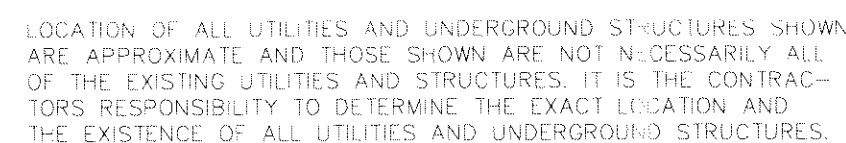




REGISTERED ENGINEER Eugene Coleman
TENNESSEE CERTIFICATE NO. 104154

ON 9/27/2006, THE KNOX COUNTY BOARD OF ZONING APPEALS APPROVED A VARIATION OF THE KNOX COUNTY ZONING RESOLUTION FOR WAIVER OF REQUIRED PARKING STALL SIZE FROM 200 SQUARE FEET IN AREA TO 162 SQUARE FEET IN AREA; WAIVER OF DRIVEWAY WIDTH FOR 90 DEGREE PARKING FROM 25 FEET TO 24 FEET; WAIVER OF REQUIRED PARKING SPACES PROVIDED FOR EACH ONE THOUSAND SQUARE FEET OF GROSS LEASABLE FLOOR AREA FROM 5 TO 4.5; AND WAIVER OF SIDE SETBACK FROM 50 FEET TO 0 FEET. PROPERTY IS LOCATED AT 7720 MAYNARDVILLE PIKE, SUBDIVISION, CLT MAP 029, PARCEL 020/021, LOT.

A VARIANCE FROM THE KNOXVILLE-KNOX COUNTY MINIMUM SUBDIVISION REGULATIONS FOR WAIVER OF SECTION 62-2 VERICAL CURVES IS BEING REQUESTED. SECTION 62-2 REQUIRES ALL CHANGES IN GRADE SHALL BE MADE BY VERICAL CURVES OF A MINIMUM LENGTH OF FIFTY (50) FEET. (50) TIMES THE ALGEBRAIC DIFFERENCE IN PERCENTS OF GRADE FOR MAJOR AND MINOR ARTERIALS AND MAJOR AND MINOR COLLECTORS, AND ONE-HALF THIS MINIMUM LENGTH FOR OTHER STREET TYPES. THE EXISTING PLAN OF THE PROPOSED INTERSECTION OF CURVE LENGTH EQUAL TO FIFTEEN (15) TIMES THE ALGEBRAIC DIFFERENCE IN PERCENTS OF GRADE FOR A PORTION OF QUARRY ROAD NEAR E. EMORY ROAD. THE PURPOSE FOR USING THIS VERTICAL CURVE LENGTH IS TO MAINTAIN THE MINIMUM STOPPING SIGHT DISTANCE AND DRIVEWAYS. USING A CURVE LENGTH EQUAL TO TWENTY-FIVE (25) TIMES THE ALGEBRAIC DIFFERENCE IN PERCENTS OF GRADE INCREASES THE EXISTING DRIVEWAY SLOPES BY 5 TO 10% BASED UPON A POLYCLON GEOMETRIC DESIGN SPEED OF 35 MPH. THE EXISTING CURVE LENGTH OF 150 FEET PROVIDES A STOPPING SIGHT DISTANCE OF 180- FEET MEETING A DESIGN SPEED OF 25 MPH. WE FEEL THAT THE CURRENT CURVE LENGTH IS IN THE BEST INTEREST OF THE PUBLIC PERSONS AND WILL NOT BE DETRIMENTAL TO PUBLIC SAFETY AND WELFARE.



REV	DESCRIPTION	DATE	BY
TH&P TYSONER, HAMILTON & PARTNERS <i>Solutions for the Future</i> ENGINEERS • SURVEYORS PLANNERS • GEOLOGISTS 5428 BRISTOL HWY JOHNSON CITY, TENNESSEE 37601 (423) 282-2687 (423) 854-4563 FAX thp@tysoner-engineering.com http://www.tysoner-engineering.com			

11-29-07

PROJECT:
**WILLOW FORK
SUBDIVISION**

PREPARED FOR:
GRAHAM CORPORATION
1701 MERCHANTS DR
KNOXVILLE, TN 37912

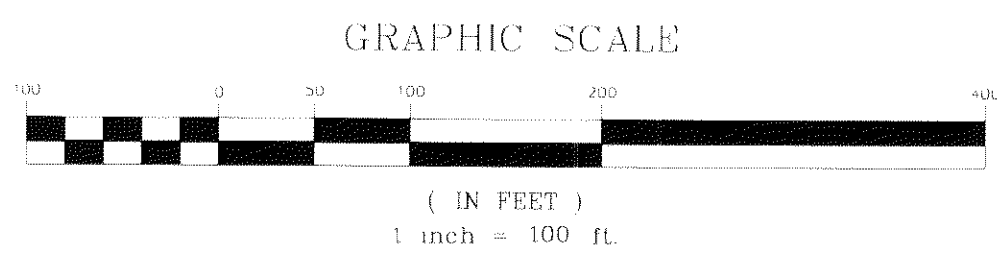
LOCATION:
KNOX COUNTY,
TENNESSEE

DWG. TITLE

CONCEPT SUBDIVISION
PLAN
FOR
WILLOW FORK
SUBDIVISION

ISSUE DATE:	
CADD FILE: 0640900C.DWG	
SCALE: 1"=100'	PROJECT NO. 0640900C
DRAWN: SDB	
CHECK: DEC	
DATE: 11/29/07	

5HT 1 OF 2



NOTICE

LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES SHOWN ARE APPROXIMATE AND THOSE SHOWN ARE NOT NECESSARILY ALL OF THE EXISTING UTILITIES AND STRUCTURES. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE EXACT LOCATION AND THE EXISTENCE OF ALL UTILITIES AND UNDERGROUND STRUCTURES.

GENERAL NOTES					
PROJECT:		WILLOW FORK SUBDIVISION			
PREPARED FOR: GRAHAM CORPORATION 1701 MERCHANTS DR KNOXVILLE, TN 37912					
LOCATION: KNOX COUNTY, TENNESSEE					
DRAWING TITLE: CONCEPT SUBDIVISION PLAN FOR WILLOW FORK SUBDIVISION					
ISSUE DATE:					
SCALE: 2"=100'					
SCHEMATIC: 1"=100'		PROJECT NO.			
DRAWING: SDB		0640900C			
CHECK: DEC.					
DATE: 11/29/07					
SHEET 2 OF 7					



Diagram of a storm sewer manhole. The manhole is shown in cross-section, revealing the internal structure. The top is covered by a circular cover with a grate. The manhole is labeled with the following text: "STORM SEWER", "INLET", "STORM SEWER MANHOLE", and "ACCESS".

Plan view of a three-lane highway cross-section. The central lane is 11' ± wide. The left and right lanes are 25' wide. The total width is 61' ±. The diagram shows the centerline, lane markings, and typical dimensions for a three-lane highway.

TYPICAL ISLAND & DRIVE

SCALE - 1"=20'

SHOPPING CENTER USE - 4.5 PARKING SPACES PROVIDED FOR EACH 1,000 SF OF GROSS LEASABLE FLOOR AREA (VARIANCE 9-27-06)

LOT 5 (2.5--ACRES±)
GROSS FLOOR AREA = 27,000 SF
PARKING REQUIRED = 27,000 SF/1000 SF x 4.5 SPACES = 122 SPACES
PARKING PROVIDED = 126 SPACES

LOT 7 (1.6-ACRES±)
GROSS FLOOR AREA = 17,091 SF
PARKING REQUIRED = 17,091 SF/1000 SF x 4.5 SPACES = 77 SPACES
PARKING PROVIDED = 78 SPACES

LOT 8 (1.4-ACRES±)
GROSS FLOOR AREA = 14,849 SF
PARKING REQUIRED = 14,849 SF/1000 SF x 4.5 SPACES = 67 SPACES
PARKING PROVIDED = 80 SPACES

LOT 10 (1.1-ACRES±)
GROSS FLOOR AREA = 10,929 SF
PARKING REQUIRED = 10,929 SF/1000 SF x 4.5 SPACES = 50 SPACES
PARKING PROVIDED = 59 SPACES

LOT 11 (0.9-ACRES±)
GROSS FLOOR AREA = 8,488 SF
PARKING REQUIRED = 8,488 SF/1000 SF x 4.5 SPACES = 39 SPACES
PARKING PROVIDED = 55 SPACES

LOT 12 (1.2-ACRES±)
GROSS FLOOR AREA = 8,678 SF
PARKING REQUIRED = 8,678 SF/1000 SF x 4.5 SPACES = 40 SPACES
PARKING PROVIDED = 53 SPACES

MATCHLINE: SEE SHEET 4 OF 7



GENERAL NOTES

5			
4			
3			
2			
1			

REV.	DESCRIPTION	DATE	BY
------	-------------	------	----

TH&P
TYSINGER, HAMPTON & PARTNERS

Solutions for the Future
ENGINEERS • SURVEYORS
PLANNERS • GEOLOGISTS
3428 BRISTOL HWY.
JOHNSON CITY, TENNESSEE 37601
(423) 282-2687
(423) 854-4563 FAX
tbp@tysinger-engineering.com
<http://www.tysinger-engineering.com>

ENGINEER'S APPROVAL _____



11-29-07

PROJECT:
WILLOW FORK
SUBDIVISION

PREPARED FOR:
GRAHAM CORPORATION
1701 MERCHANTS DR
KNOXVILLE, TN 37912

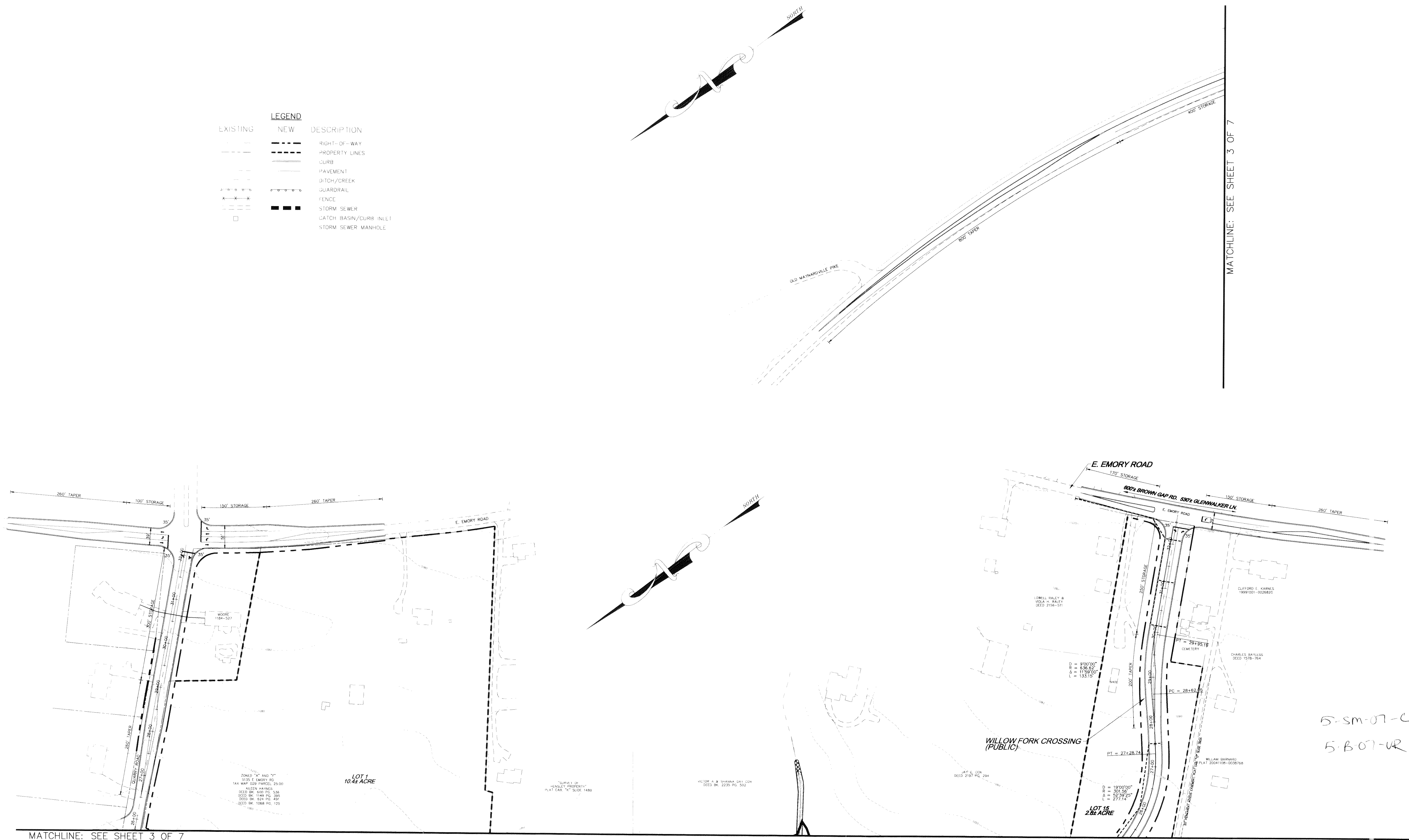
LOCATION:
KNOX COUNTY,
TENNESSEE

>WG. TITLE

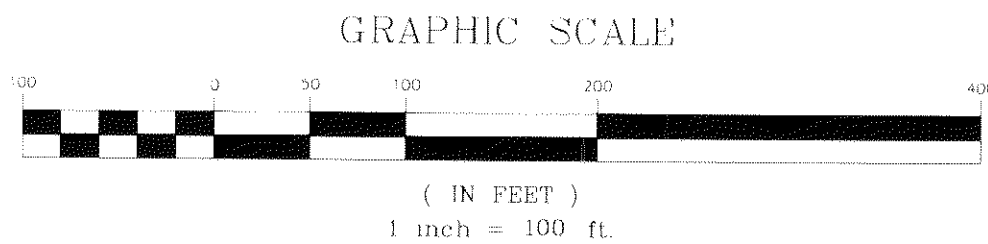
USE PERMITTED
ON REVIEW PLAN
FOR
WILLOW FORK
SUBDIVISION

ISSUE DATE:	
ADD FILE: 0640900C.DWG	
SCALE: 1"=100'	PROJECT NO. 0640900C
DRAWN: SDB	
CHECK: DEC	
DATE: 11/29/07	

SHI 3 OF 7



LEGEND		
EXISTING	NEW	DESCRIPTION
---	---	RIGHT-OF-WAY
---	---	PROPERTY LINES
---	---	CURB
---	---	PAVEMENT
---	---	DITCH/CREEK
---	---	GUARDRAIL
---	---	FENCE
---	---	STORM SEWER
---	---	CATCH BASIN/CURB INLET
---	---	STORM SEWER MANHOLE



NOTICE
LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES SHOWN ARE APPROXIMATE AND THOSE SHOWN ARE NOT NECESSARILY ALL OF THE EXISTING UTILITIES AND STRUCTURES. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE EXACT LOCATION AND THE EXISTENCE OF ALL UTILITIES AND UNDERGROUND STRUCTURES.

GENERAL NOTES

1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			
41			
42			
43			
44			
45			
46			
47			
48			
49			
50			
51			
52			
53			
54			
55			
56			
57			
58			
59			
60			
61			
62			
63			
64			
65			
66			
67			
68			
69			
70			
71			
72			
73			
74			
75			
76			
77			
78			
79			
80			
81			
82			
83			
84			
85			
86			
87			
88			
89			
90			
91			
92			
93			
94			
95			
96			
97			
98			
99			
100			

TH&P
T. H. & P. ENGINEERS, PLANNERS & SURVEYORS
Solutions for the Future
ENGINEERS • SURVEYORS
PLANNERS • GEOLOGISTS
3428 BRISTOL HWY.
JOHNSON CITY, TENNESSEE 37601
(423) 282-2687
(423) 854-4563 FAX
thp@tysinger-engineering.com
thp12://www.tysinger-engineering.com

ENGINEER'S APPROVAL

11-29-07

PROJECT:
**WILLOW FORK
SUBDIVISION**

PREPARED FOR:
**CF AHAM CORPORATION
1701 MERCHANTS DR
KNOXVILLE, TN 37912**

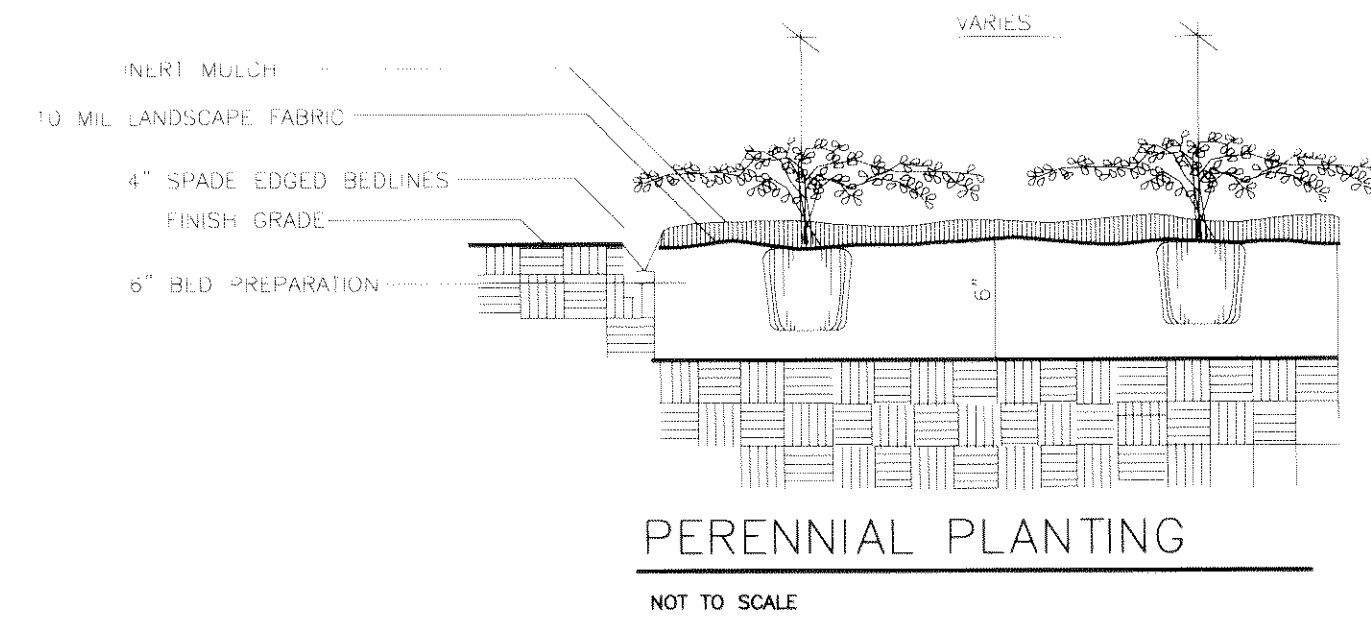
LOCATION:
**KNOX COUNTY,
TENNESSEE**

DWG TITLE
**USE PERMITTED
ON REVIEW PLAN
FOR
WILLOW FORK
SUBDIVISION**

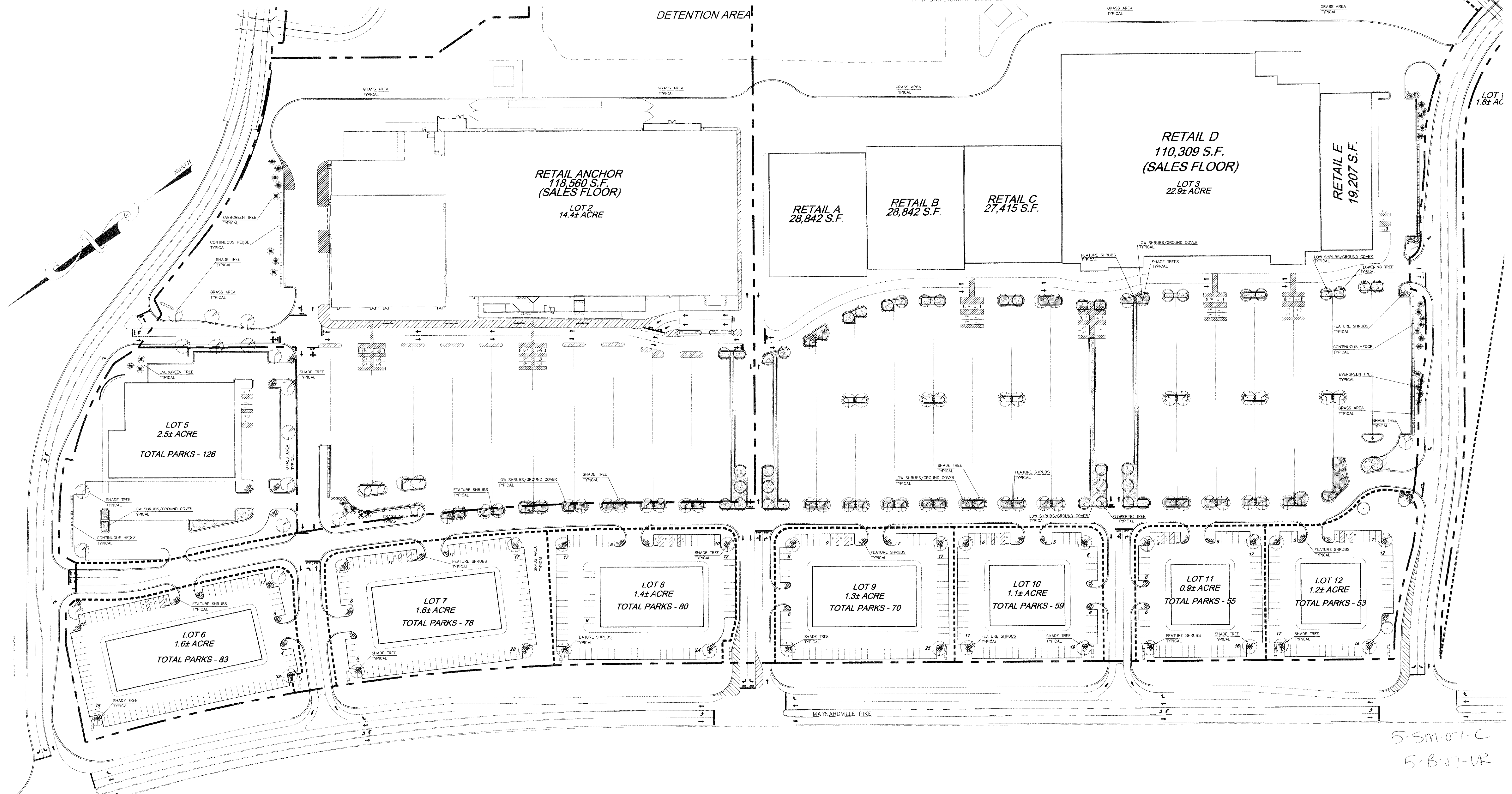
ISSUED DATE:
CAD FILE: 0640900C.DWG

SCALE: 1"=100' PROJECT NO.
DRAWN: SDB
CHECKED: DEC
DATE: 11/29/07
0640900C

SH1 4 OF 7



- ### GENERAL NOTES:
1. ALL PLANT MATERIALS ARE TO BE HIGHEST QUALITY AS PER AMERICAN STANDARDS FOR NURSERY STOCK, ANSI Z60.1-1990, INSTALLED ACCORDING TO THE HIGHEST NURSERY STANDARDS.
 2. ALL PLANTED AREAS SHALL RECEIVE A 3" LAYER OF DOUBLE SHIELDED HARDWOOD DIRT MULCH OVER A 10 MI WEED MAT EQUAL TO "WEEDBLOCK" BY EASY GARDENER OR DEWITT WEED BARRIER. THE WEED MAT SHALL BE PLACED UNDER ALL PLANTING AREAS NOT TO BE SODED OR SEEDED, OR AS DIRECTED ON DRAWINGS.
 3. MULCH IS TO BE FROM AN APPROVED SOURCE AND FREE FROM WEEDS, ROCKS, CLIPPINGS, DEBRIS ETC. CONTRACTOR SHALL SUBMIT SAMPLE TO OWNER FOR APPROVAL.
 4. SOD AND SEED TO BE VARIETY APPROVED BY OWNER. ALL DISTURBED AREAS NOT SPECIFIED AS SOD OR PLANTING AREAS SHALL BE SEED AND MULCH. ALL SOD AND SEED TO MEET TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARDS. ANY AREAS NOT ESTABLISHED WITHIN 2 MONTHS SHALL BE RESEEDED/RESEED, WITH NO ADDITIONAL CHARGE, IN ACCORDANCE WITH THE ORIGINAL SPECIFICATIONS. ENTRANCE ROADS SHALL BE SOD.



GENERAL NOTES			
6			
5			
4			
3			
2			
1			
REV.	DESCRIPTION	DATE	BY
TH&P TYSINGER, BRANSTON & PARTNERS Solutions for the Future ENGINEERS • SURVEYORS PLANNERS • GEOLOGISTS 3428 BRISTOL HWY. JOHNSON CITY, TENNESSEE 37601 (423) 282-2687 (423) 854-4563 FAX thp@tysinger-engineering.com http://www.tysinger-engineering.com			
ENGINEER'S APPROVAL			
PROJECT: WILLOW FORK SUBDIVISION PREPARED FOR: GRAHAM CORPORATION 1701 MERCHANTS DR KNOXVILLE, TN 37912 LOCATION: KNOX COUNTY, TENNESSEE			
DWG. TITLE USE PERMITTED ON REVIEW PLAN FOR WILLOW FORK SUBDIVISION			
ISSUE DATE: ADD FILE: 0640900C.DWG			
SCALE: N.T.S.		PROJECT NO.	
DRAWN: TA		0640900C	
CHECK: DEC			
DATE: 11/29/07			
SHEET 7 OF 7			