS IN THE PUBLIC RIGHT–OF–WAY WHICH CONFLICT WITH NEW CONSTRUCTION. CONTRACTOR WILL BE REQUIRED TO REMOVE SUCH IMPROVEMENTS SHOULD THEY NOT BE REMOVED BY THEIR OWNER AT THE TIME OF CONSTRUCTION OF THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SALVAGE ALL SPRINKLER HEADS AND/OR VALVES AND GIVE SUCH MATERIAL TO THEIR OWNER. PORTIONS OF UNDERGROUND SPRINKLER SYSTEMS NOT IN CONFLICT WITH NEW CONSTRUCTION SHALL BE PROTECTED FROM DAMAGE AND SHALL REMAIN IN PLACE. ALL WORK IN CONNECTION WITH UNDERGROUND SPRINKLER SYSTEMS SHALL BE CONSIDERED AS SUBSIDIARY TO THE CONTRACT PAY ITEMS OF WORK.

12. ALL PROPOSED STUBS AND PLUGGED PIPES SHALL BE LOCATED WITH GREEN PLASTIC TAPE.

13. PRIOR TO LAYING THE NEW SEWER LINES THE CONTRACTOR SHALL EXPOSE AND VERIFY THE ELEVATION, GRADE AND ALIGNMENT OF THE EXISTING SANITARY SEWER AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES FROM THE PLAN.

14. THE CONTRACTOR MUST EXAMINE THE CONSTRUCTION SITE PRIOR TO BIDDING AND BE SATISFIED AS TO THE WORK SHOWN FOR COMPLETION. AFTER BIDS HAVE BEEN RECEIVED, THE CONTRACTOR SHALL NOT ASSERT THAT THERE WAS A MISUNDERSTANDING OF THE QUANTITIES OF WORK OR OF THE NATURE FOR THE WORK TO BE COMPLETED.

15. EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION AVAILABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS UTILITY COMPANIES AND IS EITHER FROM COMPANY RECORD DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE PLAN LOCATIONS ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WHICH ARE ENCOUNTERED ON THIS PROJECT. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION DURING TRENCHING OPERATIONS TO AVOID DAMAGING THESE LINES. ANY LINES DAMAGED SHALL BE REPLACED OR REPAIRED IMMEDIATELY AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.

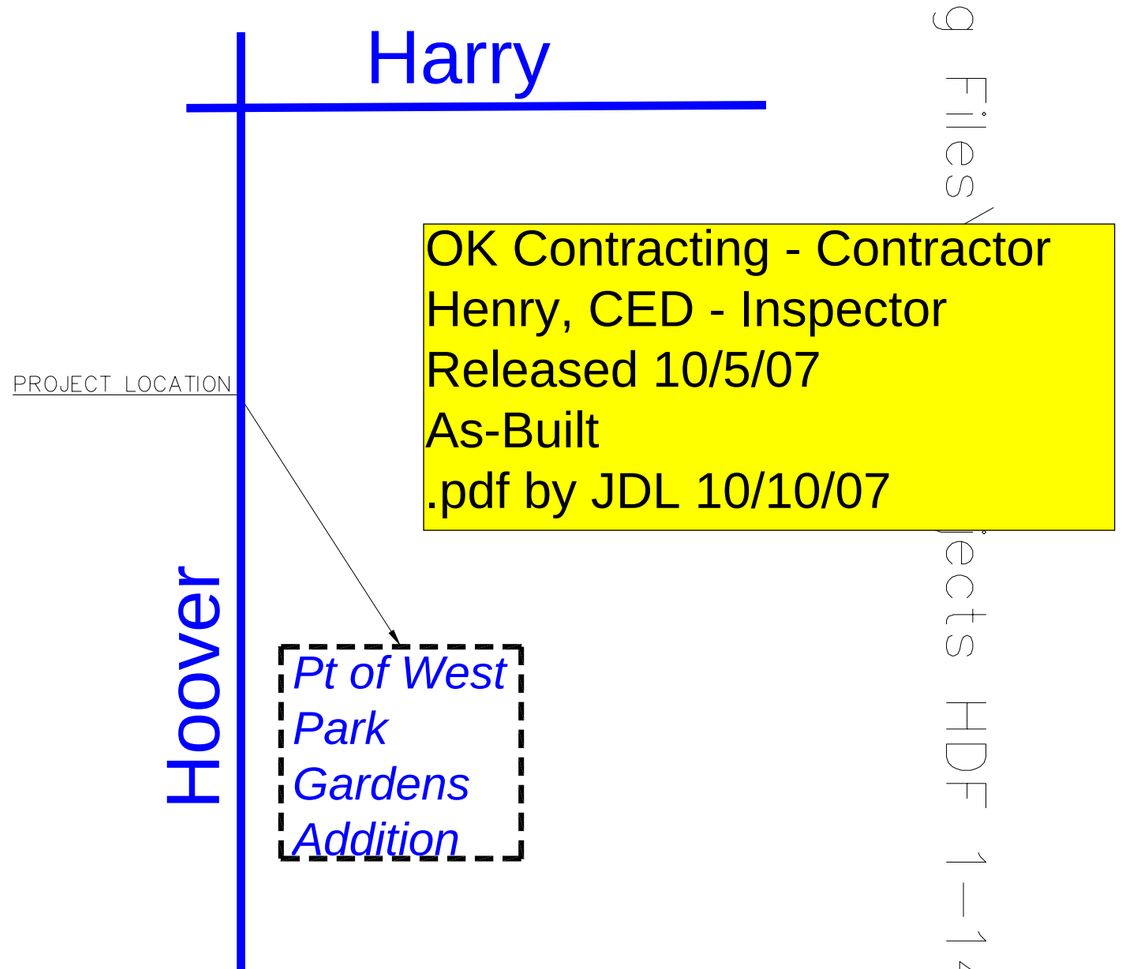
16. ALL PIPE JOINTS SHALL BE LAID AND PUSHED 'FULL HOME', WITH THE BEVELED END OF THE SPIGOT MAKING FULL CONTACT WITH THE CHAMFERED AREA AT THE THROAT OF THE BELL OR SOCKET, WITH NO SEPARATION BETWEEN THEM. IF SEPARATION IS DETERMINED, THE PIPE SHALL BE EXCAVATED AND RE–LAID ACCORDING TO SPECIFICATIONS AT THE CONTRACTOR'S EXPENSE.

17. AT LEAST 24 HOURS BEFORE CONNECTING NEW SEWER PIPE TO THE EXISTING SEWAGE SYSTEM, THE CONTRACTOR SHALL CONTACT THE CITY OF WICHITA SEWER DEPARTMENT (268–4024). THE CONTRACTOR SHALL KEEP ANY CONSTRUCTION DEBRIS FROM ENTERING THE EXISTING SANITARY SEWER DURING CONSTRUCTION. TO PREVENT WATER OR DEBRIS FROM ENTERING THE EXISTING SEWER, A MECHANICAL PLUG SHALL BE INSTALLED AND MAINTAINED TO ISOLATE THE EXISTING SEWER FROM THE NEW CONSTRUCTION UNTIL THE NEW CONSTRUCTION IS CLEANED, TELEVISED AND HAS BEEN ACCEPTED. THE WATER USED FOR CLEANING SHALL NOT BE ADDED TO THE FLOW OF THE EXISTING SEWER. THE CLEANING OR OTHERWISE ACCUMULATED WATER SHALL BE PUMPED OR OTHERWISE REMOVED PRIOR TO TELEVISING.

18. THE CONTRACTOR SHALL CONTAIN HIS OPERATIONS TO PERMIT TRAFFIC THROUGH AND ACROSS CONSTRUCTION AT EXISTING ROADWAYS AT ALL TIMES. THE CONTRACTOR SHALL ERECT WARNING SIGNS, FLASHING LIGHTS, AND BARRICADES IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES TO ENSURE SAFETY AS DIRECTED IN THE GENERAL CONDITIONS. THE CONTRACTOR SHALL LIMIT THE EXTENT OF TRENCH TO REMAIN OPEN OVERNIGHT AND WEEKENDS TO LESS THAN 50 FEET.

19. SEEDING AND FERTILIZING OF ALL AREAS DISTURBED BY THE CONSTRUCTION OF THE SANITARY SEWER AS SHOWN ON THE PLANS SHALL BE PAID FOR AS A LUMP SUM FOR "PROJECT SEEDING".

20. THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL MANHOLE COVERS.



PROJECT LOCATION

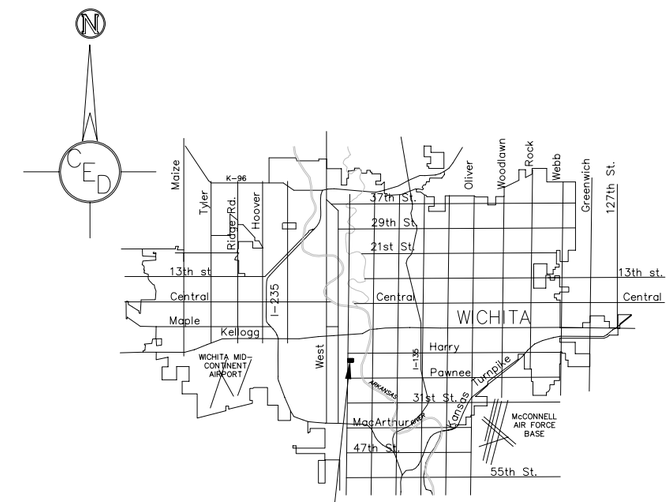
OK Contracting - Contractor
Henry, CED - Inspector
Released 10/5/07
As-Built
.pdf by JDL 10/10/07

C Files
ects HDF 1–14-

PROJECT LOCATED IN THE
N.W.1/4, SEC. 32, T.27S., R.1E.
WICHITA, SEDGWICK COUNTY, KANSAS

INDEX OF SHEETS

1. Title Sheet
2. Site Plan/Erosion Control
3. SS Plan/Profile
4. SS MH Detail
5. Backfill Detail
6. Subdivision Developement Process Details
7. Street Improvement Projects Details
8. Silt Fence, Ditch Checks & Barrier Details
9. Straw Bail, Ditch Checks & Barrier Details
10. Back of Curb Protection, Curb Inlet Protection & Construction Entrance Detail



LOCATION MAP

PROJECT LOCATION

APPROVED AS NOTED
By CITY ENGINEER OF WICHITA

Sanitary Sewers _____
Storm Sewers _____
Driveway Approaches _____
Water Mains _____
Paving _____

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 THE 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.

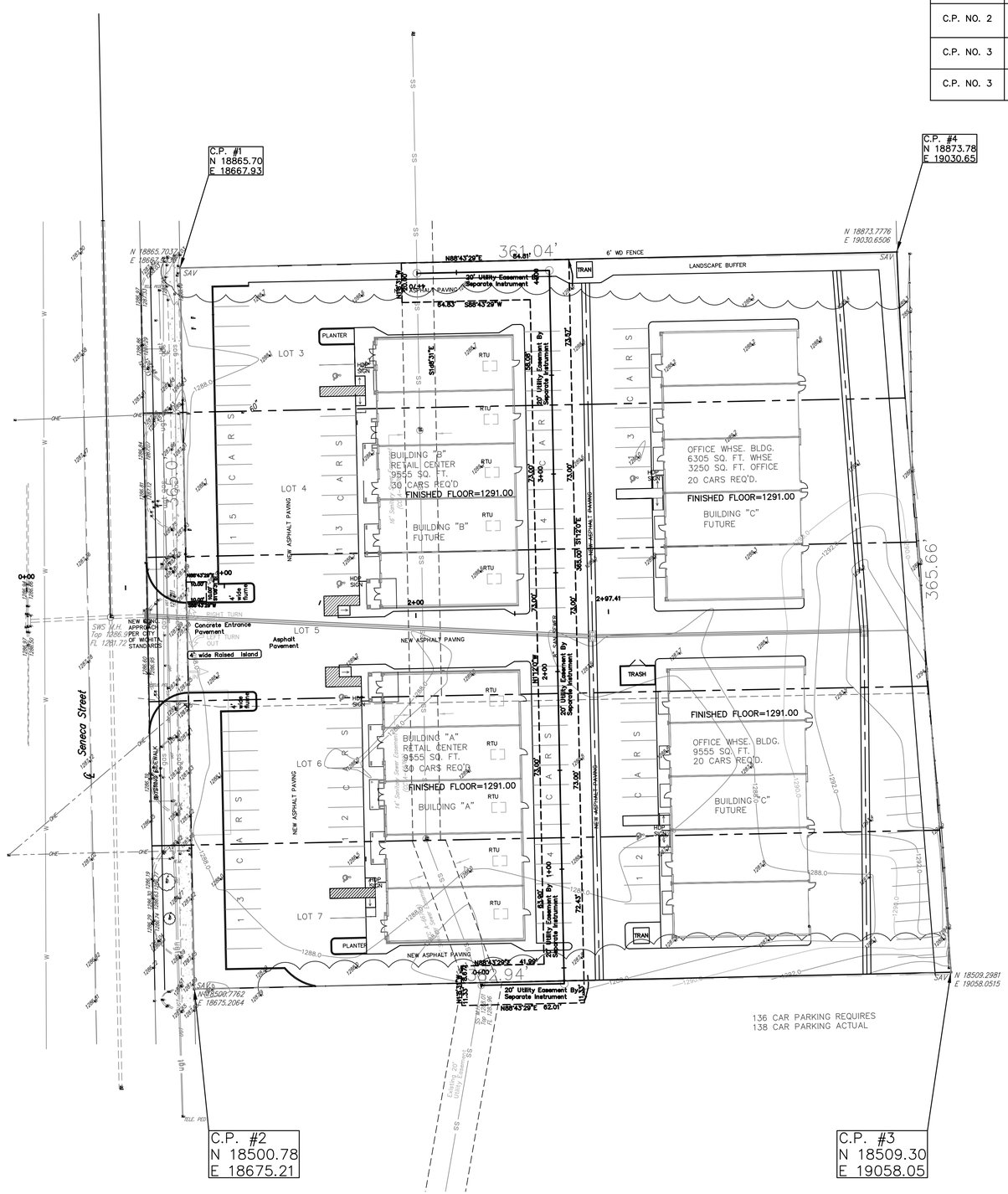
HARLAN DALE FORAKER
LICENSED
10891
KANSAS
PROFESSIONAL ENGINEER

C.O.W. PROJ. NO.: 1743 (607861)	
CERTIFIED ENGINEERING DESIGN, P.A.	
CED 810 WEST DOUGLAS, SUITE C WICHITA, KANSAS 67203 PH: (316) 262–8808 FAX: (316) 262–1669	SHEET 1 TOTAL 10

HORIZONTAL CONTROL POINTS

C.P. NO. 1	N 18865.70 E 18667.93	1/2" REBAR w/SAVOY CAP SET ON NORTHWEST PROPERTY CORNER LOT 3
C.P. NO. 2	N 18500.78 E 18675.21	1/2" REBAR w/SAVOY CAP SET ON SOUTHWEST PROPERTY CORNER LOT 7
C.P. NO. 3	N 18509.30 E 19058.05	1/2" REBAR w/SAVOY CAP SET ON SOUTHWEST PROPERTY CORNER LOT 7
C.P. NO. 3	N 18873.78 E 19030.65	1/2" REBAR w/SAVOY CAP SET ON NORTHEAST PROPERTY CORNER LOT 3

BENCHMARK:
"Square" Cut on North Curb
Return of Driveway at SW
Corner of Subject Property.
Elev.=1286.76



EROSION CONTROL LEGEND

Permanent Seeding, Fertilizing & Mulching

Silt Fence

(Contractor will be Responsible for any additional Erosion Control Devices not shown on these plans that are necessary to prevent erosion.)

GRAPHIC SCALE

(IN FEET)
1 inch = 30 ft.

LEGEND

G = GAS MAIN
W = WATER MAIN
SS = SANITARY SEWER
SWS = STORM WATER SEWER
UGE = UNDER GROUND ELECTRIC
UGT = UNDER GROUND TELEPHONE

TELE. PED . . . . . TELEPHONE PEDESTAL
. . . . . HIGH LINE POLE
. . . . . POWER POLE
. . . . . SIGN
W.M. . . . . WATER METER
SS M.H. . . . . SANITARY SEWER MANHOLE
SWS M.H. . . . . STORM WATER SEWER MANHOLE
T.S. . . . . TRAFFIC SIGNAL
Sil. Post . . . . . STEEL POST

PERMANENT SEEDING

NOTE: All areas disturbed by construction, excepting the paved areas, proposed sodded area and areas of undisturbed native sod or other desirable vegetation shall be fertilized (limed when required), seeded in kind, and mulched. Soil preparation shall conform to the Best Management Practices for Erosion and Sediment Control.

After the temporary seeding has been completed on the entire project, the permanent seeding shall be done during the normal seeding season.

It shall not be required to till the area to bare ground prior to permanent seeding. If temporary cover has provided stable slopes with no erosion, seed the permanent grasses into the existing cover. If there has been erosion that requires repair prior to seeding, then it may be necessary to regrade the area, resulting in bare ground.

FERTILIZER: A ratio and application rate that equals or exceeds the required minimum rate per acre listed in Summary of Seeding Quantities will be acceptable.

MULCHING: Mulch shall be spread uniformly over all disturbed areas(not covered by erosion mat) and punched in the soil, unless otherwise noted on the plans. The rate of application per acre, thickness in place, for the various mulching materials are as follows:

Prairie Hay Mulching: 1–3/4 to 2–1/4 Tons per Acre = 1–1/2" loose depth spread uniformly over acre.

The above rates are a guide. It will be at the discretion of the Engineer to determine what rate is sufficient for adequate protection of newly seeded areas.

The amount of mulch required shall be determined in the field.

SEEDING PERIODS	
COOL SEASON	WARM SEASON
February 15 to April 20 and August 15 to September 30	December 1 to April 30
SPECIES	SPECIES
Blue Grasses	Bluestems
Brome Grasses	Buffalo Grass
Fescues	Eastern Gama Grass
Rye Grasses	Gramas
Wheat Grasses	Indian Grass
Reed Canary Grass	Love Grasses
	Switch Grass
	Wildflower Mixes
When "COOL SEASON" species are mixed with "WARM SEASON" species, in areas of 5 acres or more, the mixture shall be seeded during the "WARM SEASON". In areas of less than 5 acres, the mixture of "COOL SEASON" and "WARM SEASON" species may be seeded during the "WARM or COOL SEASONS".	

SUMMARY OF PERMANENT SEEDING QUANTITIES		
RATE OF APPLICATION (Pure Live Seed per acre)	DESCRIPTION	QUANTITY
100 Lbs./Acre	Grass Seeding (In Kind)	As Required
125 Lbs./Acre	Fertilizer(16–20–0)	As Required
	Mulching	As Required

UTILITIES SHOWN REPRESENT THE BEST INFORMATION AVAILABLE FOR DESIGN. ADDITIONAL UTILITIES MAY BE PRESENT ON THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION, DEPTH AND SIZE OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE LIABLE FOR ANY DAMAGE CAUSED BY THE FAILURE TO DO SO.

SURVEY DISCLAIMER:
TOPOGRAPHIC SURVEY USED IN PREPARING PLANS WAS PROVIDED BY GARBER SURVEYING SERVICE, (620) 665–7032, 423 WEST FIRST AVE., HUTCHINSON, KS. ENGINEER DOES NOT GUARANTEE SURVEY ELEVATIONS FOR ACCURACY. CONTRACTOR SHALL VERIFY ELEVATIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

SANITARY SEWER FOR WEST PARK GARDENS

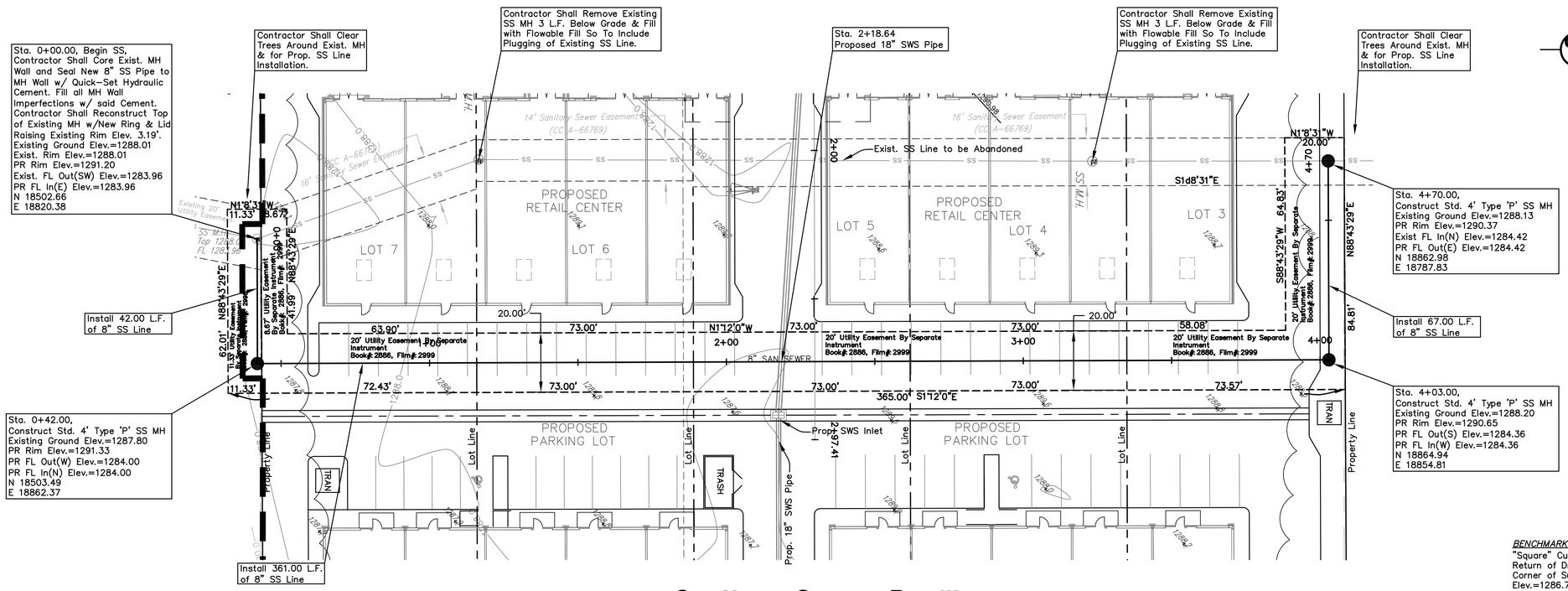
SITE PLAN/EROSION CONTROL

WICHITA, SEDGWICK COUNTY, KANSAS

PROJ. NO.: 20061452

CERTIFIED ENGINEERING DESIGN, P.A.
810 WEST DOUGLAS, SUITE C
WICHITA, KANSAS 67203
PH.(316)262–8808 FAX.(316)262–1669

DESIGNED: HDF	SCALE: 1"=30'	SHEET 2
DRAWN: JDT	DATE: 10–06	
CHECKED: HDF	CED FILE: Larry Cook Base	TOTAL 10



GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
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BENCHMARK:
"Square" Cut on North Curb Return of Driveway at SW Corner of Subject Property. Elev.=1286.76

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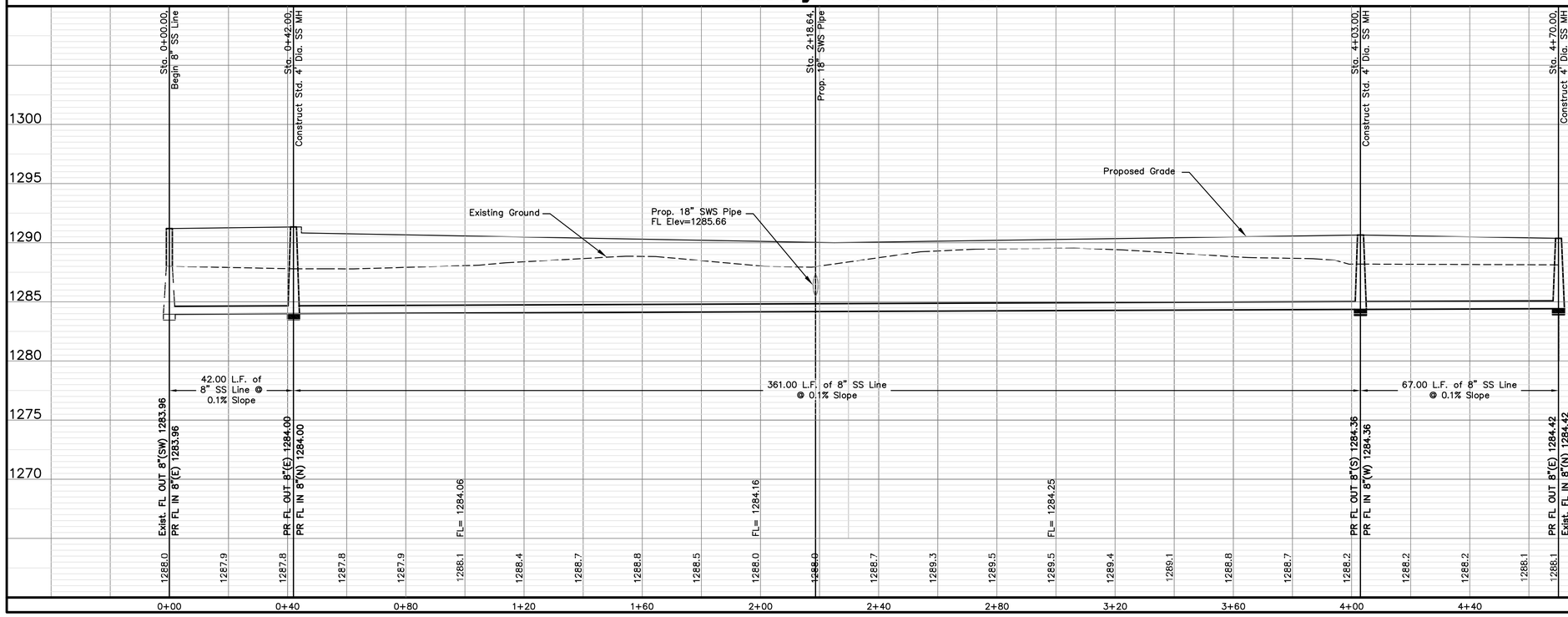
Sanitary Sewer Profile



WEST PARK GARDENS
SANITARY SEWER
WICHITA, SEDGWICK COUNTY, KANSAS
PROJ. NO.: 20061452

CERTIFIED ENGINEERING DESIGN, P.A.
810 WEST DOUGLAS, SUITE C
WICHITA, KANSAS 67203
PH.(316)262-8808 FAX.(316)262-1669

DESIGNED: HDF	SCALE: 1"=20'	SHEET 3
DRAWN: JDT	DATE: 10-06	
CHECKED: HDF	CED FILE: Larry Cook Base	TOTAL 10