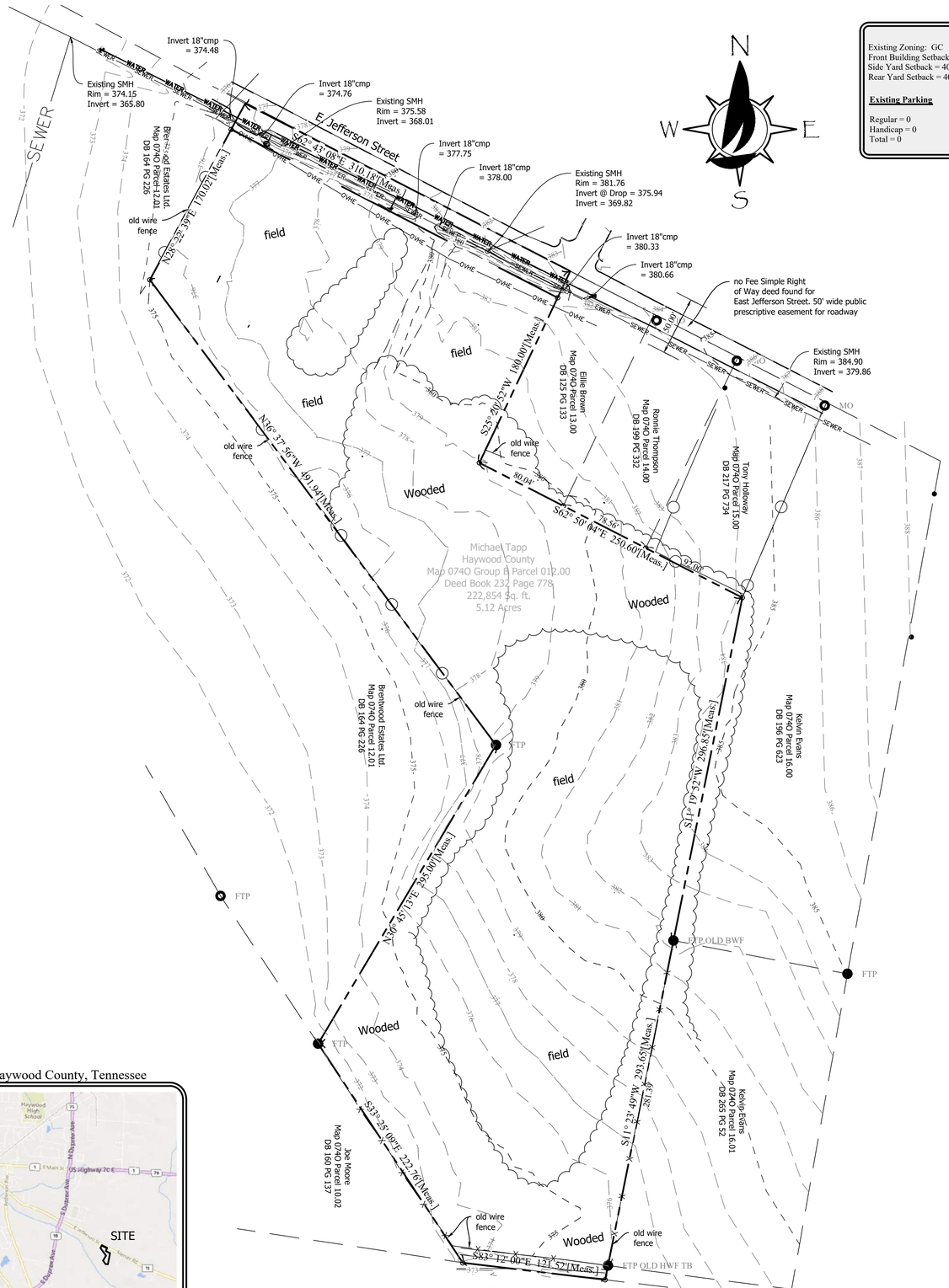


Existing Zoning: GC
Front Building Setbacks = 40' per siteplan
Side Yard Setback = 40' per siteplan
Rear Yard Setback = 40' per siteplan

Existing Parking

Regular = 0
Handicap = 0
Total = 0

Schedule B Exceptions per First American Title Insurance Co. File No. 18-0239

Survey Applicable Items follow:

Item 3: No additional easement or encumbrances found during survey.

Item 4:

Item 9:

Item 10:

Survey Datum:

1. The horizontal datum is based on the Tennessee State Plane Coordinate System (NAD1983)

2. The vertical datum is based on the NAVD88 vertical datum

Symbol Legend

Property Corner	Wood Fence line
Benchmark	Chain-linked Fence line
Parking Spaces	Barbed-Wire Fence line
curb drain inlet	Under Ground Electric
Sewer Man Hole	Over-Head Electric
Drainage Man Hole	Drain line
Gas Meter	Major Contours
Electric Meter	Minor Contours
Water Meter	Guy Anchor
Power Pole	RailRoad Easement
Light Pole	FEMA Flood Zone Area
PIV valve	Building
water valve	Concrete
fire hydrant	Asphalt
Pad-Mount Trans.	Grass
Air Conditioner	Easements
Clean Out	

Survey Notes:

1. All bearings are referenced to the Tennessee State Plane Coordinate System (NAD83)

2. All new property corners shall be 1/2" rebar with orange plastic caps reading "SEAS TN 2195".

3. Standard deed and title research was performed by Arc and current Title Commitment was provided to this firm by the client.

4. The property shown hereon does NOT graphically fall within a special designated Floodzone per FEMA FIRM Map Panel 47157C0185F, Dated 09/27/2007.

5. All existing "found irons" are described hereon and were found in accordance with the current deed of record.

Existing Site Data

This property is currently utilized as office/retail. Zoned:

One location with direct public access to _____ as shown here on.

All existing utilities shown were located from surface evidence only. Call 1-800-351-1111 (811) before digging.

There was no evidence of any current earth moving, building construction, or building additions on the property at the time of the survey.

There was no evidence of street or sidewalk construction and no proposed changes to the right of way lines were found at the time of the survey.

The property showed no signs or evidence of being used for a landfill, solid waste dump or cemetery.

There was remnants of delineated wetlands on the property at the time of the survey, but not enough to graphically show.

Brownsville, Haywood County, Tennessee

Vicinity Map - Not To Scale

Title Commitment Description

Property Description "As Surveyed"

2016 ALTA/NSPS CERTIFICATION

To Mondo Properties; First American Title Insurance Company; and to their successors and assigns:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 6a, 6b, 7a, 8, 9, 10a, 10b, 11b, 12, 13, 16, 17, 18, 19, and 20a of Table A thereof. The field work was completed on 04/04/2020.

04/04/2020
Jeremy E. Loudenbeck
TN. RLS 2195

ALTA/NSPS Land Title Survey

1616 East Jefferson Street

Brownsville, Haywood County, Tennessee

Tax Parcel #: Map 074O Group B Parcel 012.00
Instrument #: RB 232 PG 778

SEAS
Seaside Engineering And Surveying, LLC
5567 Commander Dr. Suite 101
Arlington, Tennessee 38002
Office: (901) 881-9757
Fax: (850) 398-6812

NO.	DATE	DESCRIPTION	BY

DRAWN BY: JL | DATE: 09/04/2024
CHECKED BY: JEL | DRAWING NO.: SEAS-MEM
JOB NO.: 24-536 | SHEET 1 OF 1

Surveyed for:
Overland Property Group

Surveyor Email:
Jeremy.Loudenbeck@seasllc.net

VICINITY MAP
NOT TO SCALE

FINAL SITE DATA

TOTAL SITE AREA (LOT 1):	222,854 S.F. (5.12 AC.)
TAX MAP, PARCEL NUMBER	MAP 0740, PARCEL 012.00
NUMBER OF UNITS	72 APT. UNITS
MAXIMUM BLDG. HEIGHT: PRO. MAX BLDG. HEIGHT:	75 FT 45.33FT (4 STORY APARTMENT)
BUILDING SETBACKS: FRONT SIDE REAR	 40 FT. 30 FT. 30 FT.
OPEN SPACE REQUIREMNT: PRO. OPEN SPACE:	40% MULTI FAMILY APARTMENTS
ZONING: LAND USE:	R-3 HIGH DENSITY RESIDENTIAL MULTI FAMILY APARTMENTS

PARKING SUMMARY

ACCESSIBLE PARKING STALLS	10 (2 van)
STANDARD PARKING STALLS	99
TOTAL PARKING STALLS	109
PARKING RATIO (STALLS/UNITS)	1.5

PARKING MEETS BROWNSVILLE'S LOCAL ZONING REQ':
CHAPTER 8: OFF-STREET PARKING & LOADING REGULATIONS.

TABLE 801.1 OFF-STREET PARKING SCHEDULE:
DWELLING UNITS:
2 STALLS PER DWELLING UNIT
2 X 72 UNITS = 144 STALLS REQUIRED

SECTION D, ITEM 7:
INCENTIVES: THE NUMBER OF PARKING STALL REQUIREMENTS WILL BE FURTHER REDUCED BY 25% IF LANDSCAPED ISLANDS EVERY FIFTEEN (15) PARKING STALLS ARE PROVIDED.
THUS, 144 X 75% = 108 STALLS REQUIRED

NOTE:
INSTALLATION OF ALL SPRINKLER SYSTEM PIPING FROM THE POINT OF SERVICE MUST BE PERFORMED BY A TENNESSEE REGISTERED SPRINKLER CONTRACTOR.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

SHEET 1 OF 3

PLANNING COMMISSION CERTIFICATION

I, _____
DO HEREBY CERTIFY THAT THE CITY OF BROWNSVILLE PLANNING COMMISSION HAS APPROVED THIS PLAN OF DEVELOPMENT.

_____ _____
DATE SECRETARY, CITY OF BROWNSVILLE PLANNING COMMISSION

CERTIFICATE OF ACCURACY OF ENGINEERING AND DESIGN

I, J. WESLEY WOOLDRIDGE
A PROFESSIONAL CIVIL ENGINEER, DO HEREBY CERTIFY THAT THE PLANS, ENGINEERING AND DESIGNS GOVERNING THE CONSTRUCTION OF THIS SITE DEVELOPMENT ARE TRUE AND CORRECT, AND CONFORM TO THE REQUIREMENTS SET FORTH IN THE SUBDIVISION REGULATIONS AND TECHNICAL SPECIFICATIONS OF THE CITY OF BROWNSVILLE.

_____
DATE PROFESSIONAL CIVIL ENGINEER
STATE OF TENNESSEE CERTIFICATE NO. 104878

J. Wesley Wooldridge REGISTERED ENGINEER AGRICULTURE No. 104878 STATE OF TENNESSEE

SITE BENCHMARK
RIM OF EXISTING S.M.H. LOCATED IN THE CENTER OF EAST JEFFERSON STREET
ELEVATION: 381.76

FEMA FLOOD NOTE:
The property shown hereon does NOT graphically fall within a special designated Floodzone per FEMA FIRM Map Panel 47157C0185F, Dated 09/27/2007.

REVISION

ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE
4	ASI #4	10/25
5	ASI #5	12/05/25

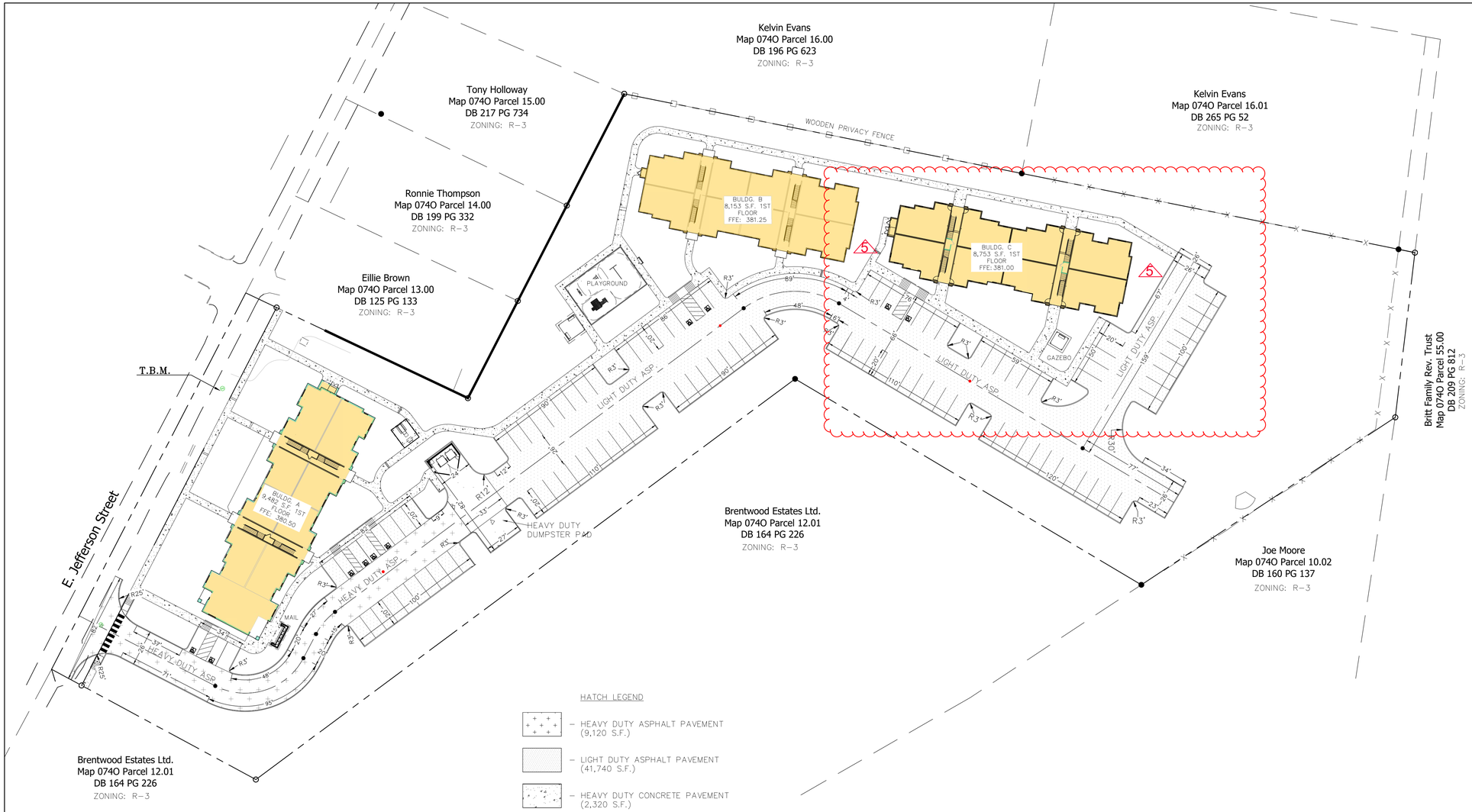
J. Wesley Wooldridge REGISTERED ENGINEER AGRICULTURE No. 104878 STATE OF TENNESSEE

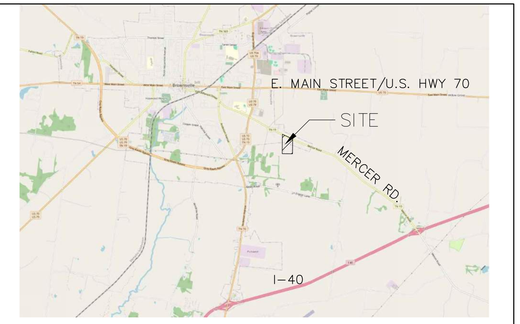
THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.
DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.

DIVISION OF ENGINEERING
SITE PLAN
LOCATION: 1616 EAST JEFFERSON STREET
BROWNSVILLE, TN.
SURVEY: SEAS DATE: 10/24 BOOK: _____
DESIGN: _____ DATE: 01/25 CKD: _____ DATE: 01/25 SCALE: 1": 40'

DEPUTY CITY ENGINEER DATE CITY ENGINEER DATE

RGI JOB NO. 24158





VICINITY MAP
NOT TO SCALE

FINAL SITE DATA	
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TAX MAP, PARCEL NUMBER	MAP 0740, PARCEL 012.00
NUMBER OF UNITS	72 APT. UNITS
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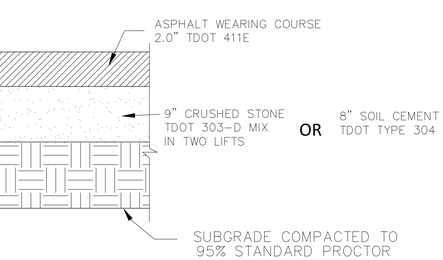
BUILDING SETBACKS: FRONT SIDE REAR	 40 FT. 30 FT. 30 FT.
OPEN SPACE REQUIREMNT: PRO. OPEN SPACE:	40% MULTI FAMILY APARTMENTS
ZONING: LAND USE:	R-3 HIGH DENSITY RESIDENTIAL MULTI FAMILY APARTMENTS

HATCH LEGEND

- HEAVY DUTY ASPHALT PAVEMENT (9,120 S.F.)
- LIGHT DUTY ASPHALT PAVEMENT (41,740 S.F.)
- HEAVY DUTY CONCRETE PAVEMENT (2,320 S.F.)

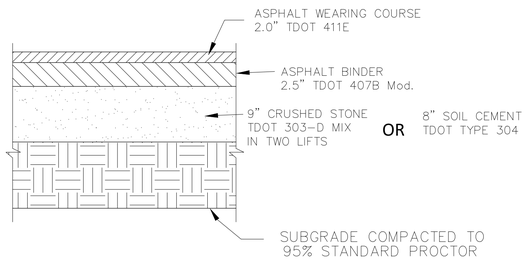
SITE BENCHMARK
RIM OF EXISTING S.M.H. LOCATED IN THE CENTER OF EAST JEFFERSON STREET
ELEVATION: 381.76

FEMA FLOOD NOTE:
The property shown hereon does NOT graphically fall within a special designated Floodzone per FEMA FIRM Map Panel 47157C0185F, Dated 09/27/2007.



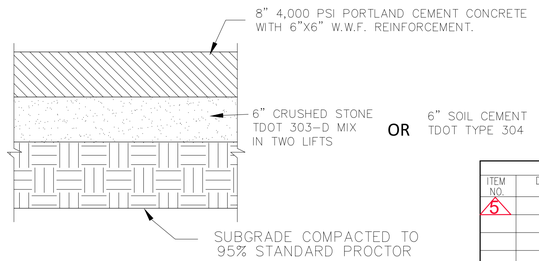
LIGHT DUTY

TYPICAL PAVEMENT DETAIL
N.T.S.



HEAVY DUTY

TYPICAL PAVEMENT DETAIL
N.T.S.



HEAVY DUTY CONCRETE

TYPICAL DUMPSTER PAD DETAIL
N.T.S.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

SHEET 2 OF 3

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE
5	ASI #5	12/05/25

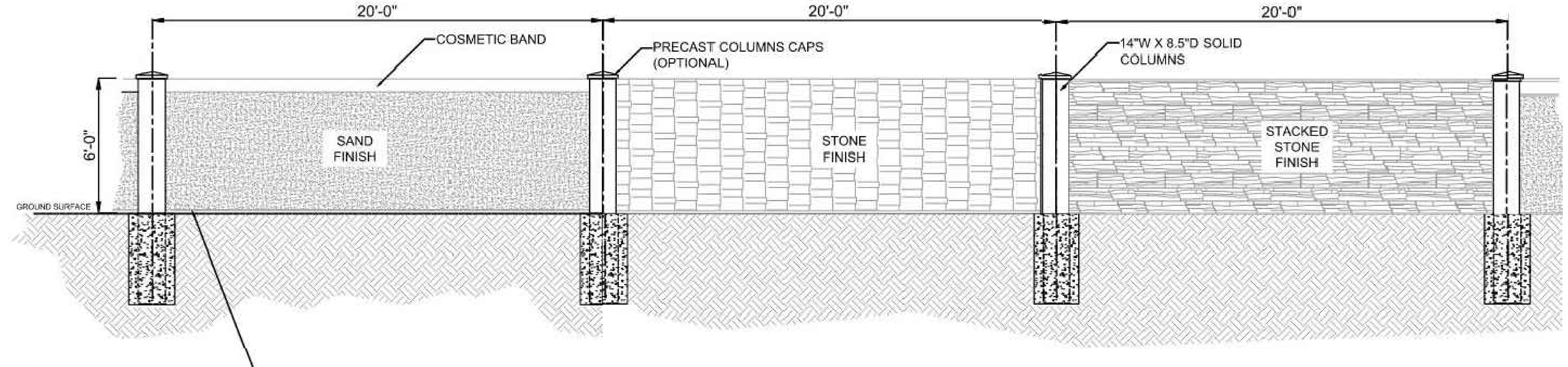
I Wesley Woolridge Registered Engineer Agriculture No. 104879 State of Tennessee 12/09/25

THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.
DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.

DIVISION OF ENGINEERING
SITE PAVING PLAN
LOCATION: 1616 EAST JEFFERSON STREET
BROWNSVILLE, TN.
SURVEY: SEAS DATE: 10/24 BOOK: _____
DESIGN: _____ DATE: 01/25 CKD: _____ DATE: 01/25 SCALE: 1": 40'

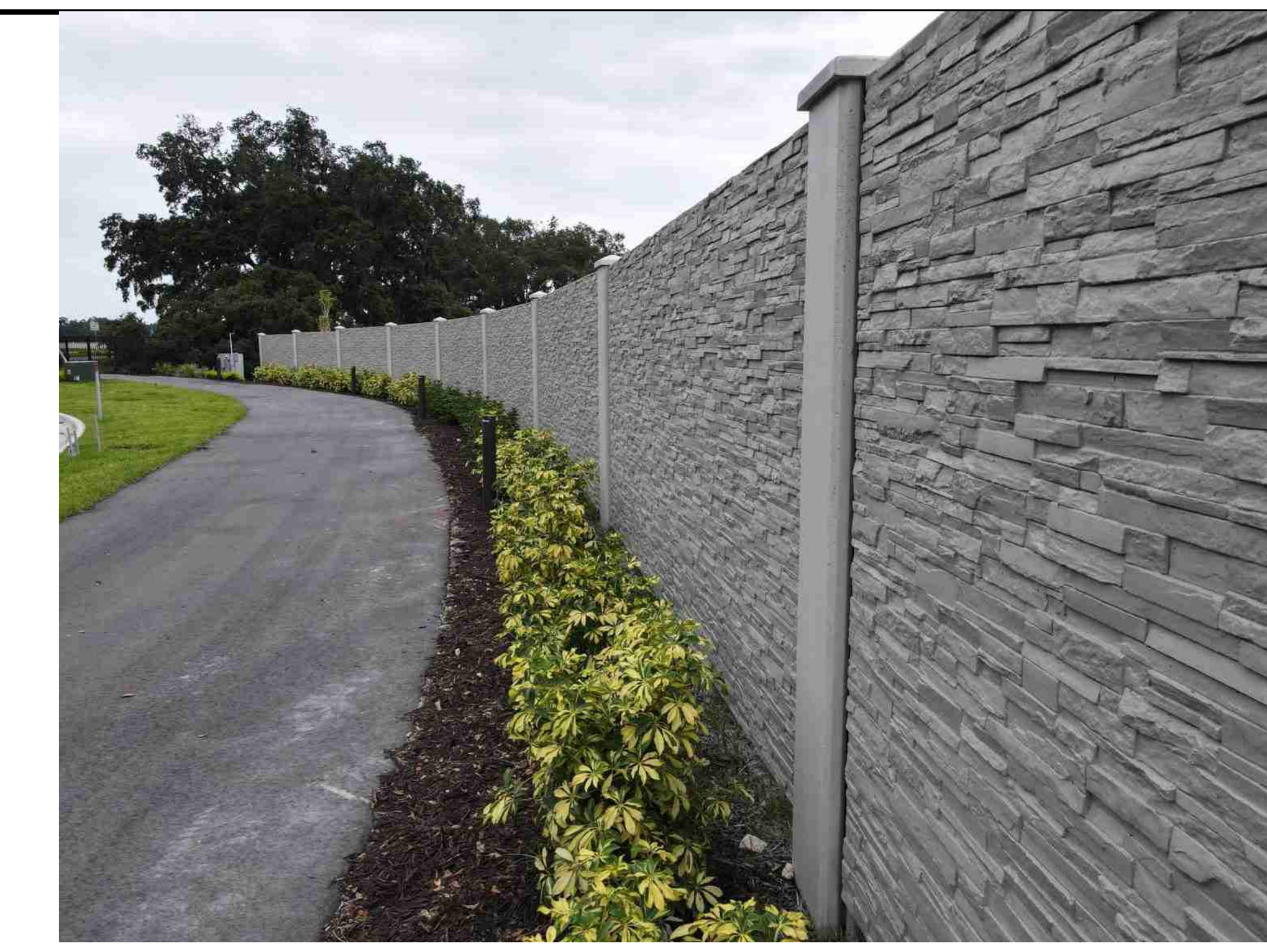
DEPUTY CITY ENGINEER _____ DATE _____ CITY ENGINEER _____ DATE _____

RGI JOB NO. 24158

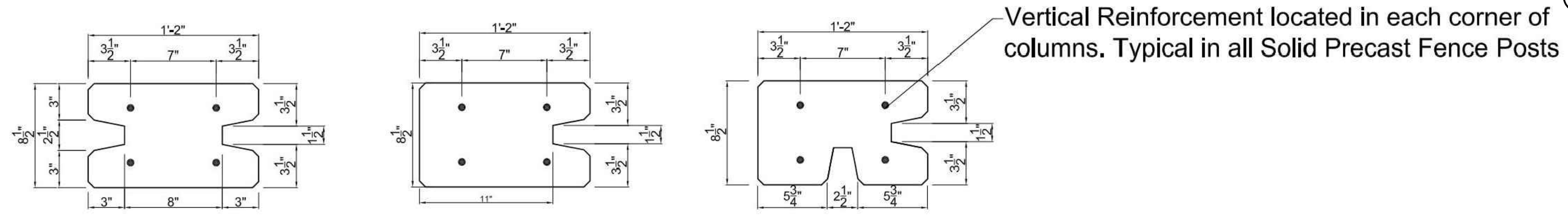


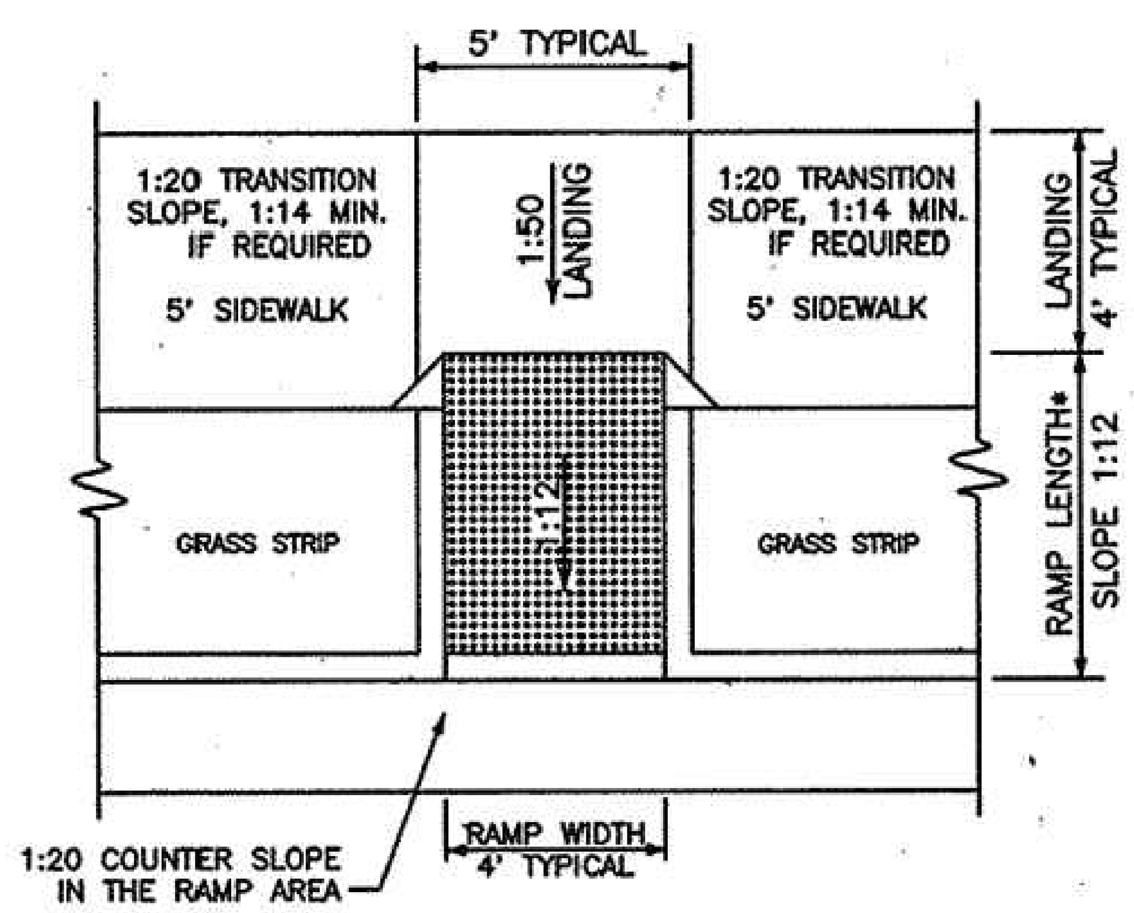
TYPICAL 6 FT. - GENERAL DIMENSIONS

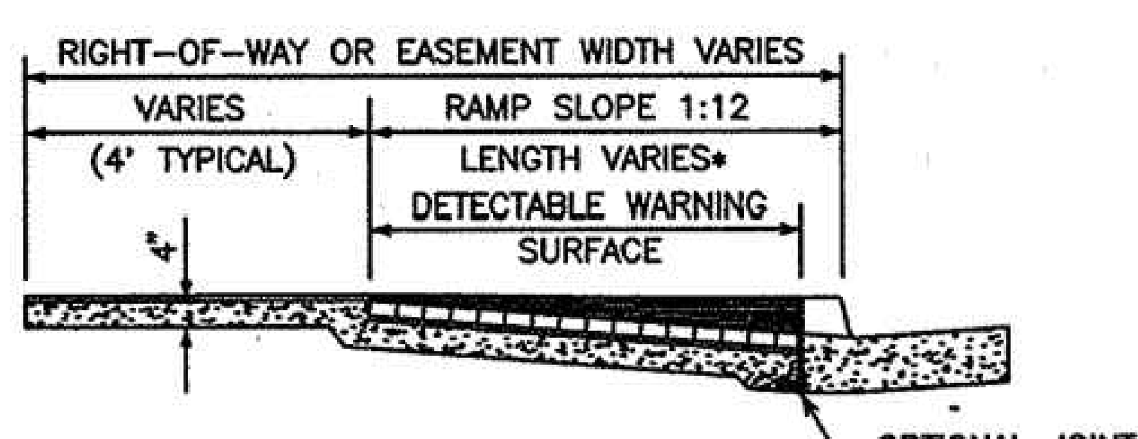
SCALE:NTS



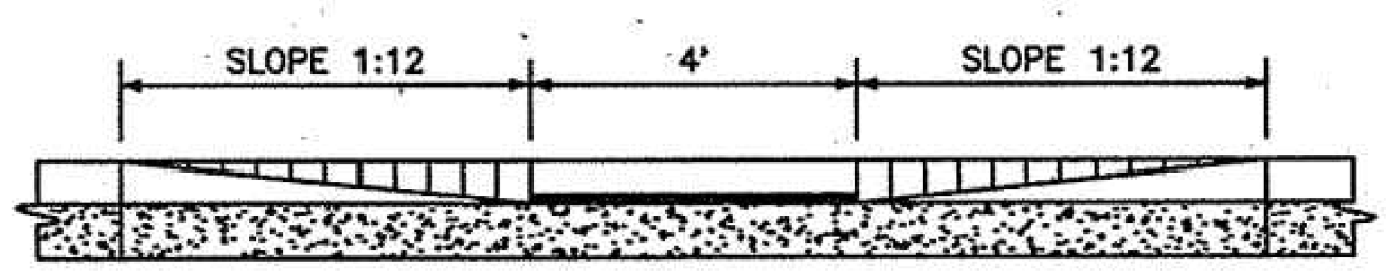
8-1/2" X 14" SOLID POST DETAILS



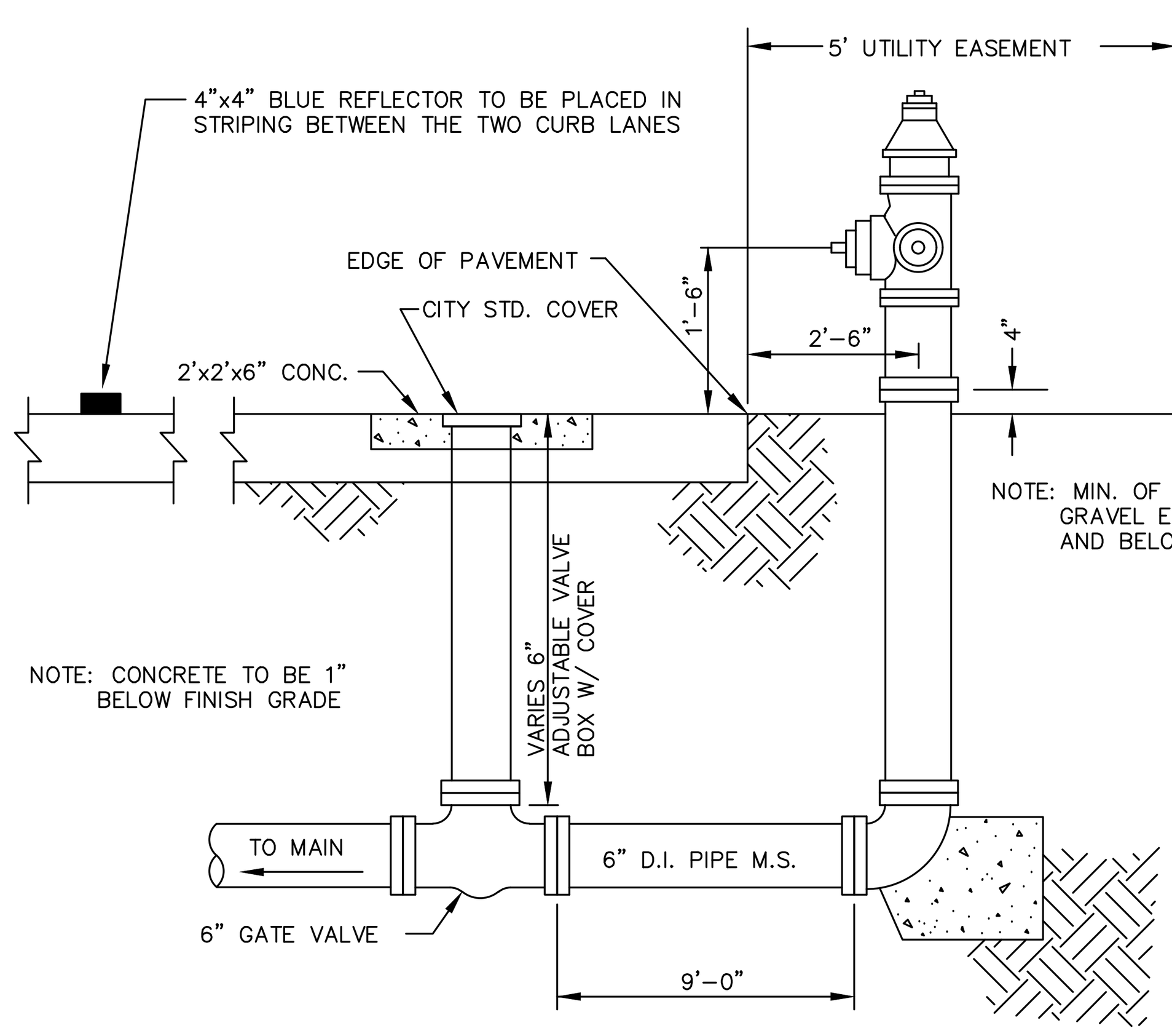




SECTION A–A

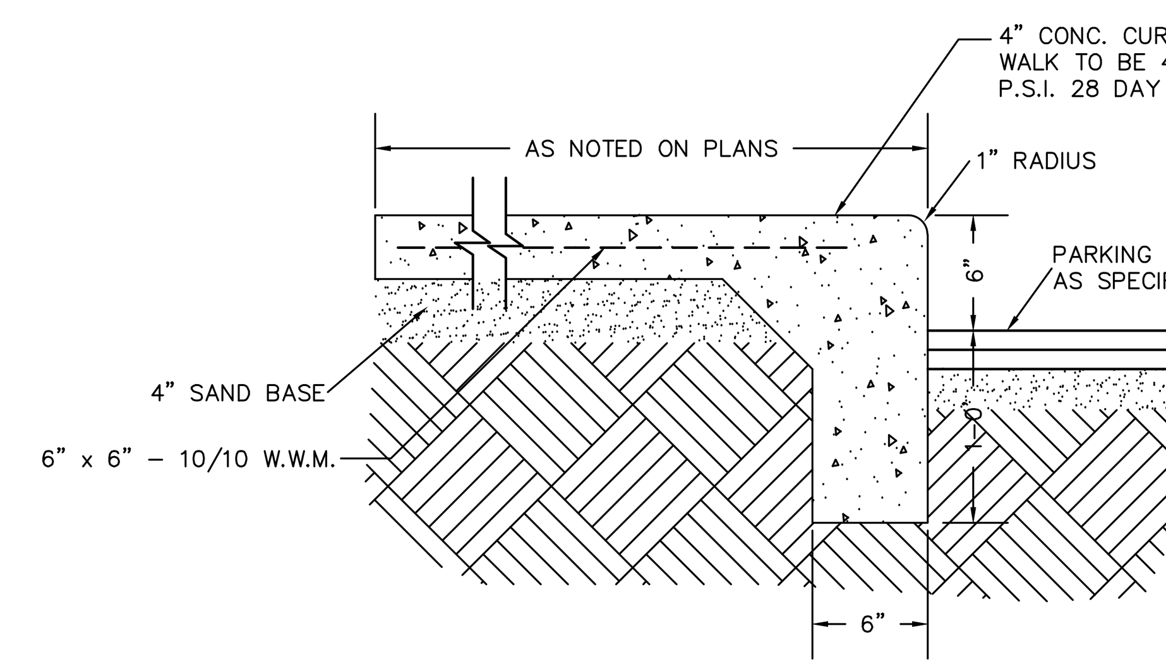


SECTION B–B



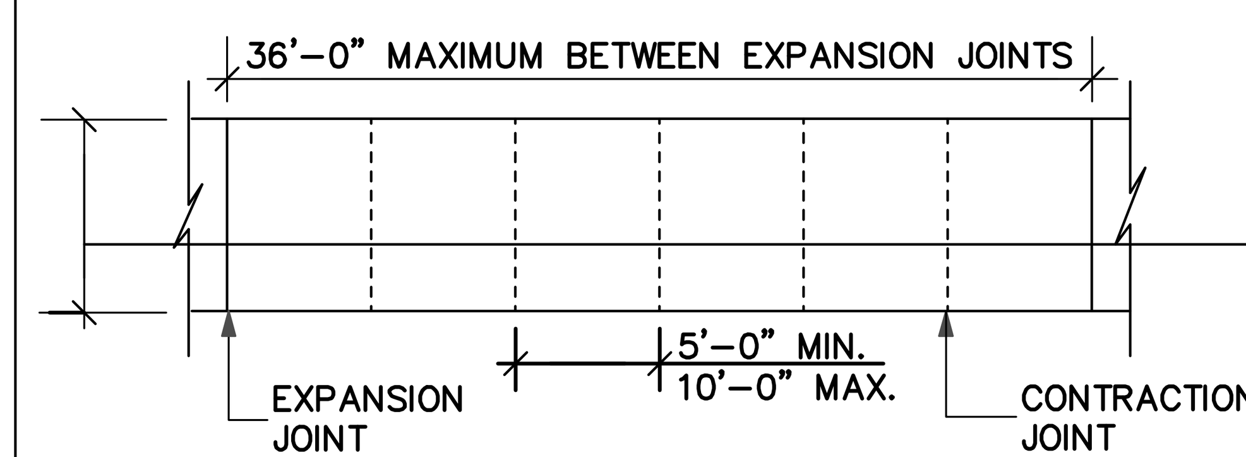
TYPICAL FIRE HYDRANT INSTALLATION

N.T.S.



CURBED SIDEWALK

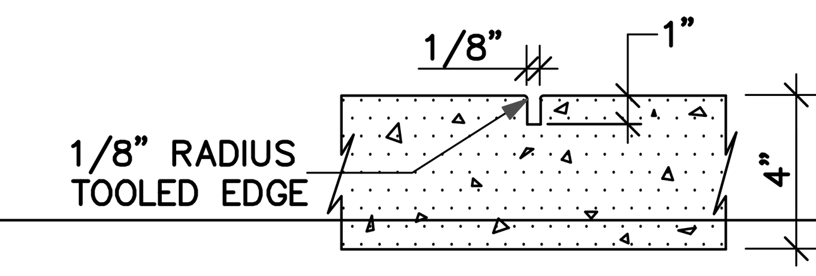
N.T.S.



SIDEWALK PLAN

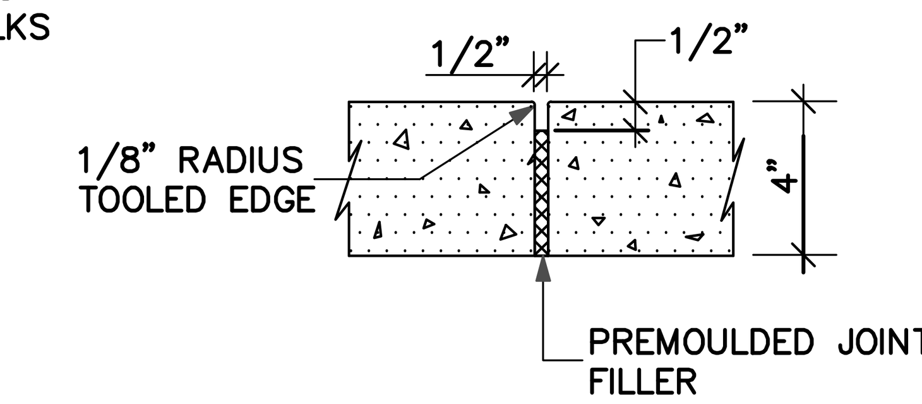
NOT TO SCALE

NOTE: ALSO PROVIDE EXPANSION JOINTS WHERE SIDEWALK ABUTS STRUCTURES OR OTHER SIDEWALKS



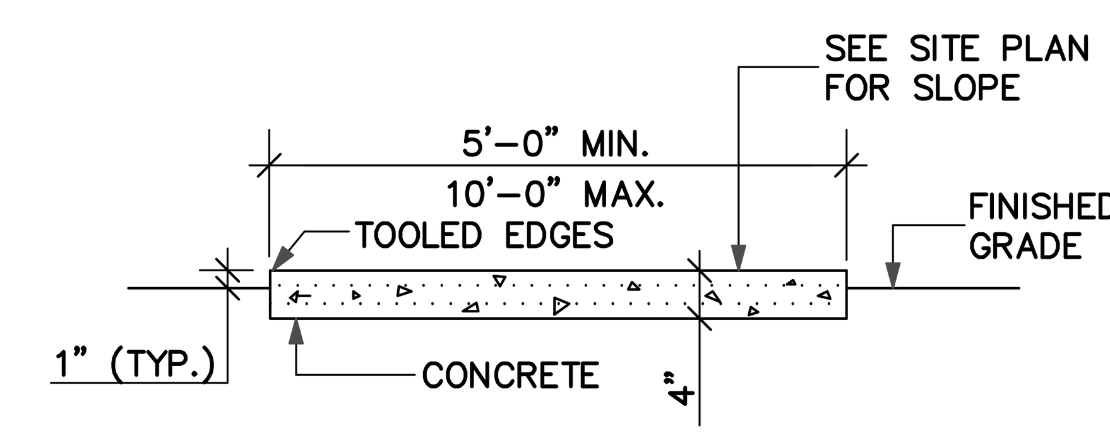
CONTRACTION JOINT

NOT TO SCALE



EXPANSION JOINT

NOT TO SCALE

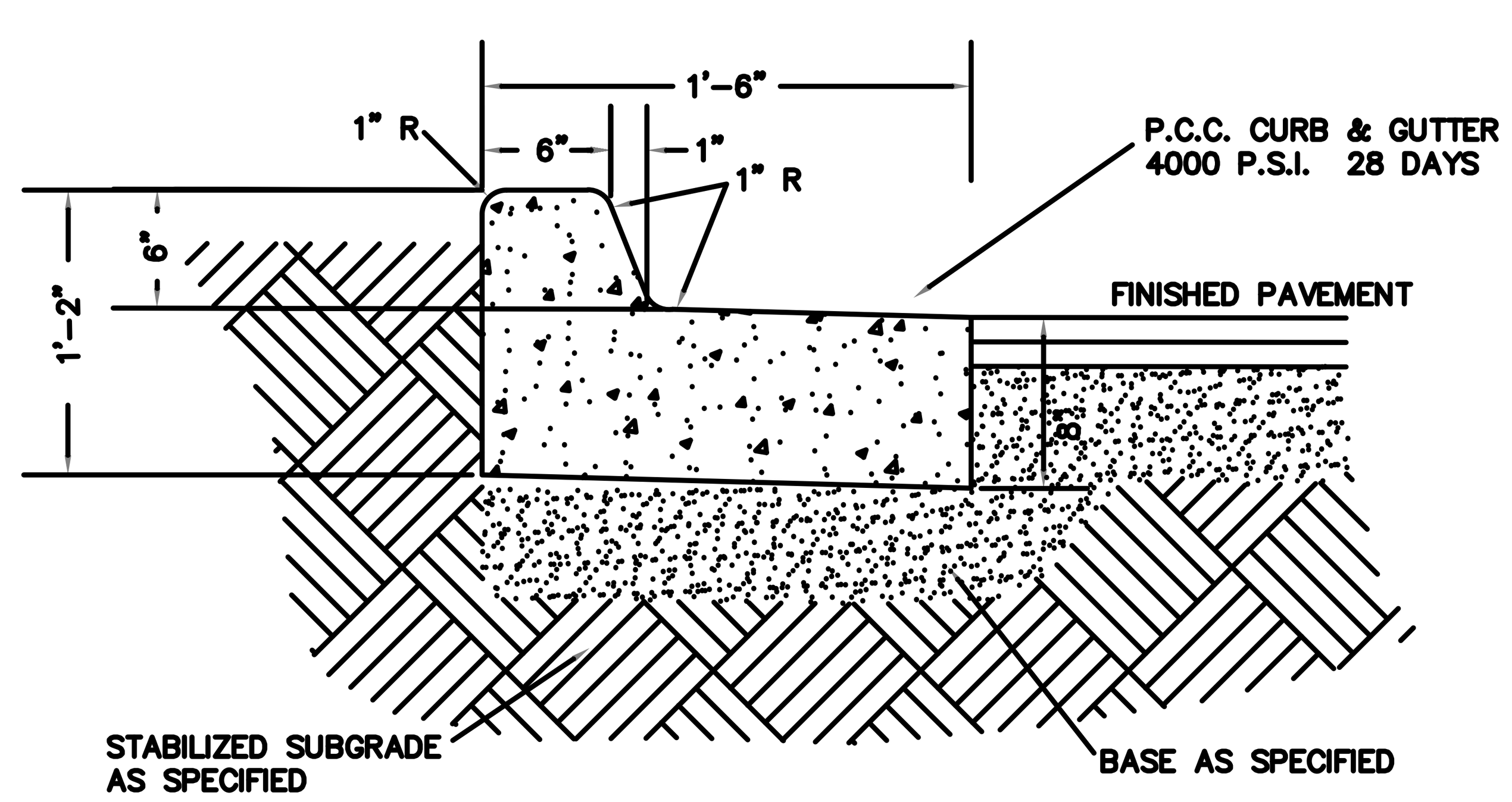


TYPICAL SIDEWALK SECTION

NOT TO SCALE

SIDEWALK DETAIL

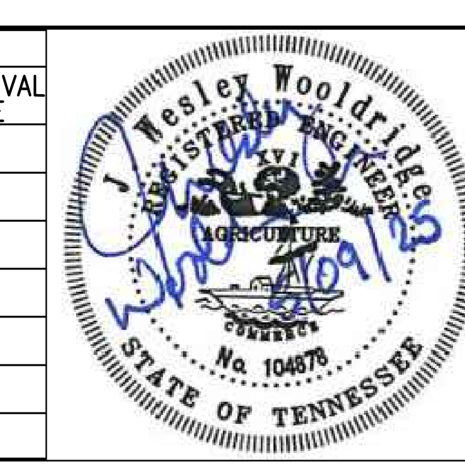
N.T.S.



6–18 CURB & GUTTER DETAIL

N.T.S.

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.

DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.

SHEET 3 OF 3

DIVISION OF ENGINEERING

SITE DETAILS

LOCATION: 1616 EAST JEFFERSON STREET
BROWNSVILLE, TN.

SURVEY: SEAS DATE: 10/24 BOOK: ______

DESIGN: JWW DATE: 01/25 CKD: JWW DATE: 01/25 SCALE: ______

DEPUTY CITY ENGINEER ______ DATE ______ CITY ENGINEER ______ DATE ______

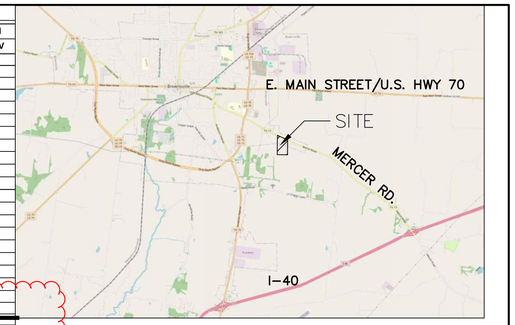
RGI JOB NO. 24158

LEGEND	
PROPOSED MINOR CONTOUR	
EXISTING MINOR CONTOUR	
PROPOSED MAJOR CONTOUR	
EXISTING MAJOR CONTOUR	
EX. EDGE OF PAVEMENT	
PROPERTY LINE	
RIDGE LINE	
FLOW LINE	
TP	TOP OF PAVEMENT
TC	TOP OF CURB/CONC.
TC/TP	TOP OF CONCRETE/ TOP OF PAVEMENT
B/SW	BACK OF SIDEWALK
FL	FLOW LINE
D.A.	DRAINAGE AREA
Q10	DISCHARGE OF 10 YR. DESIGN STORM
HP	HIGH POINT
FG	FINISH GRADE
FFE	FINISHED FLOOR ELEV.

→ –GROUND DRAINAGE DIRECTION

THE RESERVES AT COBALT CIRCLE									ASBUILT	
NO	TYPE	DA	Q25	TG/RIM	FL IN	FL IN	FL IN	FL IN	FL OUT	INV.	RIM
		(AC)	(CFS)	ELEV						ELEV	ELEV
1	TYPE 'D' HEADWALL	N/A	N/A	N/A	373.00				373.00		
2	NO 11 INLET	0.16	1.25	377.18	373.85	373.10			373.10		
2A	NO 11 INLET	0.10	0.57	379.70	374.20				374.20		
2B	NO 11 INLET	0.08	0.51	379.60	374.92				374.92		
3	NO 11 INLET	0.10	0.78	377.50	373.80				373.80		
4	NO 11 INLET	0.33	2.51	377.80	373.98				373.98		
5	@ DIA D.M.H	N/A	N/A	381.15	375.40	374.65			374.65		
5A	NO 11 INLET	0.08	0.51	380.60	375.71				375.71		
5B	NO 11 INLET	0.08	0.51	380.50	375.98				375.98		
5C	NO 11 INLET	0.37	1.63	381.60	376.26				376.26		
6	NO 11 INLET	0.16	1.25	379.30	375.39				375.39		
7	NO 11 INLET	0.33	2.53	378.40	376.02				376.02		
8	3'X3' INLET	0.95	4.18	378.50	373.25				373.25		
9	TYPE 'D' HEADWALL	N/A	N/A	375.75	373.25				373.25		
10	NO 10 INLET	0.06	0.38	379.45	375.55				373.80		
11	NO 10 INLET	0.18	0.86	379.72	377.25	374.50			374.00		
11A	NO 10 INLET	0.06	0.42	379.73	377.40				377.40		
12	NO 10 INLET	0.61	2.44	378.73	378.05	377.55			375.29		
12A	NO 10 INLET	0.06	0.34	379.75	378.20				378.20		
13	NO 10 INLET	0.83	3.32	380.50	375.72	376.22			375.72		
13A	NO 10 INLET	0.06	0.38	380.00	376.40				376.40		
13B	NO 10 INLET	0.00	0.00	380.00	377.47				376.75		
14	NO 10 INLET	0.99	3.96	380.73	379.05	377.00			376.75		
14A	NO 10 INLET	0.06	0.42	380.73	379.15				379.15		
15	NO 10 INLET	0.74	2.96	380.90	377.81				377.56		
16	NO 10 INLET	0.04	0.28	380.73	379.25				378.00		
17	TYPE'D' HEADWALL	N/A	N/A	N/A	372.20				372.20		
18	O.C.S	6.42	19.13	N/A	372.50				372.50		
19	*TDOT D-PE-24A	N/A	N/A	N/A	375.00				375.00		
20	*TDOT D-PE-24A	N/A	N/A	N/A	376.80				376.80		

*SEE SHEET #5 FOR TDOT SIDEDRAIN ENDWALL DETAILS



STR. 5C D.A. : 0.37AC Q25= 1.63cfs c = 0.55
STR. 15 D.A. : 0.74AC Q25= 2.96cfs c = 0.50
STR. 14 D.A. : 0.99AC Q25= 3.96cfs c = 0.50
STR. 13 D.A. : 0.83AC Q25= 3.32cfs c = 0.50
STR. 12 D.A. : 0.61AC Q25= 2.44cfs c = 0.50
385 WOODEN PRIVACY FENCE
STR. 11 D.A. : 0.18AC Q25= 0.86cfs c = 0.60
STR. 16 D.A. : 0.04AC Q25= 0.28cfs c = 0.88
STR. 14A D.A. : 0.06AC Q25= 0.42cfs c = 0.88
STR. 13A D.A. : 0.06AC Q25= 0.38cfs c = 0.80
STR. 5B D.A. : 0.08AC Q25= 0.51cfs c = 0.80
BULDG. B 8,153 S.F. 1ST FLOOR FFE: 381.25
STR. 5A D.A. : 0.08AC Q25= 0.51cfs c = 0.80
STR. 12A D.A. : 0.05AC Q25= 0.34cfs c = 0.85
STR. 11A D.A. : 0.06AC Q25= 0.42cfs c = 0.88
STR. 10 D.A. : 0.04AC Q25= 0.38cfs c = 0.80
BULDG. C 8,753 S.F. 1ST FLOOR FFE: 381.00
STR. 2B D.A. : 0.08AC Q25= 0.51cfs c = 0.80
STR. 9 D.A. : 0.09AC Q25= 0.57cfs c = 0.80
STR. 2 D.A. : 0.16AC Q25= 1.25cfs c = 0.98
PLAYGROUND
STR. 8 D.A. : 0.95AC Q25= 4.18cfs c = 0.55
STR. 6 D.A. : 0.16AC Q25= 1.25cfs c = 0.98
STR. 4 D.A. : 0.33AC Q25= 2.51cfs c = 0.95
STR. 3 D.A. : 0.10AC Q25= 0.78cfs c = 0.98
GAZEBO
BASIN D.A. : 0.55AC Q25= 2.99cfs c = 0.68
FLEXAMAT STANDARD 4'X22' & 4'X8' PAD
2FT CURB OPENING
FLEXAMAT STANDARD 12'X16' APRON
EX. CULVERT TO BE REMOVED
STR. 7 D.A. : 0.33AC Q25= 2.53cfs c = 0.96
BULDG. A 9,482 S.F. 1ST FLOOR FFE: 380.50
E. Jefferson Street
MAIL
2FT CURB OPENING
FLEXAMAT STANDARD 4'X12' & 4'X8' PAD
FLEXAMAT STANDARD 4'X16' & 4'X8' PAD
FLEXAMAT STANDARD 4'X12' & 4'X8' PAD
2FT CURB OPENING

GENERAL NOTES (CITY OF BROWNSVILLE)

1. A MINIMUM OF 24–HOURS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CITY OF BROWNSVILLE PUBLIC WORKS OFFICE AT (731) 772–9978.
2. ALL NEWLY CUT OR FILLED AREAS, LACKING ADEQUATE VEGETATION, SHALL BE SEEDED, MULCHED, FERTILIZED AND/OR SODDED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.
3. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT NECESSARILY ALL OF THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE UTILITY COMPANIES WHICH MAINTAIN A UTILITY LINE WITHIN THE BOUNDARIES OF THE PROJECT PRIOR TO THE INITIATION OF ANY CONSTRUCTION ON THE PROJECT OR IN THE STREETS BORDERING THE PROJECT. THE CONTRACTOR SHALL ALSO ASSUME FULL RESPONSIBILITY FOR DAMAGE TO ANY UTILITIES ENCOUNTERED WITHIN CONSTRUCTION PERIMETERS, WHETHER SHOWN ON THE CONSTRUCTION PLANS OR NOT, DURING THE WORK ON THE PROJECT. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES.
4. ALL FILL SOILS SHALL BE COMPACTED TO A MINIMUM OF 95% OF STANDARD PROCTOR DENSITY (ASTM D–698) WITHIN 3% OF OPTIMUM MOISTURE CONTENT IN LIFTS NOT TO EXCEED SIX (6) INCHES OF COMPACTED THICKNESS.
5. ALL CONSTRUCTION MATERIALS AND PROCEDURES SHALL MEET OR EXCEED THE REQUIREMENTS OF THE CITY OF BROWNSVILLE STANDARD CONSTRUCTION SPECIFICATIONS.
6. PROPERTY LINES SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. GRADING, CLEARING AND THE ERECTION OR REMOVAL OF FENCES ALONG PROPERTY LINES SHALL BE FULLY COORDINATED WITH ADJACENT PROPERTY OWNERS.
7. VERIFY SITE CONDITIONS PRIOR TO CONSTRUCTION. NOTIFY THE CITY OF BROWNSVILLE PUBLIC WORKS OF ANY VARIATIONS PRIOR TO COMMENCEMENT OF WORK.
8. ALL GRADING WORK SHALL BE PERFORMED IN SUCH A MANNER THAT ADJACENT PROPERTIES ARE NOT DAMAGED OR ADVERSELY AFFECTED.
9. LOT DRAINAGE: FINISH GRADE SHALL BE SLOPED AWAY FROM THE FOUNDATION FOR DRAINAGE. THE FINISH GRADE MUST BEGIN AT LEAST 12–INCHES BELOW THE TOP OF THE FOUNDATION WALL OR THE GRADE OF THE CONCRETE SLAB AT THE INTERIOR IN THE CASE OF AN INTEGRAL SLAB AND FOUNDATION. THE MINIMUM GRADE AWAY FROM THE FOUNDATION SHALL BE TWO PERCENT (2%) IN ALL DIRECTIONS. THE DRIVEWAY SHALL BE SLOPED DOWN AT TWO PERCENT (2%) FOR AT LEAST EIGHT FEET FROM THE STRUCTURE.

FLEXAMAT STANDARD

PROPERTY	DESCRIPTION
Mat Width & Length	Manufactured in standard widths of 4', 5.5', 8', 10', 12, 15.5' & 16'. Lengths can be cut to order per project requirements. Stocked lengths are 30', 40', & 50'. 4' x 4' mats stacked on pallets are also available.
Underlayment Options	Flexamat® Standard - a three-layered system, includes, in order from top to bottom, 1) Concrete block mat 2) 5-Pick Leno Weave and 3) Curlex® II. Flexamat® Plus - A four-layered system includes, in order from top to bottom, 1) Concrete block mat 2) 5-Pick Leno Weave 3) Recyclex TRM-V and 4) Curlex® II. Flexamat® 10NW - A two-layered system, includes, 1) Concrete block mat 2) 10oz. non-woven geotextile cast onto the back of the blocks, adhered to the concrete block.
Weight per Square Foot	10 lbs per square foot
Block Size	The concrete blocks are 6.5" x 6.5" x 2.25". There is 1.5" spacing between the blocks.
Limiting Shear	24+ PSF (non vegetated)
Limiting Velocity	30+ft./second (non vegetated)

ACREAGE SUMMARY	
EX. IMPERVIOUS SURFACE	0.12 ACRES
EX. PERVIOUS SURFACE	5.00 ACRES
IMPERVIOUS SURFACE AT COMPLETION	2.13 ACRES
PERVIOUS/SEEDED AREA AT COMPLETION	2.99 ACRES
TOTAL AREA	5.12 ACRES

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

THE RESERVE AT COBALT CIRCLE												ASBUILT							
FROM	INV. ELEV	TO	INV. ELEV	PIPE DIA (IN)	MATERIAL	LEN (FT)	SLOPE (%)	D.A. (AC)	DESIGN Q25	CAPACITY QC (CFS)	VEL. (FPS)	VELOCITY FULL (FPS)	FROM	INV. ELEV	TO	INV. ELEV	PIPE DIA (IN)	LENGTH (FT.)	SLOPE (%)	CAPACITY Q (CFS)
1	373.00	2	373.10	24	ADS HP STORM	20	0.50	2.73	14.98	17.33	6.21	5.52								
2	373.10	3	373.64	24	ADS HP STORM	109	0.50	2.4	13.90	17.25	6.11	5.49								
3	373.64	4	373.98	24	ADS HP STORM	68	0.50	2.3	13.12	17.33	6.06	5.52								
4	373.98	5	374.65	24	ADS HP STORM	132	0.51	1.97	10.61	17.46	5.82	5.56								
5	374.90	6	375.39	18	ADS HP STORM	97	0.51	1.44	7.96	8.09	5.21	4.58								
6	375.39	7	376.02	18	ADS HP STORM	126	0.50	1.28	6.71	8.05	5.10	4.55								
7	376.30	8	376.75	15	ADS HP STORM	89	0.51	0.95	4.18	4.98	4.54	4.05								
2	373.85	2A	374.20	15	ADS N-12	71	0.50	0.17	1.08	4.93	2.85	4.02								
2A	374.20	2B	374.92	15	ADS N-12	72	1.00	0.08	0.51	7.00	3.29	5.70								
5	375.40	5A	375.71	15	ADS N-12	63	0.50	0.53	2.65	4.93	4.08	4.02								
5A	375.71	5B	375.98	15	ADS N-12	54	0.50	0.45	2.14	4.95	3.87	4.03								
5B	375.98	5C	376.26	15	ADS N-12	65	0.61	0.37	1.63	4.96	3.92	4.04								
9	373.25	10	373.80	24	ADS N-12	107	0.51	3.73	16.14	17.57	6.34	5.59								
10	373.80	11	374.05	24	ADS N-12	59	0.42	3.67	15.76	15.95	5.78	5.08								
11	374.59	12	375.29	24	ADS N-12	61	1.24	3.43	14.48	26.98	8.78	8.59								
12	375.29	13	375.72	18	ADS N-12	42	1.02	2.77	11.70	11.51	7.43	6.52								
13	375.72	14	376.75	18	ADS N-12	103	1.00	1.82	7.62	11.38	6.90	6.44								
14	377.00	15	377.56	15	ADS N-12	56	1.00	0.77	3.24	7.00	5.59	5.70								
15	377.81	16	378.00	12	ADS N-12	15	1.27	0.04	0.28	4.34	3.04	5.53								
11	377.25	11A	377.40	12	ADS N-12	23	0.65	0.06	0.42	3.12	2.74	3.97								
12	378.05	12A	378.20	12	ADS N-12	26	0.58	0.05	0.34	2.93	2.46	3.73								
13	376.22	13A	376.40	12	ADS N-12	21	0.86	0.12	0.78	3.57	3.23	4.55								
13A	376.40	13B	376.75	6	ADS N-12	58	0.60	0.06	0.38	0.82	2.07	2.07								
14	379.05	14A	379.15	6	ADS N-12	13	0.77	0.06	0.42	0.53	1.57	2.72								
19	376.00	20	376.80	24	R.C.P.	76	2.37	2.05	13.13	37.72	13.27	12.01								

* denotes 18'X28' Arch end pipe

5 STR. 13B HAS BEEN ELIMINATED.

SITE BENCHMARK
RIM OF EXISTING S.M.H. LOCATED IN THE CENTER OF EAST JEFFERSON STREET
ELEVATION: 381.76

FEMA FLOOD NOTE:
THE PROPETY SHOWN HEREON DOES NOT GRAPHICALLY FALL WITHIN A SPECIAL DESIGNATED FLOODZONE PER FEMA FIRM MAP PANEL 47157C0185F, DATED 09/27/2007
ELEVATION: 381.76

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE
2	ASI #2	10/25
5	ASI #5	12/05/25

I Wesley Woodard REGISTERED LANDSCAPE ARCHITECT No. 104679 STATE OF TENNESSEE

THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.
DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.

SHEET 01 OF 06

DIVISION OF ENGINEERING
GRADING & DRAINAGE PLAN
LOCATION: 1616 EAST JEFFERSON STREET
BROWNSVILLE, TN.

SURVEY: SEAS DATE: 10/24 BOOK: _____
DESIGN: _____ DATE: 01/25 CKD: _____ DATE: 01/25 SCALE: 1" = 40'

DEPUTY CITY ENGINEER DATE CITY ENGINEER DATE

RGI JOB NO. 24158

DETENTION POND DATA – 2, 10, 25, and 100 YEAR DESIGN

Pre–Developed

Area = 5.12 ac.
CN = 77
Tp = 12.13 hrs.
Q1 = 6.62 cfs
Q2 = 8.908 cfs
Q5 = 13.04 cfs
Q10 = 16.05 cfs
Q25 = 19.76 cfs
Q100 = 26.20 cfs

Post–Developed ONSITE Detained in Basin

Area = 2.76 Total ac.
WT. CN = 92
Tp = 11.93 hrs.
Tc = 5 min.
Q1 = 11.29 cfs
Q2 = 13.62 cfs
Q5 = 17.56 cfs
Q10 = 20.30 cfs
Q25 = 23.61 cfs
Q100 = 29.22 cfs

Post–Developed OFFSITE Detained in Basin (Allowable By–pass)

Area = 3.86 Total ac.
WT. CN =77
Tp = 12.13 hrs.
Tc = 23.9 min.
Q1 = 4.99
Q2 = 6.72 cfs
Q5 = 9.83 cfs
Q10 = 12.10 cfs
Q25 = 14.90 cfs
Q100 = 19.75 cfs

Basin Elev./Storage/Discharge

Elevation (ft)	Storage (cu.ft)	Discharge (cfs)
372.50	0	0.00
373.00	969	2.254
374.00	7,410	6.914
375.00	15,143	12.30
376.00	24,229	28.74
376.33	27,597	30.83

Routed Outflow
Two 12" orifice @ 372.50
pipe coefficient = 0.013
16ft RISER at 375.25'
Weir coefficient = 3.33
TIME TO PEAK 12.20 hrs
1 year WSEL = 374.05'
2 year WSEL =374.48'
5 year WSEL = 375.20'
10 year WSEL = 375.44'
25 year WSEL = 375.59'
100 year WSEL = 375.93'
Q1 = 6.07 cfs
Q2 = 6.89 cfs
Q5 = 9.03 cfs
Q10 = 13.66 cfs
Q25 = 19.13 cfs
Q100 = 27.93 cfs

TOTAL ON–SITE UN–DETAINED Post–Developed Un–Detained

Area = 2.36 Total ac.
WT. CN = 88
Tp = 11.93 hrs.
Tc = 5 min.
Q1 = 8.54 cfs
Q2 = 10.55 cfs
Q5 = 13.95 cfs
Q10 = 16.33 cfs
Q25 = 19.21 cfs
Q100 = 24.08 cfs

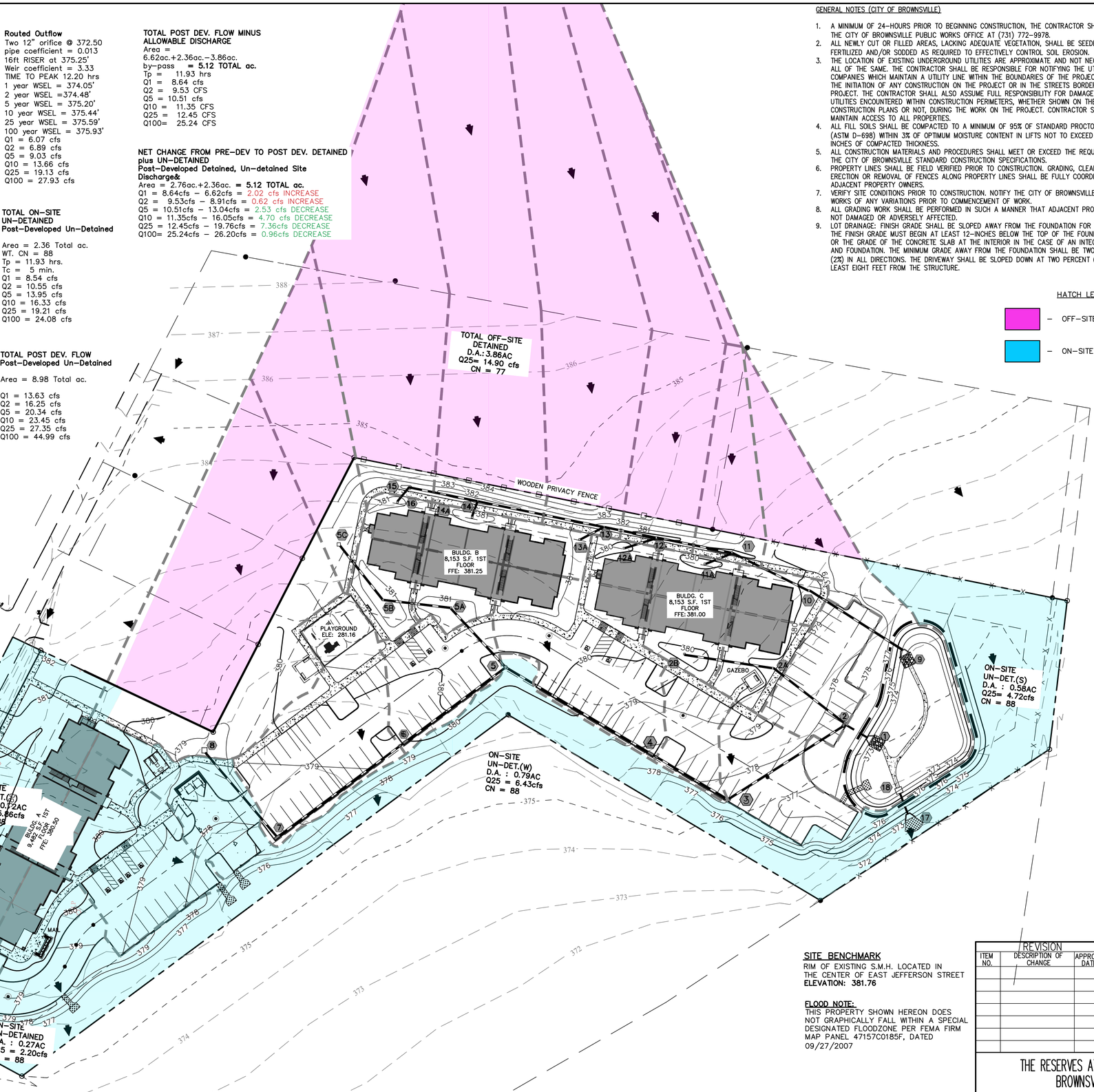
TOTAL POST DEV. FLOW Post–Developed Un–Detained

Area = 8.98 Total ac.

Q1 = 13.63 cfs
Q2 = 16.25 cfs
Q5 = 20.34 cfs
Q10 = 23.45 cfs
Q25 = 27.35 cfs
Q100 = 44.99 cfs

TOTAL POST DEV. FLOW MINUS ALLOWABLE DISCHARGE
Area =
6.62ac.+2.36ac.–3.86ac.
by–pass = **5.12 TOTAL ac.**
Tp = 11.93 hrs
Q1 = 8.64 cfs
Q2 = 9.53 CFS
Q5 = 10.51 cfs
Q10 = 11.35 CFS
Q25 = 12.45 CFS
Q100= 25.24 CFS

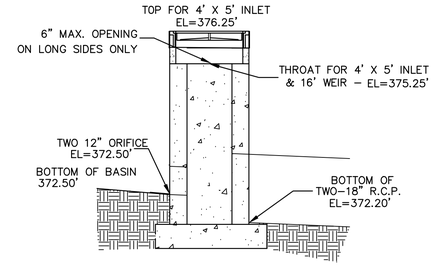
NET CHANGE FROM PRE–DEV TO POST DEV. DETAINED plus UN–DETAINED Post–Developed Detained, Un–detained Site Discharge&
Area = 2.76ac.+2.36ac. = **5.12 TOTAL ac.**
Q1 = 8.64cfs – 6.62cfs = 2.02 cfs INCREASE
Q2 = 9.53cfs – 8.91cfs = 0.62 cfs INCREASE
Q5 = 10.51cfs – 13.04cfs = 2.53 cfs DECREASE
Q10 = 11.35cfs – 16.05cfs = 4.70 cfs DECREASE
Q25 = 12.45cfs – 19.76cfs = 7.36cfs DECREASE
Q100= 25.24cfs – 26.20cfs = 0.96cfs DECREASE

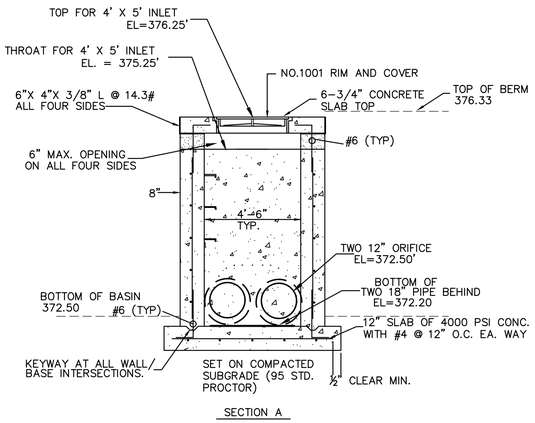


GENERAL NOTES (CITY OF BROWNSVILLE)

1. A MINIMUM OF 24–HOURS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CITY OF BROWNSVILLE PUBLIC WORKS OFFICE AT (731) 772–9978.
2. ALL NEWLY CUT OR FILLED AREAS, LACKING ADEQUATE VEGETATION, SHALL BE SEEDED, MULCHED, FERTILIZED AND/OR SODDED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.
3. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT NECESSARILY ALL OF THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE UTILITY COMPANIES WHICH MAINTAIN A UTILITY LINE WITHIN THE BOUNDARIES OF THE PROJECT PRIOR TO THE INITIATION OF ANY CONSTRUCTION ON THE PROJECT OR IN THE STREETS BORDERING THE PROJECT. THE CONTRACTOR SHALL ALSO ASSUME FULL RESPONSIBILITY FOR DAMAGE TO ANY UTILITIES ENCOUNTERED WITHIN CONSTRUCTION PERIMETERS, WHETHER SHOWN ON THE CONSTRUCTION PLANS OR NOT, DURING THE WORK ON THE PROJECT. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES.
4. ALL FILL SOILS SHALL BE COMPACTED TO A MINIMUM OF 95% OF STANDARD PROCTOR DENSITY (ASTM D–698) WITHIN 3% OF OPTIMUM MOISTURE CONTENT IN LIFTS NOT TO EXCEED SIX (6) INCHES OF COMPACTED THICKNESS.
5. ALL CONSTRUCTION MATERIALS AND PROCEDURES SHALL MEET OR EXCEED THE REQUIREMENTS OF THE CITY OF BROWNSVILLE STANDARD CONSTRUCTION SPECIFICATIONS.
6. PROPERTY LINES SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. GRADING, CLEARING AND THE ERECTION OR REMOVAL OF FENCES ALONG PROPERTY LINES SHALL BE FULLY COORDINATED WITH ADJACENT PROPERTY OWNERS.
7. VERIFY SITE CONDITIONS PRIOR TO CONSTRUCTION. NOTIFY THE CITY OF BROWNSVILLE PUBLIC WORKS OF ANY VARIATIONS PRIOR TO COMMENCEMENT OF WORK.
8. ALL GRADING WORK SHALL BE PERFORMED IN SUCH A MANNER THAT ADJACENT PROPERTIES ARE NOT DAMAGED OR ADVERSELY AFFECTED.
9. LOT DRAINAGE: FINISH GRADE SHALL BE SLOPED AWAY FROM THE FOUNDATION FOR DRAINAGE. THE FINISH GRADE MUST BEGIN AT LEAST 12–INCHES BELOW THE TOP OF THE FOUNDATION WALL OR THE GRADE OF THE CONCRETE SLAB AT THE INTERIOR IN THE CASE OF AN INTEGRAL SLAB AND FOUNDATION. THE MINIMUM GRADE AWAY FROM THE FOUNDATION SHALL BE TWO PERCENT (2%) IN ALL DIRECTIONS. THE DRIVEWAY SHALL BE SLOPED DOWN AT TWO PERCENT (2%) FOR AT LEAST EIGHT FEET FROM THE STRUCTURE.

HATCH LEGEND
– OFF–SITE DETAINED
– ON–SITE UNDETAINED





SECTION A

O.C.S. #18
MOD. 4'X4' PRECAST STRUCTURE
N.T.S.

NORTH

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

SITE BENCHMARK
RIM OF EXISTING S.M.H. LOCATED IN THE CENTER OF EAST JEFFERSON STREET
ELEVATION: 381.76

FLOOD NOTE:
THIS PROPERTY SHOWN HEREON DOES NOT GRAPHICALLY FALL WITHIN A SPECIAL DESIGNATED FLOODZONE PER FEMA FIRM MAP PANEL 47157C0185F, DATED 09/27/2007

REVISION

ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE

J. Wesley Woolridge
REGISTERED ENGINEER
No. 104879
STATE OF TENNESSEE
10/24/25

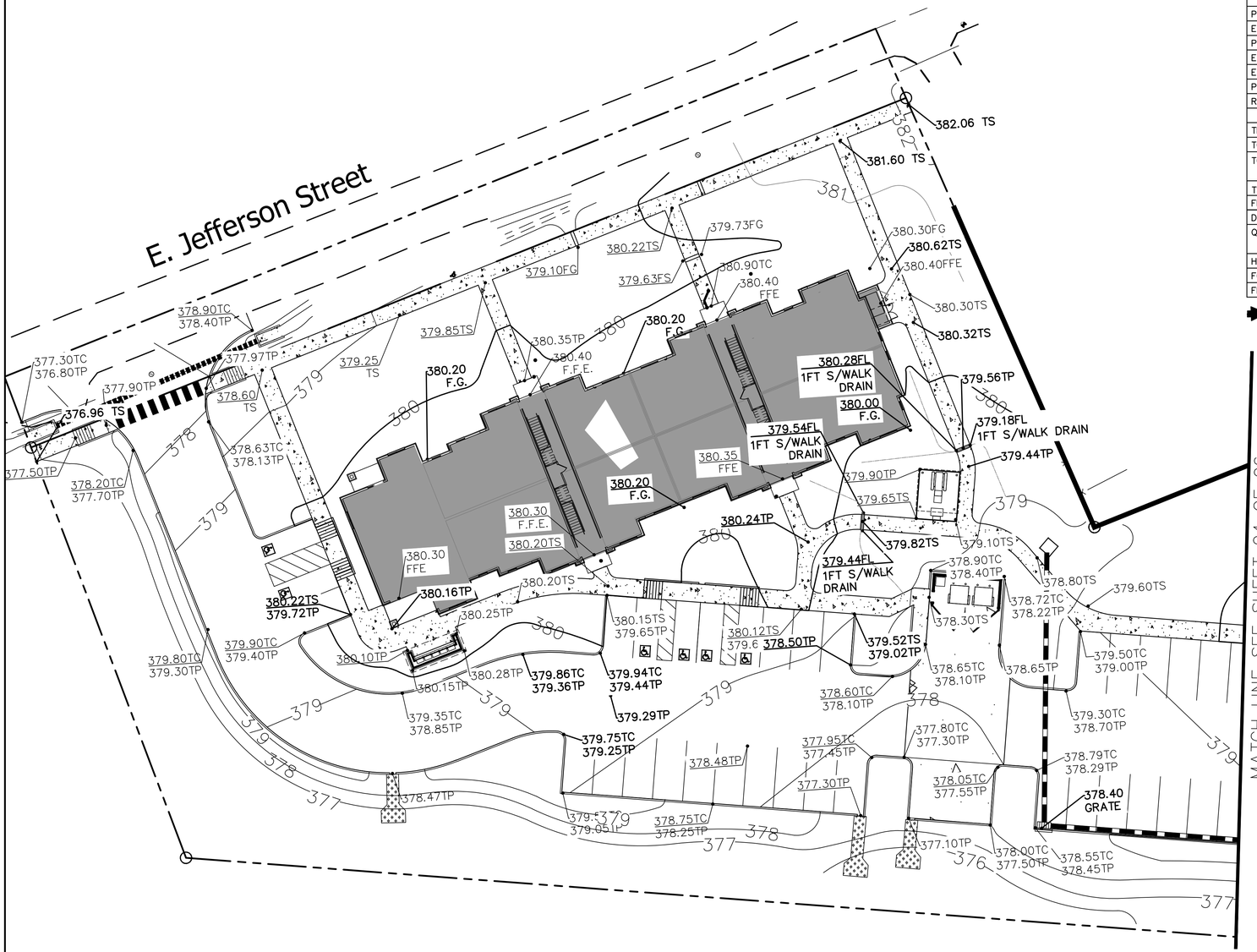
THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.
DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.

SHEET 02 OF 06

DIVISION OF ENGINEERING
DETENTION PLAN
LOCATION: 1616 EAST JEFFERSON STREET
BROWNSVILLE, TN.
SURVEY: SEAS DATE: 10/24 BOOK: _____
DESIGN: _____ DATE: 01/25 CKD: _____ DATE: 01/25 SCALE: 1"=40'

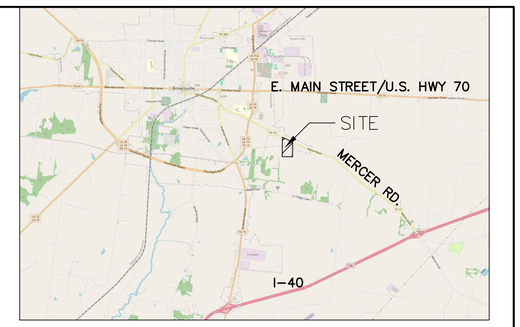
DEPUTY CITY ENGINEER | DATE | CITY ENGINEER | DATE

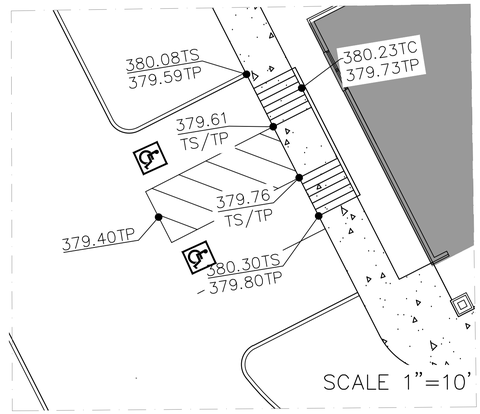
RGI JOB NO. 24158

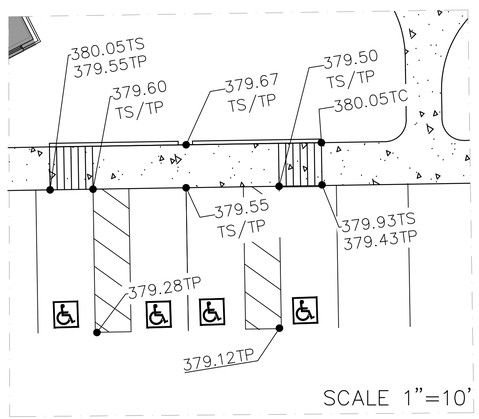


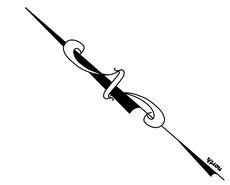
LEGEND	
PROPOSED MINOR CONTOUR	
EXISTING MINOR CONTOUR	
PROPOSED MAJOR CONTOUR	
EXISTING MAJOR CONTOUR	
EX. EDGE OF PAVEMENT	
PROPERTY LINE	
RIDGE LINE	
TP	TOP OF PAVEMENT
TC	TOP OF CURB/CONC.
TC/TP	TOP OF CONCRETE/ TOP OF PAVEMENT
TS	TOP OF SIDEWALK
FL	FLOW LINE
D.A.	DRAINAGE AREA
Q10	DISCHARGE OF 10 YR. DESIGN STORM
HP	HIGH POINT
FG	FINISH GRADE
FFE	FINISHED FLOOR ELEV.

—GROUND DRAINAGE DIRECTION









SITE BENCHMARK
MAG—NAIL AT SOUTHEAST CORNER OF CENTRAL AVE AND MEDA ST INTERSECTION.
ELEVATION: 304.38

CITY BENCHMARK
CITY BM#102 – CITY MONUMENT IS LOCATED AT CENTRAL AVE & EAST PKWY S ON THE NORTHWEST CORNER AT BACK OF SIDEWALK AT NORTHEAST CORNER OF CONCRETE BASE OF TRAFFIC SIGNAL POLE.
ELEV.: 292.36 (NAVD '88 DATUM)

FLOOD NOTE:
THIS PROPERTY IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA PER FLOOD INSURANCE RATE MAP, MAP No. 47157C 0290 F. COMMUNITY PANEL No. 470177 0290 F, EFFECTIVE DATE: SEPTEMBER 28, 2007. NEAREST BFE: 233.0

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 20 ft.

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE
2	ASI #2	10/25

I Wesley Woodard REGISTERED LANDSCAPE ARCHITECT No. 104079 STATE OF TENNESSEE

THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.
DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.

SHEET 03 OF 06

DIVISION OF ENGINEERING

SPOT GRADING PLAN 1 OF 2

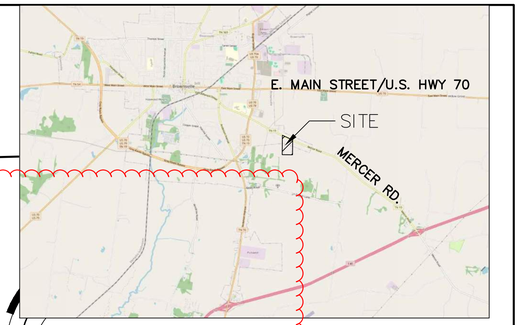
LOCATION: 1616 EAST JEFFERSON STREET
BROWNSVILLE, TN.

SURVEY: SEAS DATE: 10/24 BOOK: _____

DESIGN: _____ DATE: 01/25 CKD: _____ DATE: 01/25 SCALE: 1" = 40'

DEPUTY CITY ENGINEER _____ DATE _____ CITY ENGINEER _____ DATE _____

RGI JOB NO. 24158



WOODEN PRIVACY FENCE

BULDG. B
8,153 S.F. 1ST FLOOR
FFE: 381.25

BULDG. C
8,753 S.F. 1ST FLOOR
FFE: 381.00

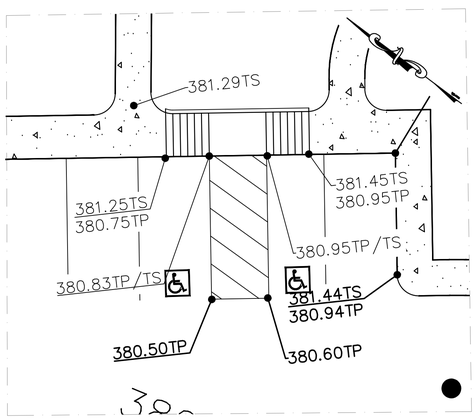
PLAYGROUND

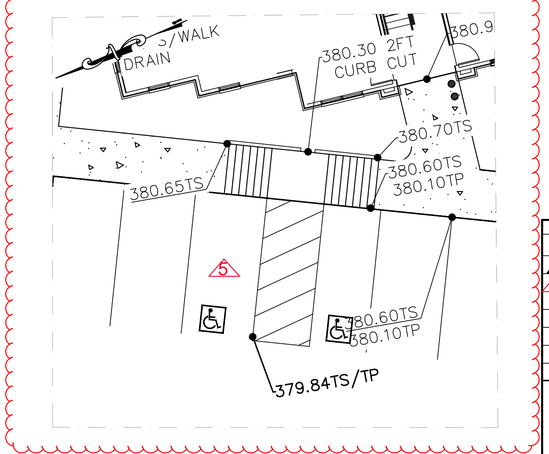
GAZEBO

MATCH LINE SEE SHEET 03 OF 06

LEGEND	
PROPOSED MINOR CONTOUR	
EXISTING MINOR CONTOUR	
PROPOSED MAJOR CONTOUR	
EXISTING MAJOR CONTOUR	
EX. EDGE OF PAVEMENT	
PROPERTY LINE	
RIDGE LINE	
TP	TOP OF PAVEMENT
TC	TOP OF CURB/CONC.
TC/TP	TOP OF CONCRETE/ TOP OF PAVEMENT
TS	TOP OF SIDEWALK
FL	FLOW LINE
D.A.	DRAINAGE AREA
Q10	DISCHARGE OF 10 YR. DESIGN STORM
HP	HIGH POINT
FG	FINISH GRADE
FFE	FINISHED FLOOR ELEV.

-GROUND DRAINAGE DIRECTION





REVISION			
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE	
2	ASI #2	10/25	
5	ASI #5	12/05/25	

Wesley Woodridge Solutions Engineering Architecture Surveying
Tennessee No. 104679
STATE OF TENNESSEE

THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.
DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.

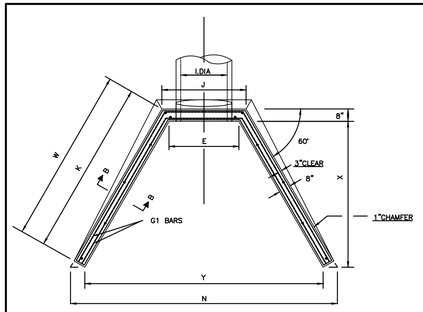
GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 20 ft.

SHEET 04 OF 06

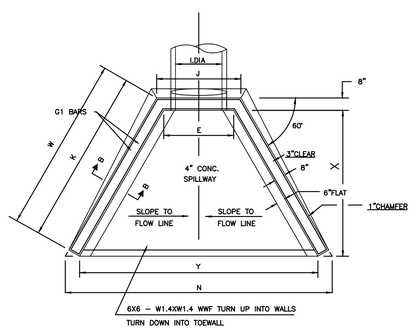
DIVISION OF ENGINEERING
SPOT GRADING PLAN 2 OF 2
LOCATION: 1616 EAST JEFFERSON STREET
BROWNSVILLE, TN.
SURVEY: SEAS DATE: 10/24 BOOK:
DESIGN: JWW DATE: 01/25 CKD: JWW DATE: 01/25 SCALE: 1" = 40'

DEPUTY CITY ENGINEER DATE CITY ENGINEER DATE

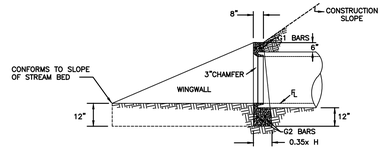
RGI JOB NO. 24158



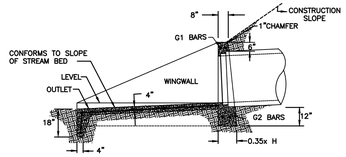
PLAN
INLET



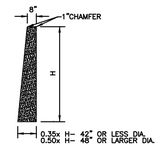
PLAN
OUTLET



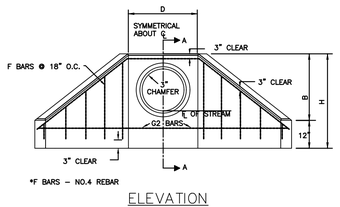
SECTION A–A
INLET



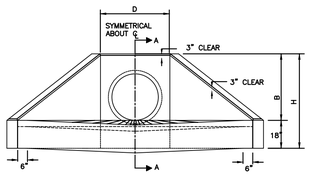
SECTION A–A
OUTLET



SECTION B–B
WINGWALL SECTION



ELEVATION
INLET



ELEVATION
OUTLET

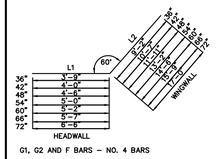
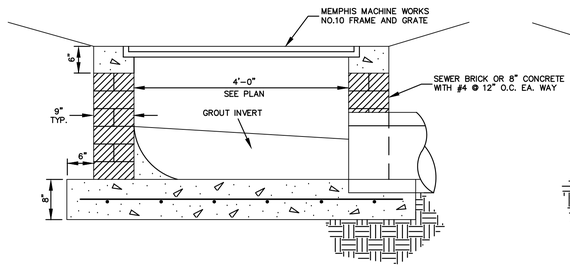


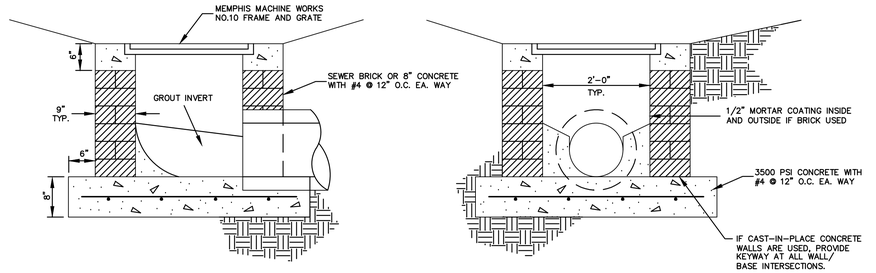
TABLE OF DIMENSIONS AND DIAMETERS												
DIA.	15"	18"	21"	24"	30"	36"	42"	48"	54"	60"	66"	72"
B	1'-11 ½"	2'-2 ½"	2'- 5 ¼"	2'- 8 ½"	3'- 3"	3'- 9 ½"	4'- 4"	4'- 10 ½"	5'- 5"	6'- 0"	6'- 6 ½"	7'- 1"
D	1'-7 ¾"	1'-10 ½"	2'- 1 ½"	2'- 5"	3'- 0"	3'- 7"	4'- 2"	4'- 9"	5'- 4"	6'- 0"	6'- 7"	7'- 2"
E	1'- 9 ½"	2'- 0 ½"	2'- 3 ½"	2'- 7"	3'- 2"	3'- 9"	4'- 4"	4'- 10"	5'- 6"	6'- 2"	6'- 9"	7'- 4"
H	3'- 1 ¾"	3'- 4 ½"	3'- 7 ½"	3'- 11"	4'- 6"	5'- 1"	5'- 8"	6'- 3"	6'- 10"	7'- 6"	8'- 1"	8'- 8"
J	2'- 7 ⅝"	3'- 10 ⅞"	3'- 1 ⅞"	3'- 5 ⅜"	4'- 0 ⅜"	4'- 10 ⅝"	5'-2 ⅜"	5'-9 ⅜"	6'- 4 ⅜"	7'- 0 ⅜"	7'- 7 ⅜"	8'- 2 ⅜"
K	4'-10 ⅜"	5'- 5 ¾"	6'- 0 ⅝"	6'- 8 ¼"	7'- 11 ¼"	9'- 2 ¼"	10'- 5 ¼"	11'- 8 ¼"	12'- 11 ¼"	14'- 3 ½"	15'- 6 ½"	16'- 9 ½"
N	7'- 11 ½"	8'- 9 ⅛"	9'- 7 ⅛"	10- 6 ⅛"	12'- 4 ⅛"	14'- 2 ⅛"	16'- 0 ⅛"	17'- 10 ⅛"	19'- 8 ⅛"	21'- 9 ⅜"	23'- 7 ⅛"	25'- 5 ⅜"
W	5'- 3 ¾"	5'- 11"	6'- 5 ⅞"	7'- 1 ⅜"	8'- 4 ½"	9'- 7 ½"	10'- 10 ½"	12'- 1 ½"	13'- 4 ½"	14'- 8 ⅝"	15'- 11 ⅝"	17'- 2 ⅝"
X	3'- 10 ½"	4'- 4 ½"	4'- 10 ½"	5'- 5"	6'- 6"	7'- 7"	8'- 8"	9'- 9"	10'- 10"	12'- 0"	13'- 1"	14'- 2"
Y	6'- 2 ⅝"	7'- 1 ⅜"	7'- 11"	8'- 10 ⅜"	10'- 8 ⅜"	12'- 6 ⅜"	14'- 4 ⅜"	16'- 2 ⅜"	18'- 0 ⅜"	20'- 0 ⅞"	21'- 10 ⅞"	23'- 8 ⅞"

* This Table of Dimensions is for 2:1 construction slope.

TYPE D HEADWALL
with WINGWALLS
N.T.S.

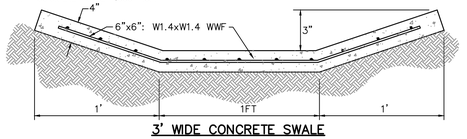


NO. 11 INLET
N.T.S.

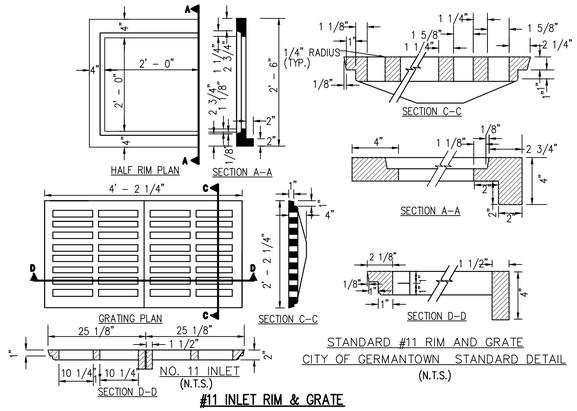


NO. 10 INLET
N.T.S.

NOTES
1. PRE–CUT EXPANSION JOINT MATERIAL SHALL BE USED IN ALL EXPANSION JOINTS.
2. DUMMY JOINTS SHALL BE INSTALLED AT 10 ft. INTERVALS, MAXIMUM.
3. INSTALL EXPANSION JOINTS EVERY 40 ft., MAXIMUM, AT ENDS OF RADIUS, AND A MINIMUM OF 5 ft. FROM INLET STRUCTURES.
4. CONCRETE TO BE 4,000 P.S.I.

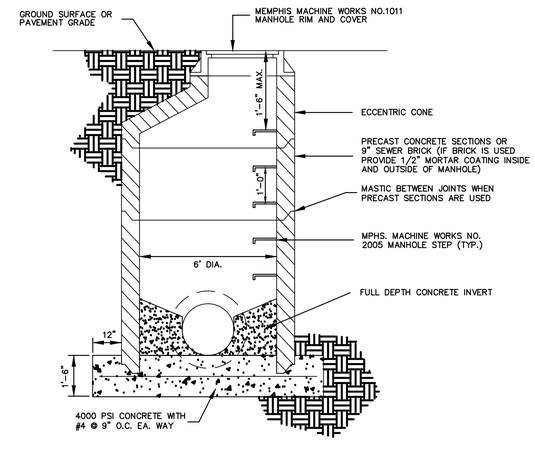


3' WIDE CONCRETE SWALE
@ LIMITS SHOWN ON PLAN
(N.T.S.)



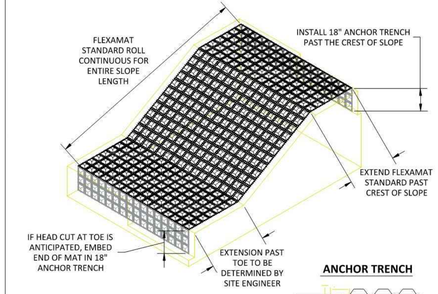
STANDARD #11 RIM AND GRATE
CITY OF GERMANTOWN STANDARD DETAIL
(N.T.S.)

#11 INLET RIM & GRATE
(N.T.S.)

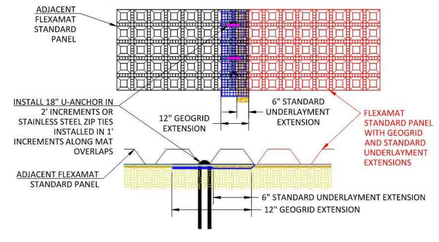


6' STORM DRAIN MANHOLE
N.T.S.

ISOMETRIC VIEW OF SLOPE AND ANCHOR TRENCHES



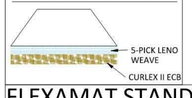
ABUTMENT METHOD FOR SEAMS WITH EXTENSIONS



ABUTMENT METHOD FOR SEAMS WITHOUT EXTENSIONS

ANCHOR TRENCH

FLEXAMAT STANDARD UNDERLAYMENT



FLEXAMAT STANDARD - SLOPE ARMORING

CONSTRUCTION NOTES:

1. AN ENGINEER OR MANUFACTURERS REPRESENTATIVE SHALL BE ONSITE FOR THE START OF THE INSTALLATION.
2. ALL SUBGRADE SURFACES PREPARED FOR PLACEMENT OF MATS SHALL BE SMOOTH AND FREE OF ALL ROCKS, STICKS, ROOTS, OTHER PROTRUSIONS, OR DEBRIS OF ANY KIND.
3. PRIOR TO FLEXAMAT STANDARD INSTALLATION SEED AND FERTILIZE SUBGRADE WITH SITE SPECIFIC SEED MIX IN ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS.
4. INSTALL FLEXAMAT STANDARD ROLLS THAT ARE CONTINUOUS FOR ENTIRE SLOPE LENGTH. FOR SLOPES LONGER THAN 16', USE MATS WITH EXTENSIONS CUT TO THE LENGTH OF THE SLOPE. INSTALL MATS TO THAT THE MATTING EXTENDS PAST THE CREST OF SLOPE AND INTO AN 18" ANCHOR TRENCH.
   - 4.1. FOR ARMORED SLOPE LENGTHS 16' OR LESS, INSTALL CURLEX ECB EQUALLY UNDER ADJACENT MATS. SECURE SEAM WITH #3 REBAR 18" U-ANCHORS IN 2' INCREMENTS THE LENGTH OF THE ABUTMENT.
   - 4.2. ARMORED SLOPE LENGTHS LONGER THAN 16', INSTALL NEXT MAT OVER EXTENSIONS.
5. INSTALL SUBSEQUENT MATS OVER THE GEOGRID EXTENSION AND STANDARD UNDERLAYMENT EXTENSION OF THE PREVIOUSLY INSTALLED MAT. ENSURE THE GEOGRID AND STANDARD UNDERLAYMENT EXTENSIONS ARE LAYING FLAT ON THE SUBGRADE BEFORE INSTALLING ADJACENT MAT OVER THE EXTENSIONS.
6. INSTALL #3 REBAR 18" U-ANCHORS IN 2' INCREMENTS ACROSS THE GEOGRID AND STANDARD EXTENSION ABUTMENT. INSTALL ANCHORS PERPENDICULAR TO THE SLOPE DIRECTLY BEHIND FIRST ROW OF BLOCKS ON THE ADJACENT MAT.
7. AT THE END OF THE ARMORED SLOPE, IF HEAD CUT IS ANTICIPATED, EMBED THE MAT 18" IN A TERMINATION TRENCH. FILL AND COMPACT TERMINATION TRENCH WITH SUITABLE FILL.

MOTZ
ENTERPRISES, INC.
Flexamat
(513)772-6689
Info@Flexamat.com
Flexamat.com
Flexamat PERMANENT EROSION CONTROL
REV - 1

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE

Wesley Woodlee Registered Engineer No. 104679 STATE OF TENNESSEE

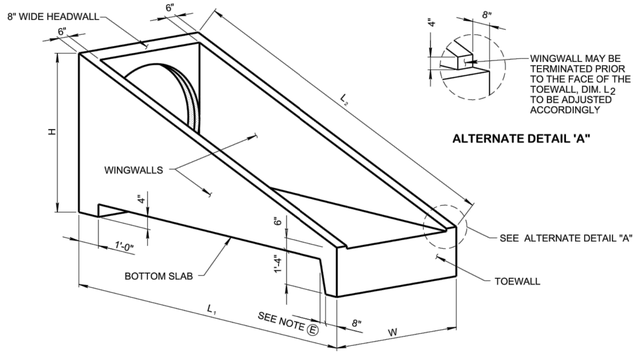
THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.
DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.

SHEET 05 OF 06

DIVISION OF ENGINEERING
GRADING AND DRAINAGE DETAILS
LOCATION: 1616 EAST JEFFERSON STREET
BROWNSVILLE, TN.
SURVEY: SEAS DATE: 10/24 BOOK: _____
DESIGN: JWW DATE: 01/25 CKD: JWW DATE: 01/25 SCALE: 1"=40'

DEPUTY CITY ENGINEER | DATE | CITY ENGINEER | DATE

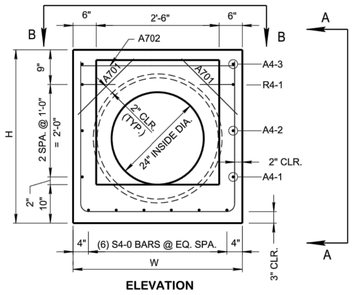
RGI JOB NO. 24158



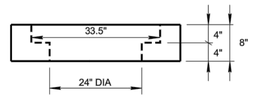
ISOMETRIC VIEW

NOTE: ¾" CHAMFER REQUIRED ON ALL EXPOSED EDGES

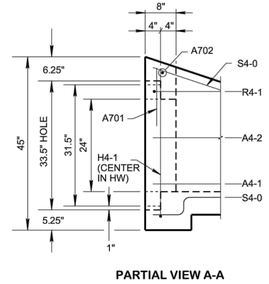
ALTERNATE DETAIL 'A"



ELEVATION



PARTIAL VIEW B-B
SEE NOTE (F)

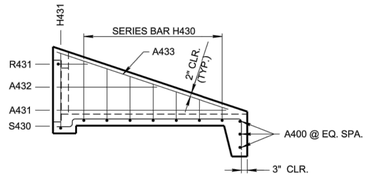


PARTIAL VIEW A-A

HEADWALL DETAILS

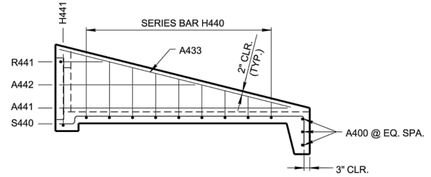
NOTE: INSTALL BARS A701 AT 45 °
SEE GENERAL NOTES (C) & (F).

- REV. 6-14-13: REVISED NOTEG. ADDED NOTE (H) AND (I)
- REV. 1-6-15: REVISED HOLE OPENING SIZE. ADDED STEPPED HOLE DETAIL.
- REV. 1-21-16: REVISED GENERAL NOTE (B)
- REV. 7-5-17: MODIFIED GENERAL NOTES (C) AND (J)
- REV. 06-28-19: ADJUSTED A-A, B-B AND ELEVATION VIEWS. RENAMED AND REDREW SHEET.



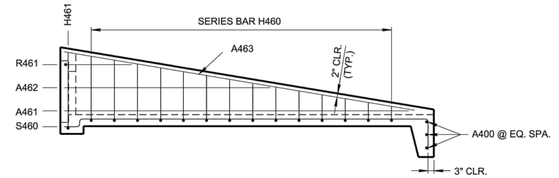
3:1 WINGWALL ELEVATION

NOTE: A-BARS IN HEADWALL NOT SHOWN FOR CLARITY.



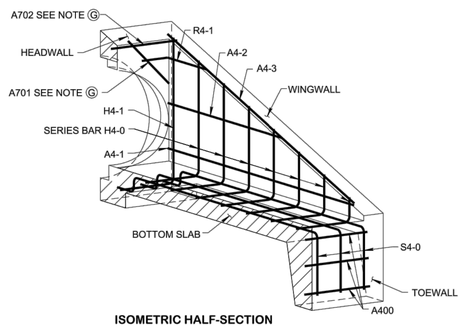
4:1 WINGWALL ELEVATION

NOTE: A-BARS IN HEADWALL NOT SHOWN FOR CLARITY.



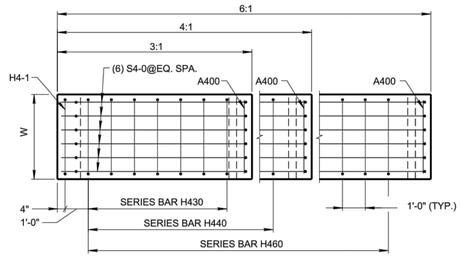
6:1 WINGWALL ELEVATION

NOTE: A-BARS IN HEADWALL NOT SHOWN FOR CLARITY.



ISOMETRIC HALF-SECTION SHOWING REINFORCEMENT

(3:1 SHOWN, 4:1 & 6:1 SIMILAR)
SEE GENERAL NOTE (C)



BOTTOM SLAB PLAN

DIMENSIONS AND QUANTITIES FOR ONE ENDWALL 24" PIPE

SLOPE	CONCRETE ENDWALL DIMENSIONS				ESTIMATED QUANTITIES	
	H	L_1	L_2	W	CLASS "A" CONC. CU. YD.	STEEL BAR REINF. LB.
3:1	3'-9"	8'-5"	8'-10½"	3'-6"	1.28	124
4:1		11'-0"	11'-4"		1.61	153
6:1		16'-2"	16'-4⅝"		2.26	215

GENERAL NOTES

(A) DRAWING TO BE USED FOR ALL CAST-IN-PLACE AND ALL PRECAST 24" CONCRETE ENDWALLS (TYPE "U") FOR CROSS DRAINS ONLY. "U" ENDWALL TO BE PLACED AT 90° SKEW TO CENTERLINE. SEE STD. DWG. D-PE-99 FOR SKEWED CONNECTION DETAIL WHEN CROSS DRAIN IS NOT PERPENDICULAR TO CENTERLINE. CAST-IN-PLACE CONCRETE ENDWALL SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD SPECIFICATIONS, SECTION 611 AND/OR SPECIAL PROVISIONS.

(B) SEE STD. DWG. D-PE-24B FOR BILL OF STEEL & PRECAST NOTES.

(C) "-" IN BAR DESIGNATION REPRESENTS 3, 4 OR 6 FOR 3:1, 4:1 OR 6:1 SLOPES, RESPECTIVELY. SEE STD. DWG. D-PE-24B.

(D) SPLICING OF REINFORCEMENT IS ACCEPTABLE PROVIDED THAT A MINIMUM 21" SPLICE LENGTH IS USED.

(E) TOEWALL BACK SLOPE MAY BE CONSTRUCTED VARIABLE FROM VERTICAL UP TO 15°.

(F) 90° STEPS ARE SHOWN ON THE STEPPED HOLE DETAIL, HOWEVER MINOR VARIATIONS OF THE TAPER ARE ACCEPTABLE.

(G) OPTIONAL STEPPED HOLE OR HOLE FORMERS ARE ALLOWED PROVIDED THE AMOUNT OF COVER BETWEEN THE PIPE OPENING AND BARS A701 AND A702 IS THE SAME OR GREATER THAN SHOWN ON THIS DRAWING.

(H) PAYMENT WILL BE MADE UNDER:

611-07.57	24" ENDWALL (CROSS DRAIN) 3:1	EACH
611-07.58	24" ENDWALL (CROSS DRAIN) 4:1	EACH
611-07.59	24" ENDWALL (CROSS DRAIN) 6:1	EACH

(I) THE CONTRACTOR MAY BE ELECT TO SUBSTITUTE AN APPROVED ALTERNATIVE DESIGN.

(J) DIMENSIONAL AND REINFORCING TOLERANCES WILL BE AS SHOWN IN STANDARD OPERATING PROCEDURE (SOP) 5-3.

- MINOR REVISION -- FHWA APPROVAL NOT REQUIRED

STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION

TYPE "U" CROSS DRAIN ENDWALL FOR 24" PIPE
(FOR 3:1, 4:1 & 6:1 SLOPES)

03-01-2012 | D-PE-24A

NOT TO SCALE

REVISION

ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE

THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.
DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.

SHEET 06 OF 06

DIVISION OF ENGINEERING

GRADING AND DRAINAGE DETAILS

LOCATION: 1616 EAST JEFFERSON STREET
BROWNSVILLE, TN.

SURVEY: SEAS DATE: 10/24 BOOK: _____

DESIGN: JWW DATE: 01/25 CKD: JWW DATE: 01/25 SCALE: _____

DEPUTY CITY ENGINEER _____ DATE _____ CITY ENGINEER _____ DATE _____

RGI JOB NO. 24158

MAP LEGEND

SF – SILT FENCE

LOD – LIMIT OF DISTURBANCE

CW – CONCRETE WASHOUT

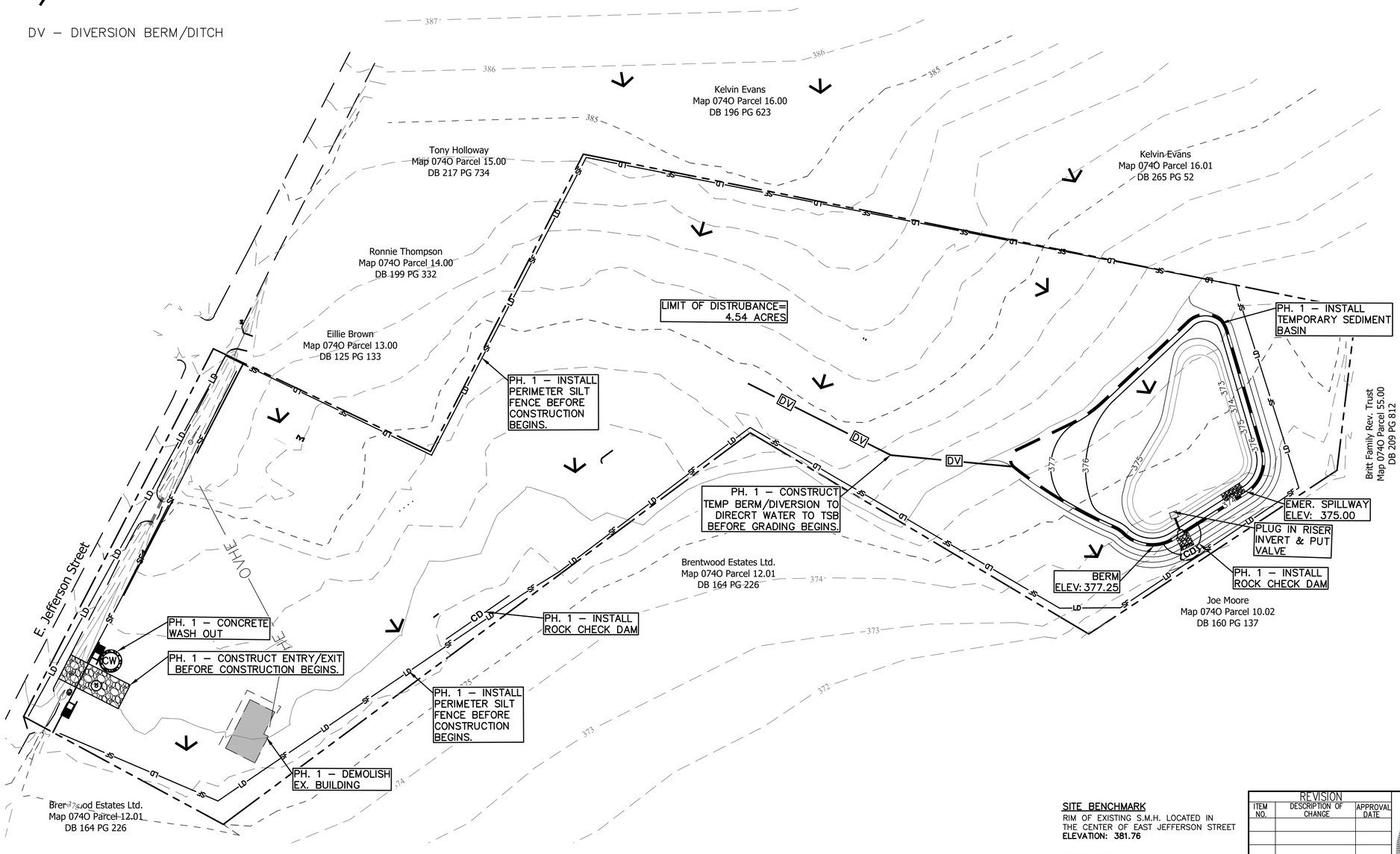
CE – CONSTRUCTION ENTRANCE

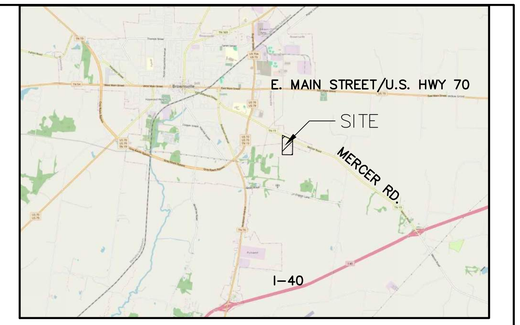
–GROUND DRAINAGE DIRECTION

DV – DIVERSION BERM/DITCH

GENERAL NOTES

1. A MINIMUM OF 24–HOURS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CITY OF BROWNSVILLE CONSTRUCTION INSPECTION OFFICE.
2. ALL NEWLY CUT OR FILLED AREAS, LACKING ADEQUATE VEGETATION, SHALL BE SEEDED, MULCHED, FERTILIZED AND/OR SODDED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.
3. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT NECESSARILY ALL OF THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE UTILITY COMPANIES WHICH MAINTAIN A UTILITY LINE WITHIN THE BOUNDARIES OF THE PROJECT PRIOR TO THE INITIATION OF ANY CONSTRUCTION ON THE PROJECT OR IN THE STREETS BORDERING THE PROJECT. THE CONTRACTOR SHALL ALSO ASSUME FULL RESPONSIBILITY FOR DAMAGE TO ANY UTILITIES ENCOUNTERED WITHIN CONSTRUCTION PERIMETERS, WHETHER SHOWN ON THE CONSTRUCTION PLANS OR NOT, DURING THE WORK ON THE PROJECT. FOR SITE LOCATION OF EXISTING UTILITIES INVOLVING MLG&W, SOUTH CENTRAL BELL, AND/OR TEXAS GAS COMPANY, CALL 1–800–351–1111.
4. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES.
5. ALL FILL SOILS SHALL BE COMPACTED TO A MINIMUM OF 95% OF STANDARD PROCTOR DENSITY (ASTM D–698) WITHIN 3% OF OPTIMUM MOISTURE CONTENT IN LIFTS NOT TO EXCEED SIX (6) INCHES OF COMPACTED THICKNESS.
6. ALL CONSTRUCTION MATERIALS AND PROCEDURES SHALL MEET OR EXCEED THE REQUIREMENTS OF THE CITY OF BROWNSVILLE STANDARD CONSTRUCTION SPECIFICATIONS.
7. PROPERTY LINES SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. GRADING, CLEARING AND THE ERECTION OR REMOVAL OF FENCES ALONG PROPERTY LINES SHALL BE FULLY COORDINATED WITH ADJACENT PROPERTY OWNERS.
8. VERIFY SITE CONDITIONS PRIOR TO CONSTRUCTION. NOTIFY THE CITY OF BROWNSVILLE CONSTRUCTION INSPECTION OFFICE ENGINEER OF ANY VARIATIONS PRIOR TO COMMENCEMENT OF WORK.
9. ALL GRADING WORK SHALL BE PERFORMED IN SUCH A MANNER THAT ADJACENT PROPERTIES ARE NOT DAMAGED OR ADVERSELY AFFECTED.
10. LOT DRAINAGE: FINISH GRADE SHALL BE SLOPED AWAY FROM THE FOUNDATION FOR DRAINAGE. THE FINISH GRADE MUST BEGIN AT LEAST 12–INCHES BELOW THE TOP OF THE FOUNDATION WALL OR THE GRADE OF THE CONCRETE SLAB AT THE INTERIOR IN THE CASE OF AN INTEGRAL SLAB AND FOUNDATION. THE MINIMUM GRADE AWAY FROM THE FOUNDATION SHALL BE TWO PERCENT (2%) IN ALL DIRECTIONS. THE DRIVEWAY SHALL BE SLOPED DOWN AT TWO PERCENT (2%) FOR AT LEAST EIGHT FEET FROM THE STRUCTURE.





VICINITY

–CAUTION NOTICE TO CONTRACTOR–

IN CASE OF CONFLICTS BETWEEN EROSION CONTROL PLANS, THE SWPPP DOCUMENT, ANY PROJECT OR MUNICIPAL SPECIFICATIONS AND THE ACTUAL STATE NPDES GENERAL PERMIT, THE MOST STRINGENT REQUIREMENTS SHALL APPLY.

IF PROPERLY IMPLEMENTED, THIS PLAN WILL PROVIDE AN EFFECTIVE MEANS FOR CONTROLLING EROSION. HOWEVER, IT IS ACKNOWLEDGED THAT NO ONE PLAN CAN BE PREPARED THAT WILL DEPICT ALL POSSIBLE CONTROL MEASURES NECESSARY FOR VARIOUS STAGES OF CONSTRUCTION. THE CONTRACTOR SHALL INCLUDE IN THE BASE BID ADEQUATE FUNDS TO PROVIDE ALL EROSION CONTROL MEASURES NECESSARY TO COMPLY WITH CODES FOR THE DURATION OF THE CONSTRUCTION PROJECT.

PHASE 1 SEQUENCING

1. INSTALL PERIMETER SILT FENCE.
2. CONSTRUCT ENTRY/EXIT & CONC. WASHOUT
3. CONSTRUCT SEDIMENT TRAP AND TEMPORARY DIVERSION BERMS/DITCHES.
4. DEMOLISH EXISTING STRUCTURES.

LIMITS OF DISTURBANCE

ALL GROUND AND SUBGRADE DISTURBING ACTIVITIES SHALL BE RESTRICTED TO WITHIN THE LIMITS OF DISTURBANCE SHOWN ON THE EROSION CONTROL PLANS. NO GROUND OR SUBGRADE DISTURBANCES NOR STORAGE OF NEW, SALVAGED OR WASTE MATERIALS OR CHEMICALS SHALL OCCUR OR BE STORED BEYOND THE LIMITS SHOWN. IF SUCH DISTURBANCES OR STORAGE NEEDS ARE REQUIRED BEYOND THE LIMITS SHOWN, THE CONTRACTOR SHALL UPDATE THE NPDES PERMIT COVERAGE FOR THE SITE PRIOR TO INITIATING SUCH CONSTRUCTION ACTIVITIES.

BEST MANAGEMENT PRACITCES SEQUENCE

NOTE: UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS (AS APPLICABLE): TRAILER, PARKING, LAY DOWN, PORTA–POTTY, WHEEL WASH, CONCRETE WASHOUT, MASON'S AREA, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC, IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS. IN ADDITION, NOTE ANY OFF–SITE AREAS WHERE FILL IS IMPORTED FROM OR SOIL IS EXPORTED TO ON THE SITE MAPS.

ACREAGE SUMMARY	
EX. IMPERVIOUS SURFACE	0.12 ACRES
EX. PERVIOUS SURFACE	5.00 ACRES
IMPERVIOUS SURFACE AT COMPLETION	2.13 ACRES
PERVIOUS/SEEDED AREA AT COMPLETION	2.99 ACRES
TOTAL AREA	5.12 ACRES

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

SHEET 01 OF 04

SITE BENCHMARK

RIM OF EXISTING S.M.H. LOCATED IN THE CENTER OF EAST JEFFERSON STREET
ELEVATION: 381.76

FLOOD NOTE:

THIS PROPERTY SHOWN HEREON DOES NOT GRAPHICALLY FALL WITHIN A SPECIAL DESIGNATED FLOODZONE PER FEMA FIRM MAP PANEL 47157C0185F, DATED 09/27/2007

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE

Wesley Woodruff REGISTERED ENGINEER No. 104679 STATE OF TENNESSEE

THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.

DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.

DIVISION OF ENGINEERING

EROSION PREVENTION & SEDIMENT CONTROL PH. 1

LOCATION: 1616 EAST JEFFERSON STREET
BROWNSVILLE, TN.

SURVEY: SEAS DATE: 10/24 BOOK: _____

DESIGN: _____ DATE: 01/25 CKD: _____ DATE: 01/25 SCALE: 1"=40'

DEPUTY CITY ENGINEER _____ DATE _____ CITY ENGINEER _____ DATE _____

RGI JOB NO. 24158

MAP LEGEND

SF – SILT FENCE

LOD – LIMIT OF DISTURBANCE

CW – CONCRETE WASHOUT

CE – CONSTRUCTION ENTRANCE

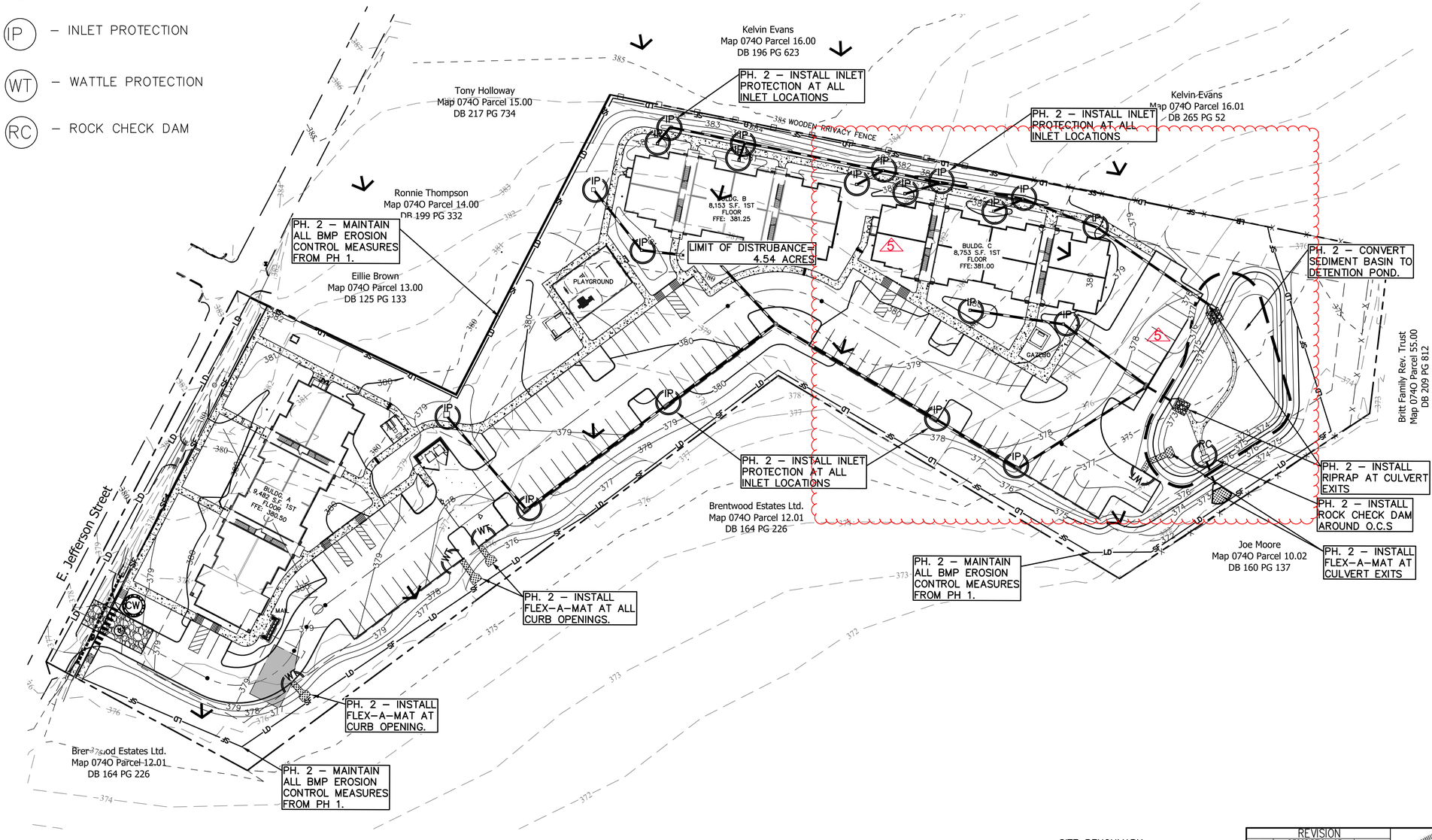
IP – INLET PROTECTION

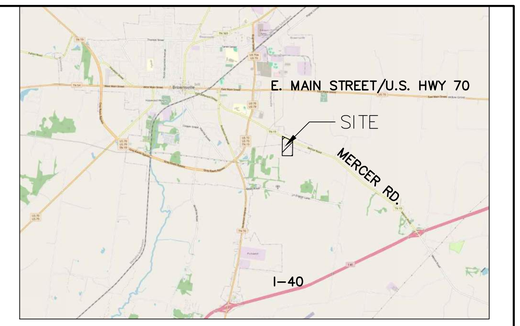
WT – WATTLE PROTECTION

RC – ROCK CHECK DAM

GENERAL NOTES

1. A MINIMUM OF 24-HOURS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CITY OF BROWNSVILLE CONSTRUCTION INSPECTION OFFICE.
2. ALL NEWLY CUT OR FILLED AREAS, LACKING ADEQUATE VEGETATION, SHALL BE SEEDED, MULCHED, FERTILIZED AND/OR SODDED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.
3. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT NECESSARILY ALL OF THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE UTILITY COMPANIES WHICH MAINTAIN A UTILITY LINE WITHIN THE BOUNDARIES OF THE PROJECT PRIOR TO THE INITIATION OF ANY CONSTRUCTION ON THE PROJECT OR IN THE STREETS BORDERING THE PROJECT. THE CONTRACTOR SHALL ALSO ASSUME FULL RESPONSIBILITY FOR DAMAGE TO ANY UTILITIES ENCOUNTERED WITHIN CONSTRUCTION PERIMETERS, WHETHER SHOWN ON THE CONSTRUCTION PLANS OR NOT, DURING THE WORK ON THE PROJECT. FOR SITE LOCATION OF EXISTING UTILITIES INVOLVING MLG&W, SOUTH CENTRAL BELL, AND/OR TEXAS GAS COMPANY, CALL 1-800-351-1111.
4. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES.
5. ALL FILL SOILS SHALL BE COMPACTED TO A MINIMUM OF 95% OF STANDARD PROCTOR DENSITY (ASTM D-698) WITHIN 3% OF OPTIMUM MOISTURE CONTENT IN LIFTS NOT TO EXCEED SIX (6) INCHES OF COMPACTED THICKNESS.
6. ALL CONSTRUCTION MATERIALS AND PROCEDURES SHALL MEET OR EXCEED THE REQUIREMENTS OF THE CITY OF BROWNSVILLE STANDARD CONSTRUCTION SPECIFICATIONS.
7. PROPERTY LINES SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. GRADING, CLEARING AND THE ERECTION OR REMOVAL OF FENCES ALONG PROPERTY LINES SHALL BE FULLY COORDINATED WITH ADJACENT PROPERTY OWNERS.
8. VERIFY SITE CONDITIONS PRIOR TO CONSTRUCTION. NOTIFY THE CITY OF BROWNSVILLE CONSTRUCTION INSPECTION OFFICE ENGINEER OF ANY VARIATIONS PRIOR TO COMMENCEMENT OF WORK.
9. ALL GRADING WORK SHALL BE PERFORMED IN SUCH A MANNER THAT ADJACENT PROPERTIES ARE NOT DAMAGED OR ADVERSELY AFFECTED.
10. LOT DRAINAGE: FINISH GRADE SHALL BE SLOPED AWAY FROM THE FOUNDATION FOR DRAINAGE. THE FINISH GRADE MUST BEGIN AT LEAST 12-INCHES BELOW THE TOP OF THE FOUNDATION WALL OR THE GRADE OF THE CONCRETE SLAB AT THE INTERIOR IN THE CASE OF AN INTEGRAL SLAB AND FOUNDATION. THE MINIMUM GRADE AWAY FROM THE FOUNDATION SHALL BE TWO PERCENT (2%) IN ALL DIRECTIONS. THE DRIVEWAY SHALL BE SLOPED DOWN AT TWO PERCENT (2%) FOR AT LEAST EIGHT FEET FROM THE STRUCTURE.





VICINITY

-CAUTION NOTICE TO CONTRACTOR-

IN CASE OF CONFLICTS BETWEEN EROSION CONTROL PLANS, THE SWPPP DOCUMENT, ANY PROJECT OR MUNICIPAL SPECIFICATIONS AND THE ACTUAL STATE NPDES GENERAL PERMIT, THE MOST STRINGENT REQUIREMENTS SHALL APPLY.

IF PROPERLY IMPLEMENTED, THIS PLAN WILL PROVIDE AN EFFECTIVE MEANS FOR CONTROLLING EROSION. HOWEVER, IT IS ACKNOWLEDGED THAT NO ONE PLAN CAN BE PREPARED THAT WILL DEPICT ALL POSSIBLE CONTROL MEASURES NECESSARY FOR VARIOUS STAGES OF CONSTRUCTION. THE CONTRACTOR SHALL INCLUDE IN THE BASE BID ADEQUATE FUNDS TO PROVIDE ALL EROSION CONTROL MEASURES NECESSARY TO COMPLY WITH CODES FOR THE DURATION OF THE CONSTRUCTION PROJECT.

PHASE 2 SEQUENCING

1. MAINTAIN/REPAIR/REPLACE ALL BMP MEASURES PLACED IN PH. 1
2. INSTALL DANDY BAGS AT ALL PROPOSED INLET LOCATIONS
3. CONVERT SEDIMENT BASIN TO A DETENTION POND
4. INSTALL RIP-RAP BMP AT CULVERT EXITS AND SPECIFIED LOCATIONS
5. INSTALL PADS

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(IN FEET)
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REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE
5	ASI #5	12/05/25

Wesley Woodruff REGISTERED ENGINEER No. 104679 STATE OF TENNESSEE

THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.

DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.

SHEET 02 OF 05

DIVISION OF ENGINEERING

EROSION PREVENTION & SEDIMENT CONTROL PH. 2

LOCATION: 1616 EAST JEFFERSON STREET
BROWNSVILLE, TN.

SURVEY: SEAS DATE: 10/24 BOOK: _____

DESIGN: _____ DATE: 01/25 CKD: _____ DATE: 01/25 SCALE: 1"=40'

DEPUTY CITY ENGINEER _____ DATE _____ CITY ENGINEER _____ DATE _____

RGI JOB NO. 24158

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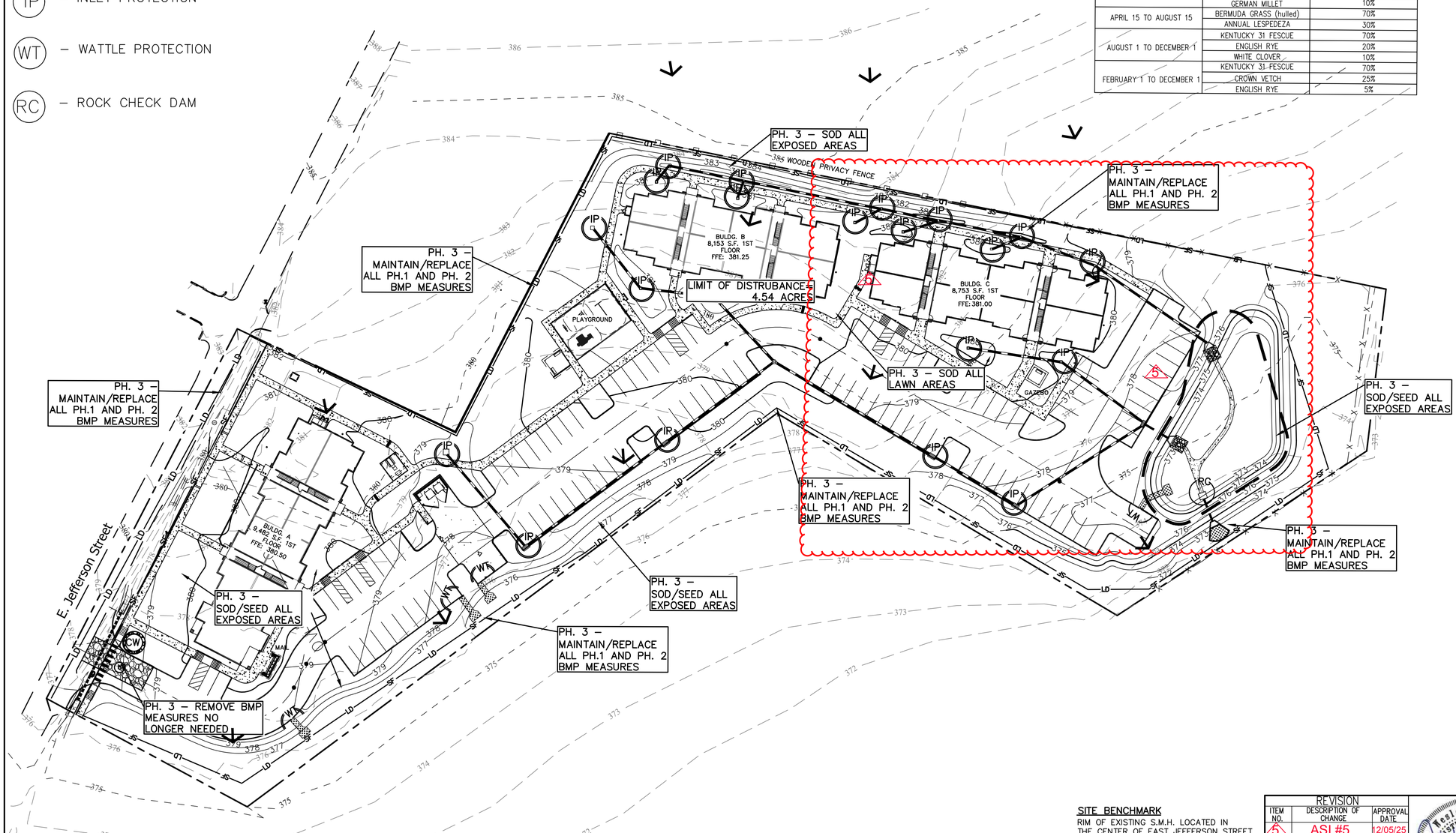
TEMPORARY SEEDING MIXTURE(S)		
SEEDING DATES	SEED TYPE	PERCENTAGE
JANUARY 1 TO MAY 1	ITALIAN RYE	33%
	KOREAN LESPEDEZA	33%
	SUMMER OATS	34%
MAY 1 TO JULY 15	SUDAN–SORGHUM	100%
	ENGLISH RYE	100%
JULY 1 TO JANUARY 1	KOREAN LESPEDEZA	100%
	GERMAN MILLET	100%

PERMANENT SEEDING MIXTURE(S)		
SEEDING DATES	SEED TYPE	PERCENTAGE
FEBRUARY 1 TO JULY 1	KENTUCKY 31 FESCUE	80%
	KOREAN LESPEDEZA	15%
	ENGLISH RYE	5%
JUNE 1 TO AUGUST 15	KENTUCKY 31 FESCUE	55%
	ENGLISH RYE	20%
	KOREAN LESPEDEZA	15%
	GERMAN MILLET	10%
APRIL 15 TO AUGUST 15	BERMUDA GRASS (hulled)	70%
	ANNUAL LESPEDEZA	30%
AUGUST 1 TO DECEMBER 1	KENTUCKY 31 FESCUE	70%
	ENGLISH RYE	20%
	WHITE CLOVER	10%
FEBRUARY 1 TO DECEMBER 1	KENTUCKY 31 FESCUE	70%
	CROWN VETCH	25%
	ENGLISH RYE	5%

VICINITY



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PHASE 3 SEQUENCING

1. MAINTAIN/REPLACE/REPAIR ALL BMP MEASURES FROM PH. 1 AND PH 2.
2. BEGIN/COMPLETE ALL SEEDING AND SODDING OPERATIONS
3. REMOVE SILT FENCE BARRIER AND TEMPORARY EROSION CONTROL MEASURES
4. REMOVE CONSTRUCTION EXIT AND CLEAN UP COMPLETED SITE

LIMITS OF DISTURBANCE

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REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE
5	ASI #5	12/05/25

T. Wesley Woodruff, Registered Engineer, No. 104879, State of Tennessee

THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.

DEVELOPER:

ENGINEER: RENAISSANCE GROUP, INC.

SHEET 03 OF 05

DIVISION OF ENGINEERING

EROSION PREVENTION & SEDIMENT CONTROL PH. 3

LOCATION: 1616 EAST JEFFERSON STREET

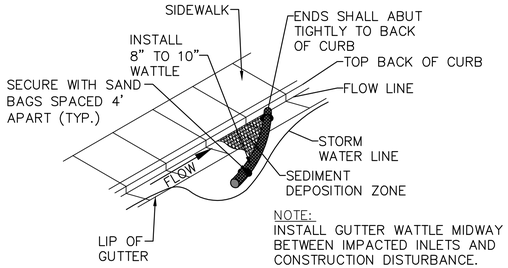
BROWNSVILLE, TN.

SURVEY: SEAS DATE: 10/24 BOOK: _____

DESIGN: _____ DATE: 01/25 CKD: _____ DATE: 01/25 SCALE: 1"=40'

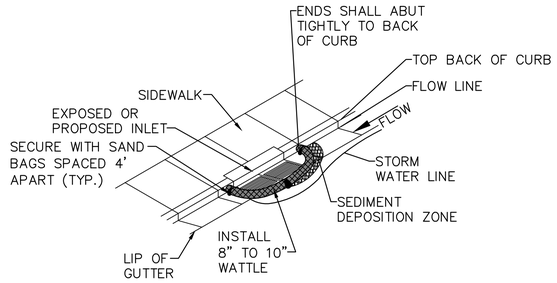
DEPUTY CITY ENGINEER _____ DATE _____ CITY ENGINEER _____ DATE _____

RGI JOB NO. 24158



NOTE:
INSTALL GUTTER WATTLE MIDWAY BETWEEN IMPACTED INLETS AND CONSTRUCTION DISTURBANCE.

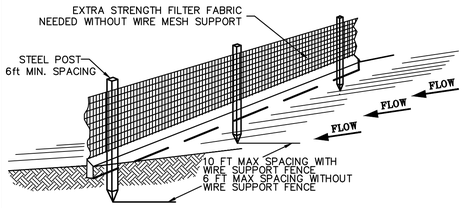
GUTTER PROTECTION SETUP
N.T.S.

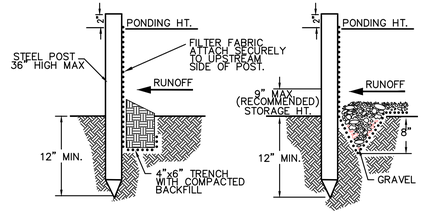


WATTLE MAINTENANCE NOTES:

1. THE CONTRACTOR SHALL INSPECT WATTLES EVERY TWO WEEKS AND AFTER ANY SIGNIFICANT STORM EVENT AND MAKE REPAIRS OR REMOVE SEDIMENT ACCUMULATED BEHIND WATTLE AS NECESSARY.
2. SEDIMENT ACCUMULATED BEHIND WATTLE SHALL BE REMOVED WHEN THE SEDIMENT HAS ACCUMULATED TO ONE HALF THE DIAMETER OF THE WATTLE.
3. WATTLES SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND IS ACCEPTED BY THE CITY.

TEMPORARY CURB INLET WATTLE PROTECTION





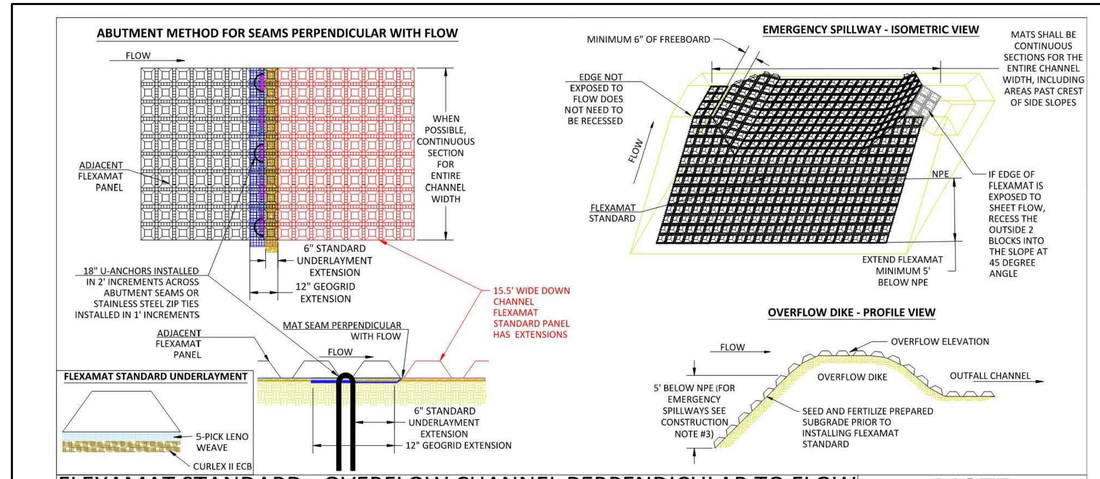
STANDARD DETAIL
TRENCH WITH NATIVE BACKFILL

ALTERNATE DETAIL
TRENCH WITH GRAVEL

NOTE:
1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.

FABRIC:
1. AMOCO 1198
2. BELTECH 810
3. MIRAFI 130X
4. LING GTF 190
5. SI 915 SC

SILT FENCE DETAIL
N.T.S.



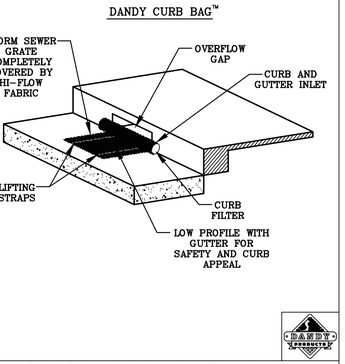
FLEXAMAT STANDARD - OVERFLOW CHANNEL PERPENDICULAR TO FLOW

CONSTRUCTION NOTES:

1. AN ENGINEER OR MANUFACTURERS REPRESENTATIVE SHALL BE ONSITE FOR THE START OF THE INSTALLATION.
2. ALL SUBGRADE SURFACES PREPARED FOR PLACEMENT OF MATS SHALL BE SMOOTH AND FREE OF ALL ROCKS, STICKS, ROOTS, OTHER PROTRUSIONS, OR DEBRIS OF ANY KIND. THE PREPARED SURFACE SHALL PROVIDE A FIRM UNYIELDING SUBGRADE FOR THE MATS.
3. PRIOR TO THE FLEXAMAT STANDARD INSTALLATION SEED AND FERTILIZE SUBGRADE WITH SITE SPECIFIC SEED MIX IN ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS.
4. MAT SHALL EXTEND 5' BELOW NORMAL POND ELEVATION. (FOR EMERGENCY OVERFLOW INSTALLATIONS EXTEND THE MAT 3' DOWN THE INSIDE FACE OF THE OVERFLOW DIKE.)
5. INSTALL FLEXAMAT STANDARD ROLLS. MANUFACTURER RECOMMENDS INSTALLING THE WIDEST MAT POSSIBLE FOR SPILLWAY APPLICATIONS.
6. INSTALLATION STARTS AT THE DOWN CHANNEL END AND MOVES UP THE CHANNEL, TOWARDS THE START OF CHANNEL.
   - 6.1. FOR WIDTHS WIDER THAN 16', INSTALL 15.5' WIDE MATS WITH GEOGRID AND STANDARD UNDERLAYMENT EXTENSIONS. INSTALL ADJACENT MAT OVER THE 12" GEOGRID AND 6" STANDARD UNDERLAYMENT EXTENSIONS OF THE ADJACENT MATS. ENSURE THE GEOGRID AND STANDARD UNDERLAYMENT EXTENSIONS ARE LAYING FLAT ON THE SUBGRADE BEFORE INSTALLING ADJACENT MAT OVER THE EXTENSIONS.
   - 6.2. INSTALL 18" U-ANCHORS IN 2' INCREMENTS OR STAINLESS STEEL ZIP TIES IN 1' INCREMENTS ACROSS MAT ABUTMENT SEAMS. INSTALL U-ANCHORS AND ZIP TIES PERPENDICULAR TO FLOW DIRECTLY BEHIND FIRST BLOCK OF THE UP-CHANNEL MAT. U-ANCHORS SHALL ENCOMPASS TWO CORDS OF GEOGRID ON EACH MAT. ZIP TIES SHALL ENCOMPASS 3 CORDS OF GEOGRID FROM EACH MAT.
7. AT THE END OF THE ARMORED SPILLWAY, EMBED THE MAT 18" IN A TERMINATION TRENCH. FILL AND COMPACT TERMINATION TRENCH WITH SUITABLE FILL. (AS SPECIFIED BY EOR.)

MOTZ ENTERPRISES, INC.
Flexamat
(513)772-6689
Info@Flexamat.com
Flexamat.com

REV - 1



DETAIL OF CURB INLET SEDIMENT CONTROL DEVICE WITH CURB FILTER

PROJECT:		DR. BY:
CITY/STATE:	DATE:	DR. NO:

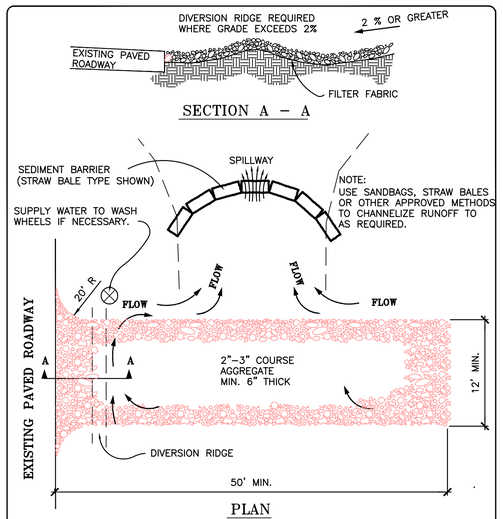
DANDY CURB BAG™
SPECIFICATIONS

NOTE: THE DANDY CURB BAG™ WILL BE **MANUFACTURED IN THE U.S.A** FROM A WOVEN MONOFILAMENT FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS:

DANDY CURB BAG™ (SAFETY ORANGE)

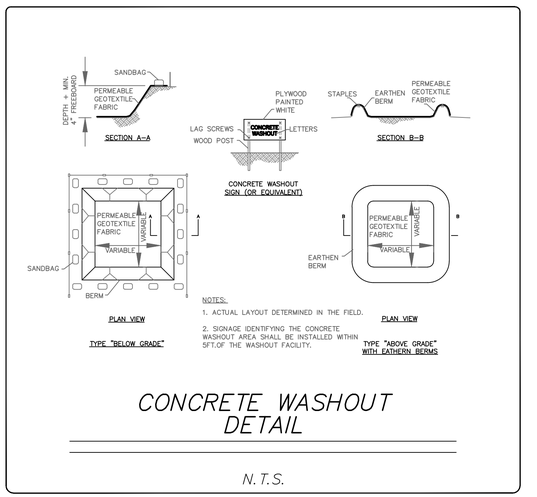
Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4632	kN (lbs)	1.62 (365) X 0.89 (200)
Grab Tensile Elongation	ASTM D 4632	%	24 X 10
Puncture Strength	ASTM D 4833	kN (lbs)	0.40 (90)
Mullen Burst Strength	ASTM D 3786	kPa (psi)	3097 (450)
Trapezoid Tear Strength	ASTM D 4533	kN (lbs)	0.51 (115) X 0.33 (75)
UV Resistence	ASTM D 4355	%	90
Apparent Opening Size	ASTM D 4751	Mm (US Std Sieve)	0.425 (40)
Flow Rate	ASTM D 4491	$l/min/m^2$ (gal/min/ft^2)	5907 (145)
Permittivity	ASTM D 4491	Sec^{-1}	2.1

*Note: All Dandy Curb Bags™ can be ordered with our optional oil absorbents



NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABLIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT

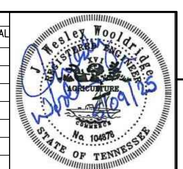


NOTES:
1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
2. SIGNAGE IDENTIFYING THE CONCRETE WASHOUT AREA SHALL BE INSTALLED WITHIN 5FT.OF THE WASHOUT FACILITY.

CONCRETE WASHOUT DETAIL
N.T.S.

REVISION

ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.
DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.

SHEET 04 OF 04

DIVISION OF ENGINEERING
EROSION PREVENTION & SEDIMENT CONTROL DETAILS
LOCATION: 1616 EAST JEFFERSON STREET
BROWNSVILLE, TN.

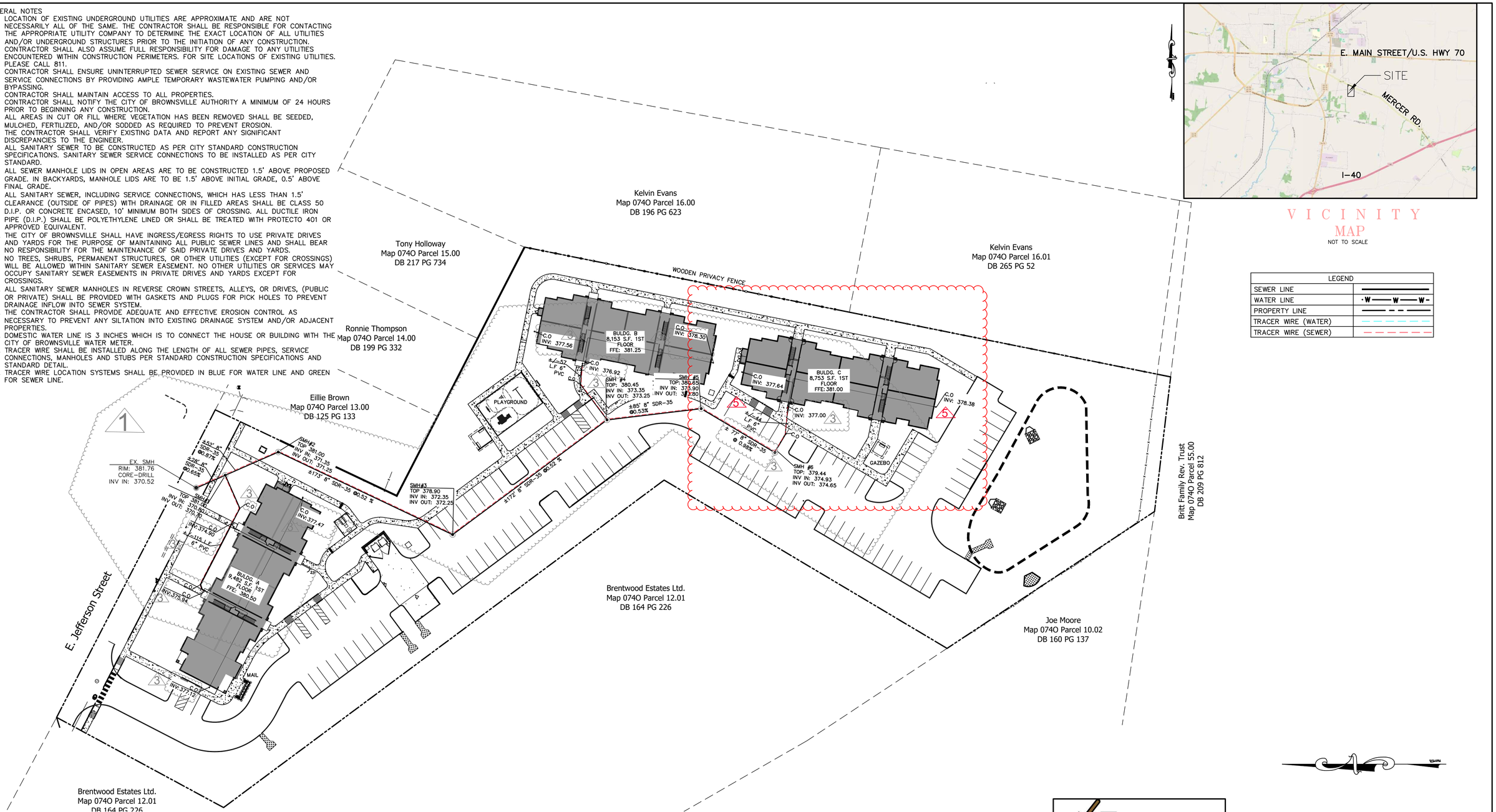
SURVEY: SEAS DATE: 10/24 BOOK: _____
DESIGN: JWW DATE: 01/25 CKD: JWW DATE: 01/25 SCALE: 1"=40'

DEPUTY CITY ENGINEER _____ DATE _____ CITY ENGINEER _____ DATE _____

RGI JOB NO. 24158

GENERAL NOTES

1. LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND ARE NOT NECESSARILY ALL OF THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE APPROPRIATE UTILITY COMPANY TO DETERMINE THE EXACT LOCATION OF ALL UTILITIES AND/OR UNDERGROUND STRUCTURES PRIOR TO THE INITIATION OF ANY CONSTRUCTION. CONTRACTOR SHALL ALSO ASSUME FULL RESPONSIBILITY FOR DAMAGE TO ANY UTILITIES ENCOUNTERED WITHIN CONSTRUCTION PERIMETERS. FOR SITE LOCATIONS OF EXISTING UTILITIES. PLEASE CALL 811.
2. CONTRACTOR SHALL ENSURE UNINTERRUPTED SEWER SERVICE ON EXISTING SEWER AND SERVICE CONNECTIONS BY PROVIDING AMPLE TEMPORARY WASTEWATER PUMPING AND/OR BYPASSING.
3. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES.
4. CONTRACTOR SHALL NOTIFY THE CITY OF BROWNSVILLE AUTHORITY A MINIMUM OF 24 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION.
5. ALL AREAS IN CUT OR FILL WHERE VEGETATION HAS BEEN REMOVED SHALL BE SEEDED, MULCHED, FERTILIZED, AND/OR SODDED AS REQUIRED TO PREVENT EROSION.
6. THE CONTRACTOR SHALL VERIFY EXISTING DATA AND REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ENGINEER.
7. ALL SANITARY SEWER TO BE CONSTRUCTED AS PER CITY STANDARD CONSTRUCTION SPECIFICATIONS. SANITARY SEWER SERVICE CONNECTIONS TO BE INSTALLED AS PER CITY STANDARD.
8. ALL SEWER MANHOLE LIDS IN OPEN AREAS ARE TO BE CONSTRUCTED 1.5' ABOVE PROPOSED GRADE. IN BACKYARDS, MANHOLE LIDS ARE TO BE 1.5' ABOVE INITIAL GRADE, 0.5' ABOVE FINAL GRADE.
9. ALL SANITARY SEWER, INCLUDING SERVICE CONNECTIONS, WHICH HAS LESS THAN 1.5' CLEARANCE (OUTSIDE OF PIPES) WITH DRAINAGE OR IN FILLED AREAS SHALL BE CLASS 50 D.I.P. OR CONCRETE ENCASED, 10' MINIMUM BOTH SIDES OF CROSSING. ALL DUCTILE IRON PIPE (D.I.P.) SHALL BE POLYETHYLENE LINED OR SHALL BE TREATED WITH PROTECTO 401 OR APPROVED EQUIVALENT.
10. THE CITY OF BROWNSVILLE SHALL HAVE INGRESS/EGRESS RIGHTS TO USE PRIVATE DRIVES AND YARDS FOR THE PURPOSE OF MAINTAINING ALL PUBLIC SEWER LINES AND SHALL BEAR NO RESPONSIBILITY FOR THE MAINTENANCE OF SAID PRIVATE DRIVES AND YARDS.
11. NO TREES, SHRUBS, PERMANENT STRUCTURES, OR OTHER UTILITIES (EXCEPT FOR CROSSINGS) WILL BE ALLOWED WITHIN SANITARY SEWER EASEMENT. NO OTHER UTILITIES OR SERVICES MAY OCCUPY SANITARY SEWER EASEMENTS IN PRIVATE DRIVES AND YARDS EXCEPT FOR CROSSINGS.
12. ALL SANITARY SEWER MANHOLES IN REVERSE CROWN STREETS, ALLEYS, OR DRIVES, (PUBLIC OR PRIVATE) SHALL BE PROVIDED WITH GASKETS AND PLUGS FOR PICK HOLES TO PREVENT DRAINAGE INFLOW INTO SEWER SYSTEM.
13. THE CONTRACTOR SHALL PROVIDE ADEQUATE AND EFFECTIVE EROSION CONTROL AS NECESSARY TO PREVENT ANY SILTATION INTO EXISTING DRAINAGE SYSTEM AND/OR ADJACENT PROPERTIES.
14. DOMESTIC WATER LINE IS 3 INCHES WHICH IS TO CONNECT THE HOUSE OR BUILDING WITH THE CITY OF BROWNSVILLE WATER METER.
15. TRACER WIRE SHALL BE INSTALLED ALONG THE LENGTH OF ALL SEWER PIPES, SERVICE CONNECTIONS, MANHOLES AND STUBS PER STANDARD CONSTRUCTION SPECIFICATIONS AND STANDARD DETAIL.
16. TRACER WIRE LOCATION SYSTEMS SHALL BE PROVIDED IN BLUE FOR WATER LINE AND GREEN FOR SEWER LINE.



VICINITY MAP
NOT TO SCALE

LEGEND	
SEWER LINE	
WATER LINE	W W W
PROPERTY LINE	
TRACER WIRE (WATER)	
TRACER WIRE (SEWER)	

SITE BENCHMARK
RIM OF EXISTING S.M.H. LOCATED IN THE CENTER OF EAST JEFFERSON STREET
ELEVATION: 381.76

FLOOD NOTE:
THIS PROPERTY SHOWN HEREON DOES NOT GRAPHICALLY FALL WITHIN A SPECIAL DESIGNATED FLOODZONE PER FEMA FIRM MAP PANEL 47157C0185F, DATED 09/27/2007

Tennessee811

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE
1	ASI #1	07/25
3	ASI #3	10/25
5	ASI #5	12/05/25

Wesley Woodridge REGISTERED ENGINEER No. 104679 STATE OF TENNESSEE

THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.
DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.

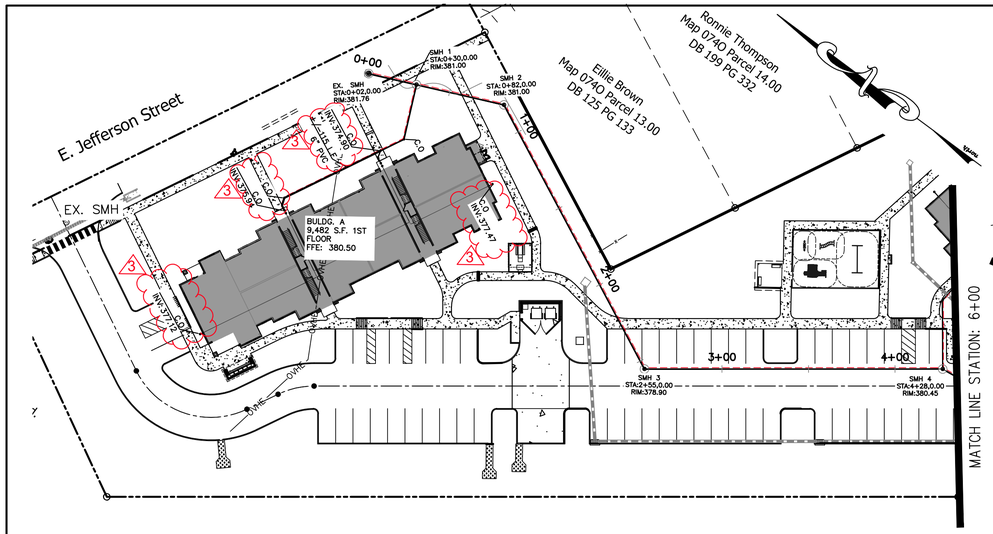
GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

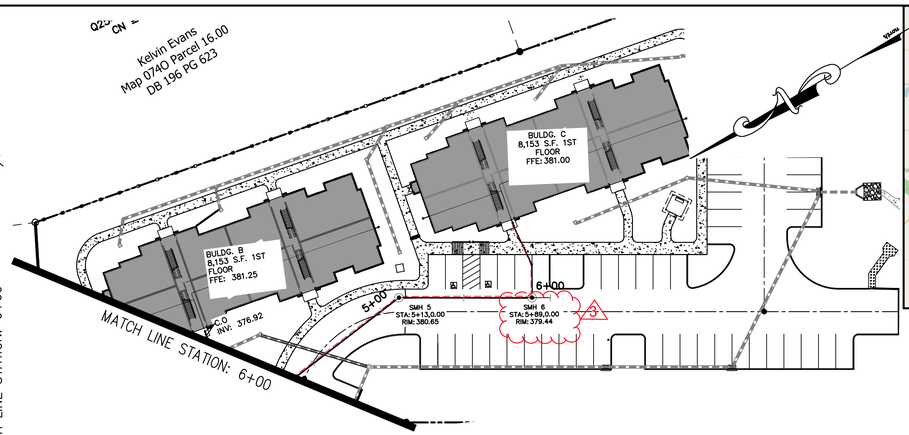
SHEET 01 OF 04

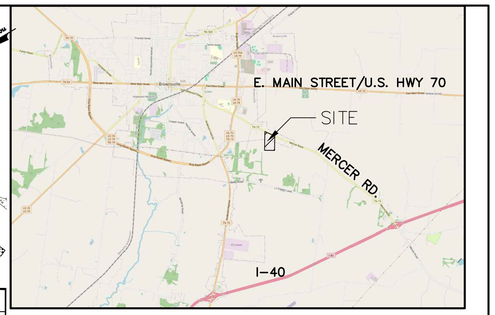
DIVISION OF ENGINEERING
SANITARY SEWER PLAN
LOCATION: 1616 EAST JEFFERSON STREET
BROWNSVILLE, TN.
SURVEY: SEAS DATE: 10/24 BOOK: _____
DESIGN: _____ DATE: 01/25 CKD: _____ DATE: 01/25 SCALE: _____

DEPUTY CITY ENGINEER _____ DATE _____ CITY ENGINEER _____ DATE _____

RGI JOB NO. 24158

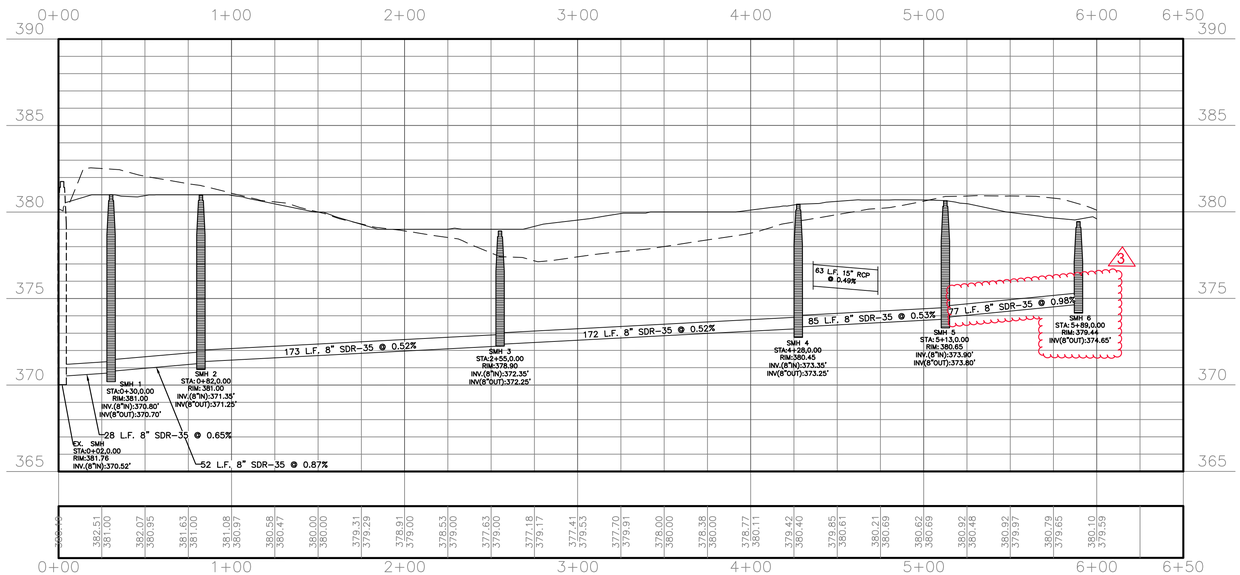






VICINITY MAP
NOT TO SCALE

SS CL (1) PROFILE



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FLOOD NOTE:
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REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE
1	ASI #1	07/25
3	ASI #3	10/25

J. Wesley Woodruff
REGISTERED ENGINEER
No. 104678
STATE OF TENNESSEE

THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.
DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

SHEET 01 OF 01

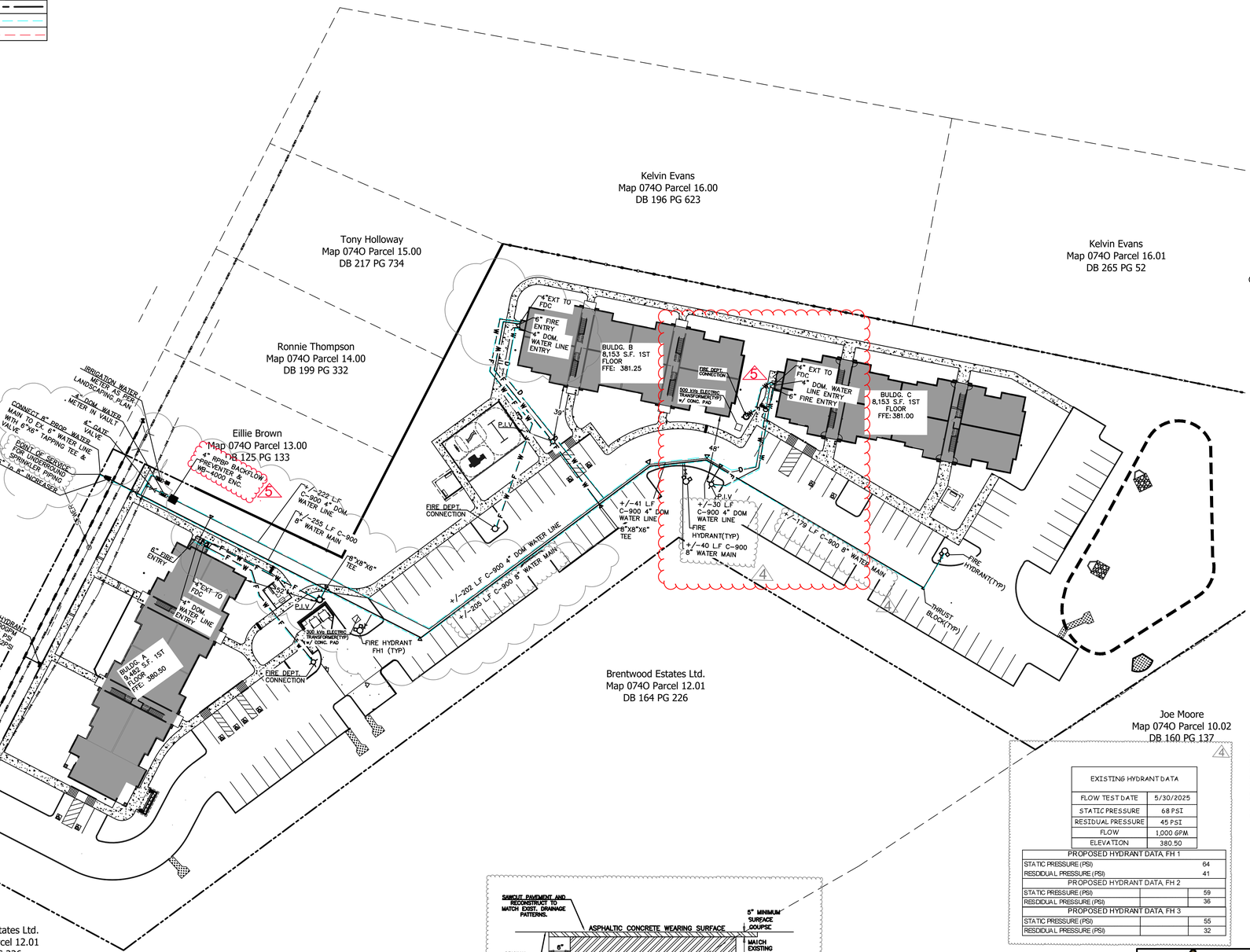
DIVISION OF ENGINEERING
S.S PLAN AND PROFILE
LOCATION: 1616 EAST JEFFERSON STREET
BROWNSVILLE, TN.
SURVEY: SEAS DATE: 10/24 BOOK: _____
DESIGN: _____ DATE: 01/25 CKD: _____ DATE: 01/25 SCALE: _____

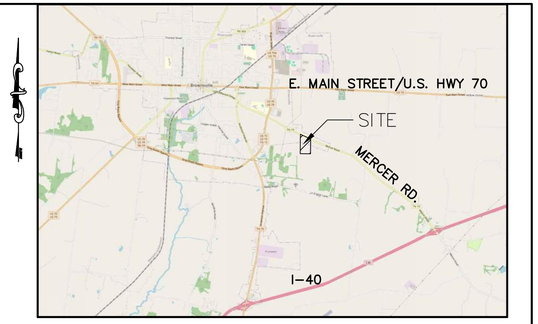
DEPUTY CITY ENGINEER _____ DATE _____ CITY ENGINEER _____ DATE _____

RGI JOB NO. 24158

LEGEND	
SEWER LINE	
WATER LINE	W W W
PROPERTY LINE	
TRACER WIRE (WATER)	
TRACER WIRE (SEWER)	

WATER LEGEND
- FIRE HYDRANT
- THRUST BLOCK
- F.D.C
- P.I.V
- WATER VALVE





VICINITY MAP
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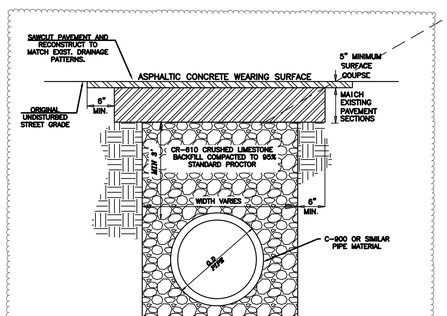
EXISTING HYDRANT DATA	
FLOW TEST DATE	5/30/2025
STATIC PRESSURE	68 PSI
RESIDUAL PRESSURE	45 PSI
FLOW	1,000 GPM
ELEVATION	380.50

PROPOSED HYDRANT DATA, FH 1		
STATIC PRESSURE (PSI)		64
RESIDUAL PRESSURE (PSI)		41
PROPOSED HYDRANT DATA, FH 2		
STATIC PRESSURE (PSI)		59
RESIDUAL PRESSURE (PSI)		36
PROPOSED HYDRANT DATA, FH 3		
STATIC PRESSURE (PSI)		55
RESIDUAL PRESSURE (PSI)		32

NOTES
1. INSTALLATION OF ALL SPRINKLER SYSTEM PIPING FROM THE POINT OF SERVICE MUST BE PERFORMED BY A TENNESSEE REGISTERED SPRINKLER CONTRACTOR.
2. PIPE MATERIALS SHALL BE C-900 FOR UNDERGROUND SPRINKLER PIPING MATERIAL
3. MINIMUM 3' DEPTH SHALL BE BETWEEN TOP OF GROUND AND PIPE. (SEE UTILITY DETAIL SHEET)



UNDERGROUND PIPING AND TRENCH DETAILS

SITE BENCHMARK
RIM OF EXISTING S.M.H. LOCATED IN THE CENTER OF EAST JEFFERSON STREET
ELEVATION: 381.76

FLOOD NOTE:
THIS PROPERTY SHOWN HEREON DOES NOT GRAPHICALLY FALL WITHIN A SPECIAL DESIGNATED FLOODZONE PER FEMA FIRM MAP PANEL 47157C0185F, DATED 09/27/2007

Tennessee811

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE
2	ASI #2	10/25
4	ASI #4	10/25
5	ASI #5	12/05/25

Wesley Woodfield Registered Engineer Agriculture No. 104679 State of Tennessee

THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.
DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.

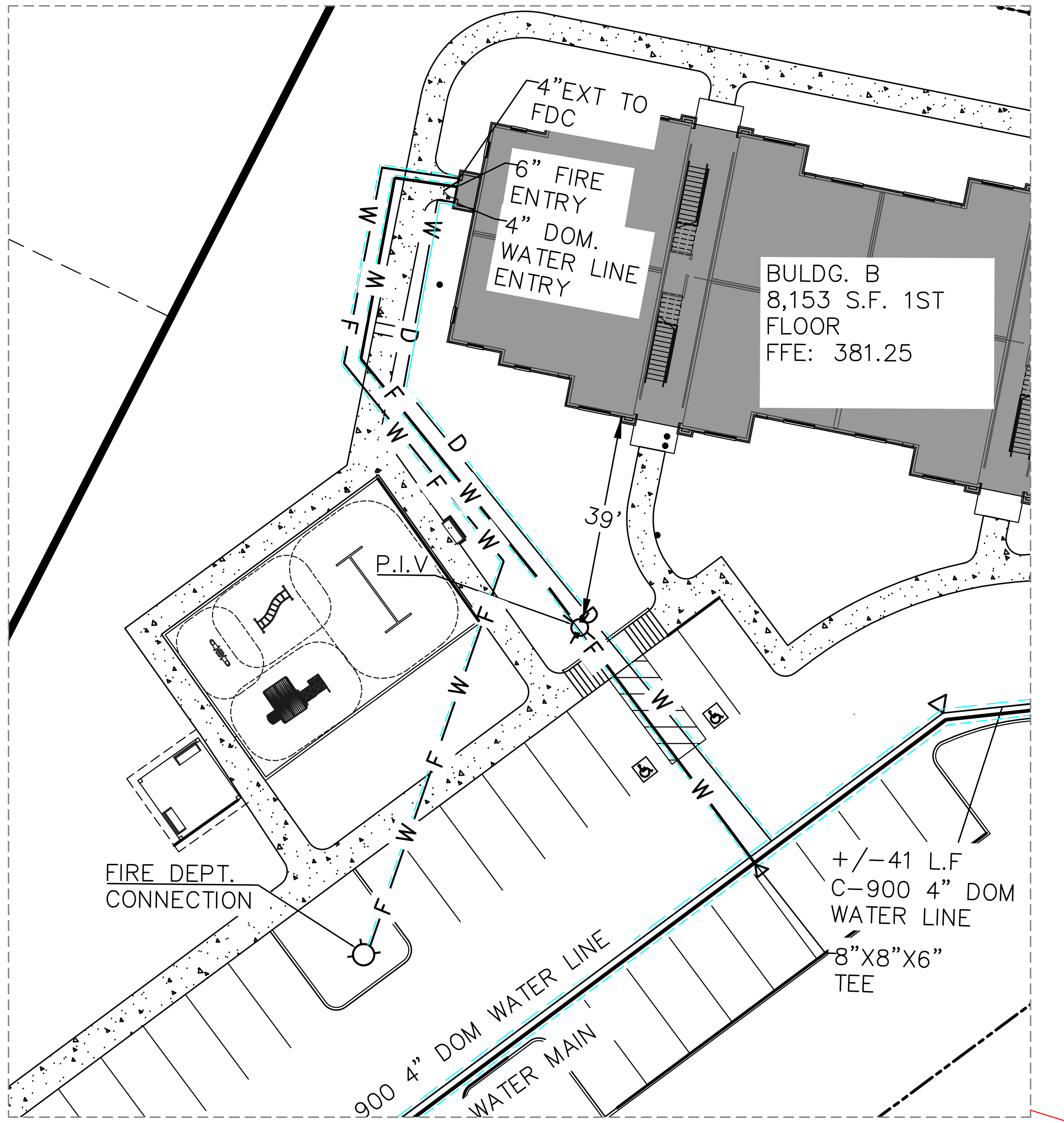
GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

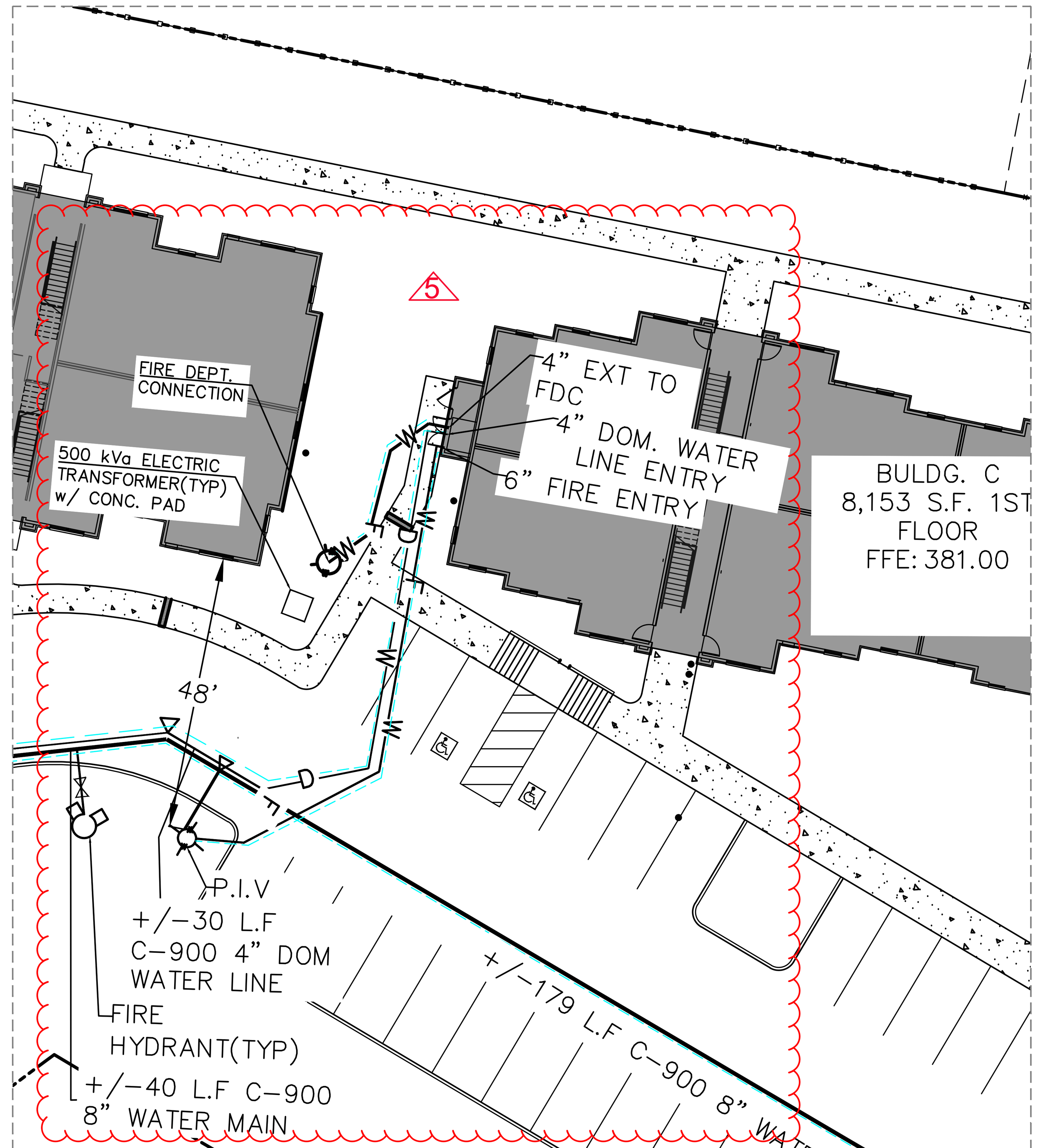
SHEET 02 OF 05

DIVISION OF ENGINEERING
WATER PLAN
LOCATION: 1616 EAST JEFFERSON STREET
BROWNSVILLE, TN.
SURVEY: SEAS DATE: 10/24 BOOK: _____
DESIGN: _____ DATE: 01/25 CKD: _____ DATE: 01/25 SCALE: _____

DEPUTY CITY ENGINEER _____ DATE _____ CITY ENGINEER _____ DATE _____

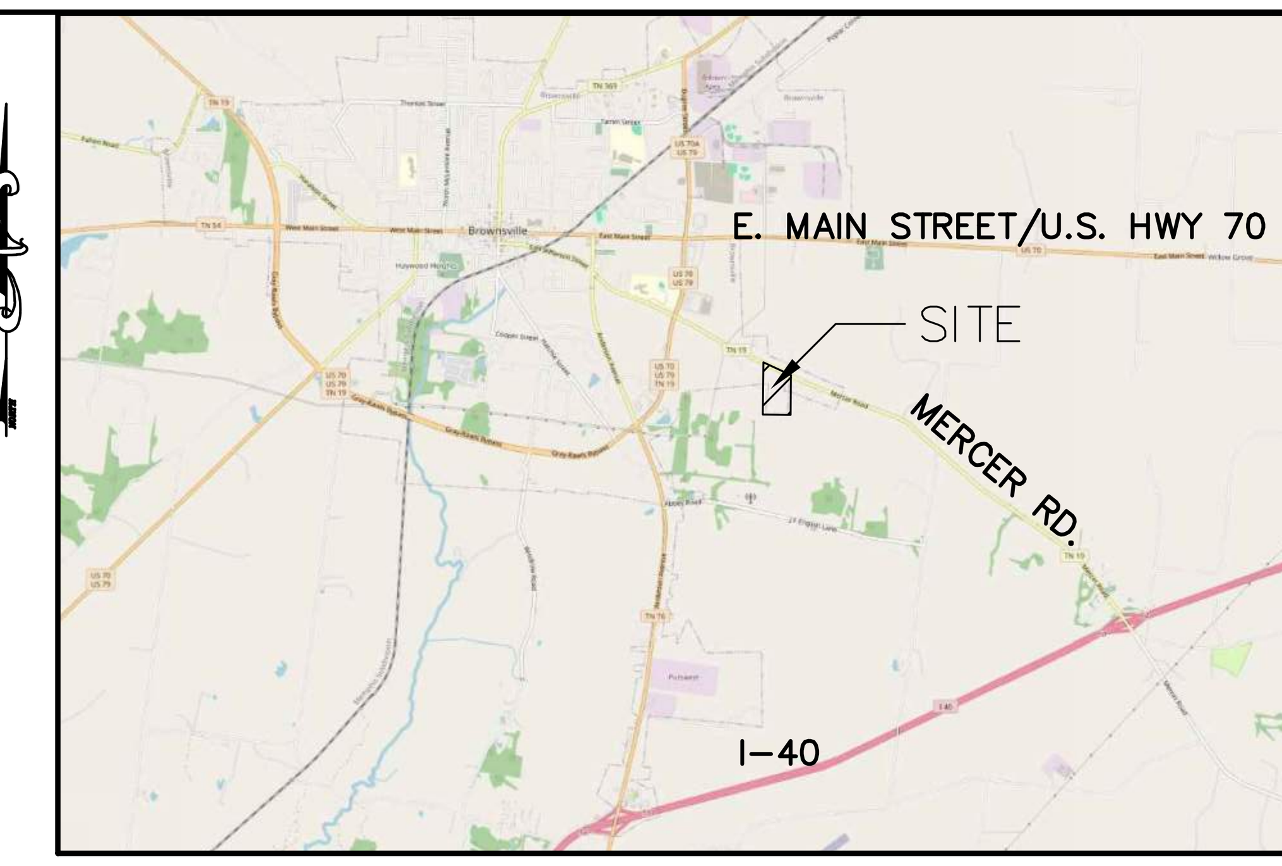
RGI JOB NO. 24158





LEGEND	
SEWER LINE	
WATER LINE	-W——W——W-
PROPERTY LINE	
TRACER WIRE (WATER)	
TRACER WIRE (SEWER)	

WATER LEGEND
- FIRE HYDRANT
- THRUST BLOCK
- F.D.C
- P.I.V
- WATER VALVE



VICINITY MAP

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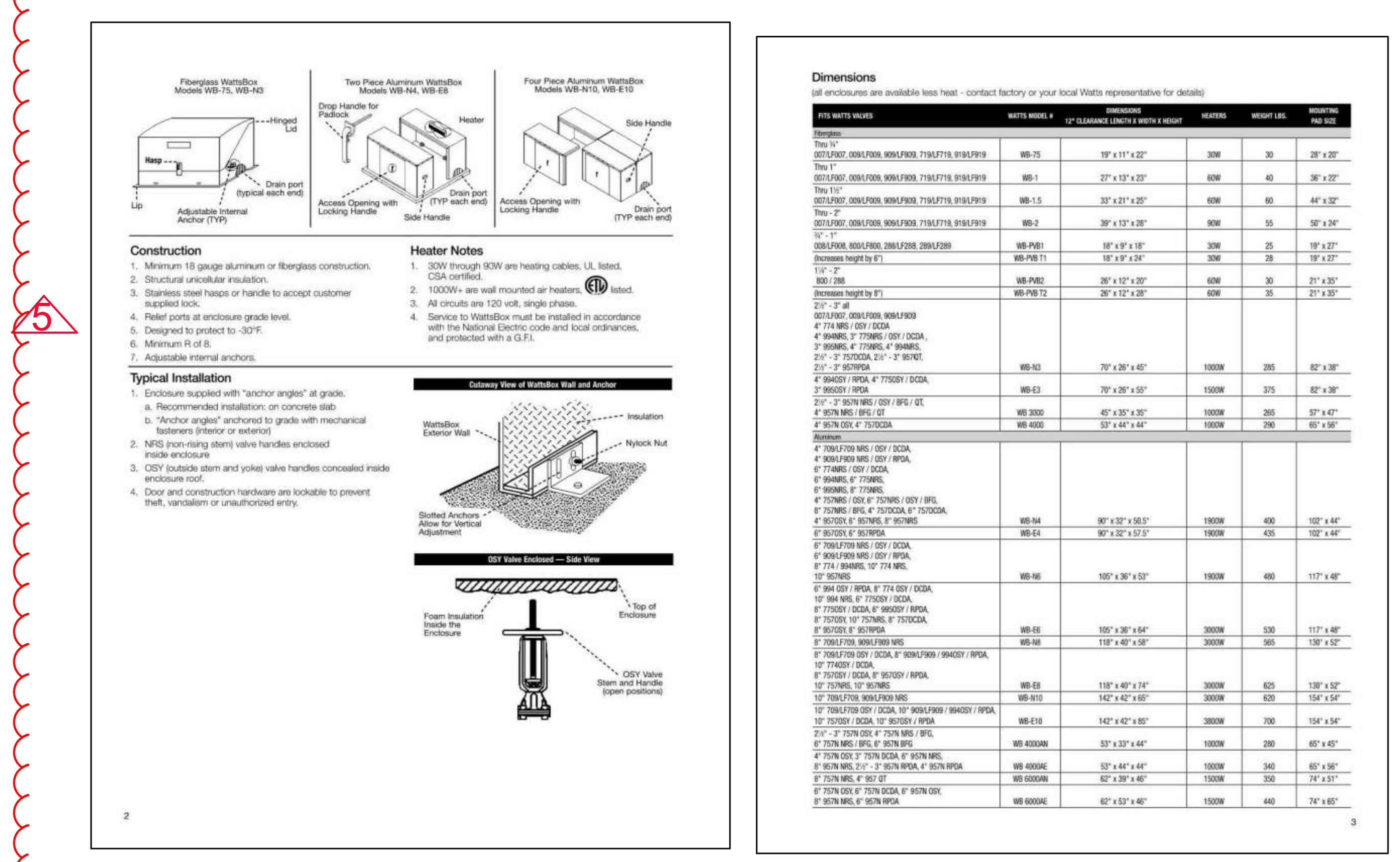

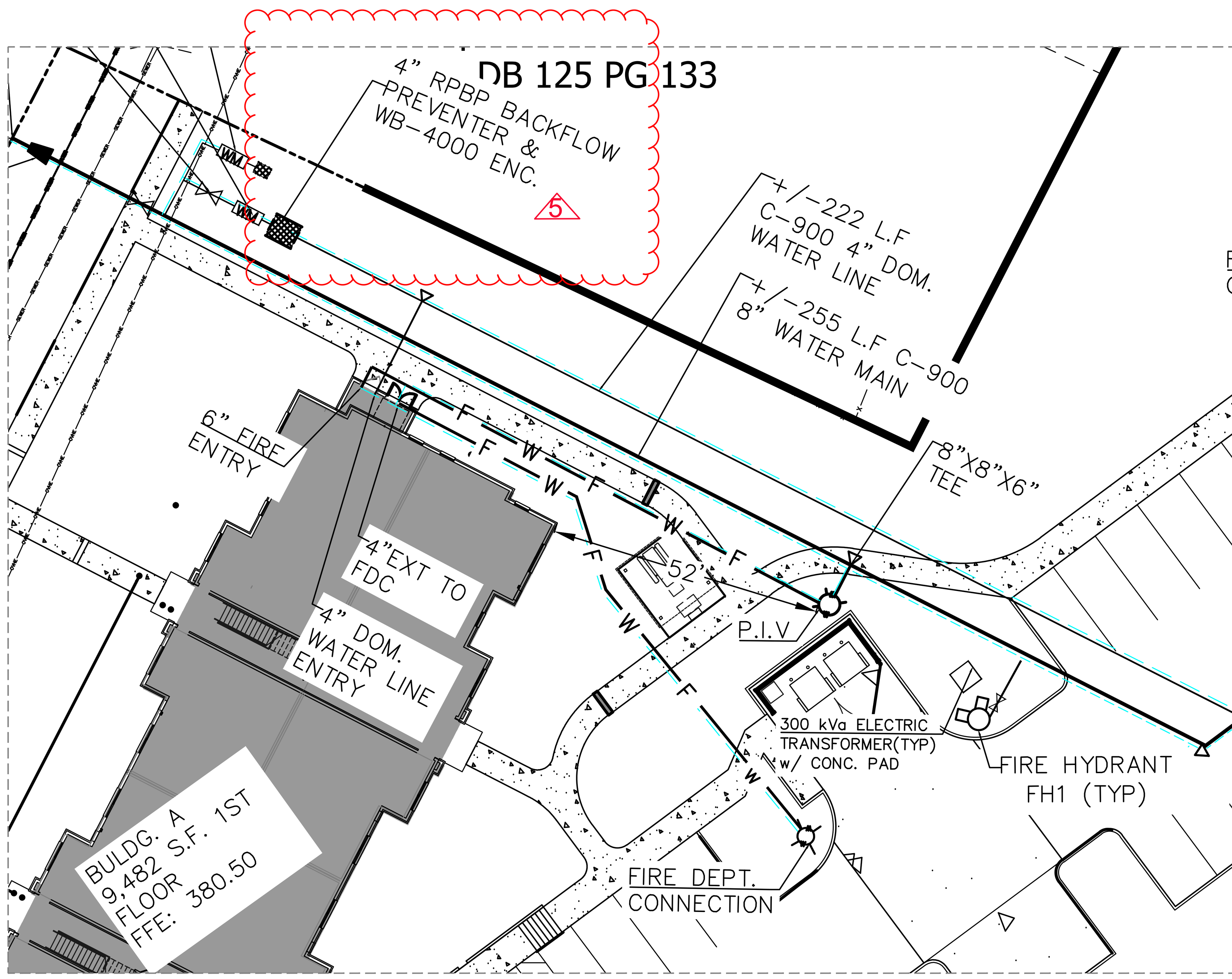

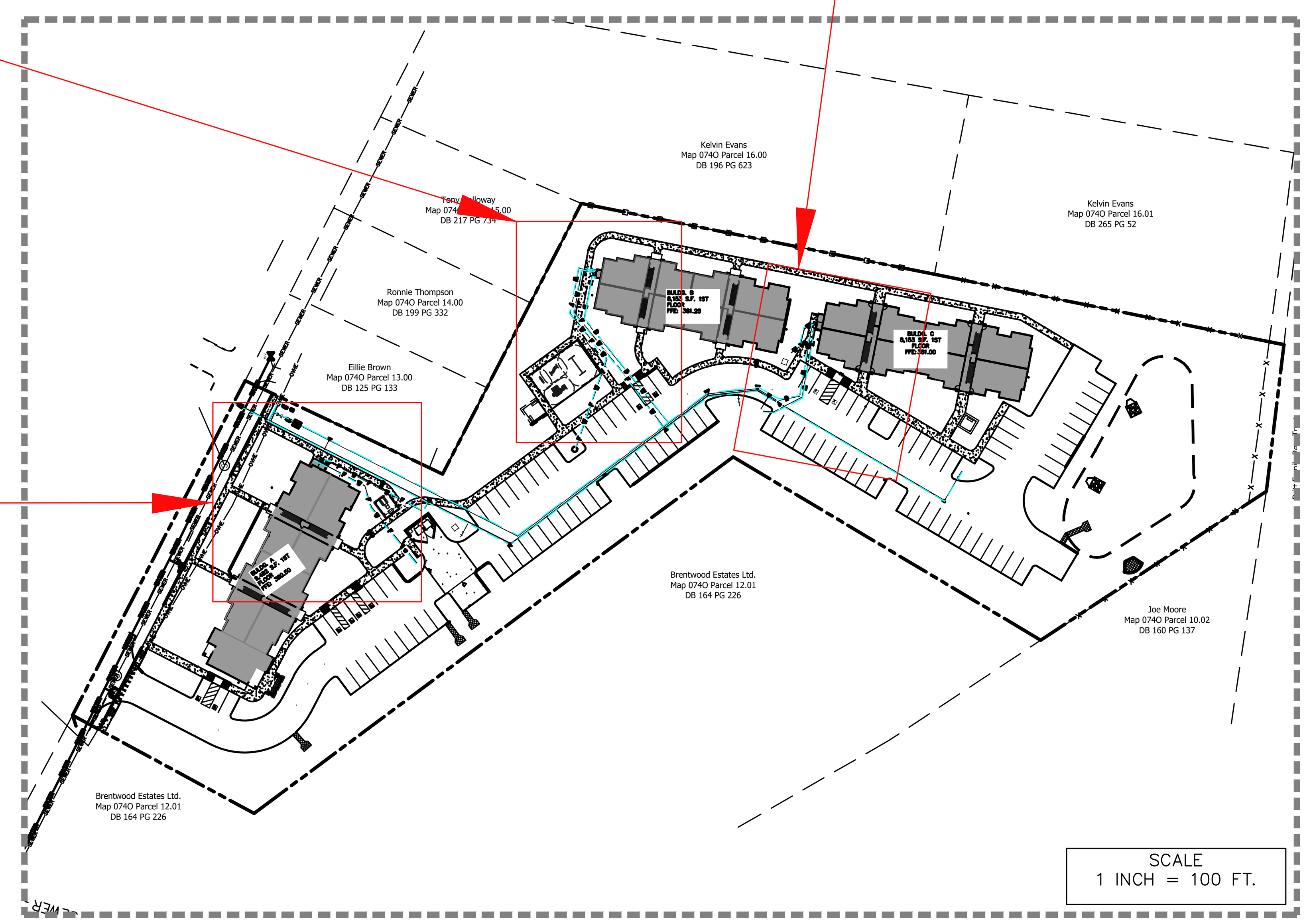

NOTES
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SITE BENCHMARK
RIM OF EXISTING S.M.H. LOCATED IN THE CENTER OF EAST JEFFERSON STREET
ELEVATION: 381.76

FLOOD NOTE:
THIS PROPERTY SHOWN HEREON DOES NOT GRAPHICALLY FALL WITHIN A SPECIAL DESIGNATED FLOODZONE PER FEMA FIRM MAP PANEL 47157C0185F, DATED 09/27/2007

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 20 ft.

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE
5	ASI #5	12/05/25

J. Wesley Wooldridge REGISTERED ENGINEER No. 104878 STATE OF TENNESSEE AGRICULTURE COMMERCE

THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.
DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.

SHEET 03 OF 05

DIVISION OF ENGINEERING
ENLARGED WATER ENTRY PLAN
LOCATION: 1616 EAST JEFFERSON STREET
BROWNSVILLE, TN.

SURVEY: SEAS DATE: 10/24 BOOK: ______
DESIGN: ______ DATE: 01/25 CKD: ______ DATE: 01/25 SCALE: ______

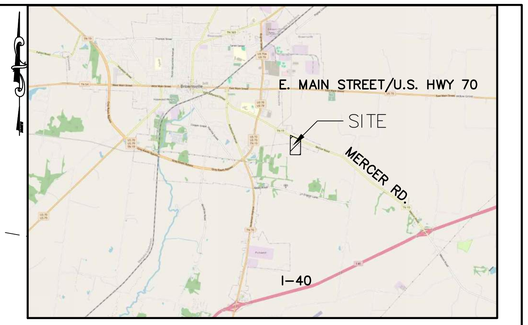
DEPUTY CITY ENGINEER | DATE | CITY ENGINEER | DATE

RGI JOB NO. 24158

LEGEND	
SEWER LINE	
WATER LINE	·W—W—W·
PROPERTY LINE	
TRACER WIRE (WATER)	
TRACER WIRE (SEWER)	

WATER LEGEND

- FIRE HYDRANT
- THRUST BLOCK
- F.D.C
- P.I.V
- WATER VALVE



VICINITY MAP
NOT TO SCALE

Kelvin Evans
Map 074O Parcel 16.00
DB 196 PG 623

Tony Holloway
Map 074O Parcel 15.00
DB 217 PG 734

Kelvin Evans
Map 074O Parcel 16.01
DB 265 PG 52

Ronnie Thompson
Map 074O Parcel 14.00
DB 199 PG 332

Eillie Brown
Map 074O Parcel 13.00
DB 125 PG 133

Brentwood Estates Ltd.
Map 074O Parcel 12.01
DB 164 PG 226

Joe Moore
Map 074O Parcel 10.02
DB 160 PG 137

Brentwood Estates Ltd.
Map 074O Parcel 12.01
DB 164 PG 226

WOODEN PRIVACY FENCE

BLDG. A 9,450 S.F. 1ST FLOOR FFE: 380.50

BLDG. B 8,153 S.F. 1ST FLOOR FFE: 381.25

BLDG. C 8,753 S.F. 1ST FLOOR FFE: 381.00

EX. SMH RIM: 381.76 CORE-DRILL INV IN: 370.52

EX. FIRE HYDRANT FLOW-100GPM STATIC- 68 psi RESIDUAL 32psi

IRRIGATION WATER METER AS PER LANDSCAPING PLAN

4" DOM. WATER METER IN VAULT

4" GATE VALVE

CONNECT 6" DISP. WATER MAIN TO EX. 8" WATER LINE WITH 6"X6" TAPPING TEE & VALVE

POINT OF SERVICE FOR UNDERGROUND SPRINKLER PIPING 6" to 8" INCREASER

4" RPBP BACKFLOW PREVENTER W/ 4000 ENC.

SMH #1 TOP: 381.00 INV IN: 371.35 INV OUT: 371.25

SMH #2 TOP: 381.00 INV IN: 371.35 INV OUT: 371.25

SMH #3 TOP: 378.90 INV IN: 372.35 INV OUT: 372.25

SMH #4 TOP: 380.45 INV IN: 373.35 INV OUT: 373.25

SMH #5 TOP: 380.65 INV IN: 373.95 INV OUT: 373.80

SMH #6 TOP: 379.44 INV IN: 374.93 INV OUT: 374.65

+/-222 LF C-900 4" DOM. WATER LINE

+/-785 LF C-900 6" WATER MAIN

+/-52 LF 8" PVC

+/-85 LF 8" SDR-35 @0.53%

+/-172 LF 8" SDR-35 @0.52 %

+/-202 LF C-900 4" DOM. WATER LINE

+/-205 LF C-900 8" WATER MAIN

+/-41 LF C-900 4" DOM WATER LINE

+/-30 LF C-900 4" DOM WATER LINE

+/-40 LF C-900 8" WATER MAIN

+/-44 LF 6" PVC

+/-179 LF C-900 6" WATER MAIN

+/-115 LF 8" PVC

+/-15 LF 8" SDR-35 @0.67%

+/-52 LF 8" SDR-35 @0.67%

6" FIRE ENTRY

4" DOM. WATER ENTRY

4" EXT TO FDC

6" FIRE ENTRY

4" DOM. WATER LINE ENTRY

C.O

P.I.V

300 KVA ELECTRIC TRANSFORMER(TYP) W/ CONC. PAD

FIRE HYDRANT FH1 (TYP)

FIRE HYDRANT(TYP)

FIRE DEPT. CONNECTION

PLAYGROUND

GAZEBO

MAIL

THRUST BLOCK(TYP)

4"X8"X6" TEE

6"X6"X6" TEE

OHW

SEWER

GENERAL NOTES

1. LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND ARE NOT NECESSARILY ALL OF THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE APPROPRIATE UTILITY COMPANY TO DETERMINE THE EXACT LOCATION OF ALL UTILITIES AND/OR UNDERGROUND STRUCTURES PRIOR TO THE INITIATION OF ANY CONSTRUCTION. CONTRACTOR SHALL ALSO ASSUME FULL RESPONSIBILITY FOR DAMAGE TO ANY UTILITIES ENCOUNTERED WITHIN CONSTRUCTION PERIMETERS. FOR SITE LOCATIONS OF EXISTING UTILITIES. PLEASE CALL 811.
2. CONTRACTOR SHALL ENSURE UNINTERRUPTED SEWER SERVICE ON EXISTING SEWER AND SERVICE CONNECTIONS BY PROVIDING AMPLE TEMPORARY WASTEWATER PUMPING AND/OR BYPASSING.
3. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES.
4. CONTRACTOR SHALL NOTIFY THE CITY OF BROWNSVILLE AUTHORITY A MINIMUM OF 24 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION.
5. ALL AREAS IN CUT OR FILL WHERE VEGETATION HAS BEEN REMOVED SHALL BE SEEDED, MULCHED, FERTILIZED, AND/OR SODDED AS REQUIRED TO PREVENT EROSION.
6. THE CONTRACTOR SHALL VERIFY EXISTING DATA AND REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ENGINEER.
7. ALL SANITARY SEWER TO BE CONSTRUCTED AS PER CITY STANDARD CONSTRUCTION SPECIFICATIONS. SANITARY SEWER SERVICE CONNECTIONS TO BE INSTALLED AS PER CITY STANDARD.
8. ALL SEWER MANHOLE LIDS IN OPEN AREAS ARE TO BE CONSTRUCTED 1.5' ABOVE PROPOSED GRADE. IN BACKYARDS, MANHOLE LIDS ARE TO BE 1.5' ABOVE INITIAL GRADE, 0.5' ABOVE FINAL GRADE.
9. ALL SANITARY SEWER, INCLUDING SERVICE CONNECTIONS, WHICH HAS LESS THAN 1.5' CLEARANCE (OUTSIDE OF PIPES) WITH DRAINAGE OR IN FILLED AREAS SHALL BE CLASS 50 D.I.P. OR CONCRETE ENCASED, 10' MINIMUM BOTH SIDES OF CROSSING. ALL DUCTILE IRON PIPE (D.I.P.) SHALL BE POLYETHYLENE LINED OR SHALL BE TREATED WITH PROTECTO 401 OR APPROVED EQUIVALENT.
10. THE CITY OF BROWNSVILLE SHALL HAVE INGRESS/EGRESS RIGHTS TO USE PRIVATE DRIVES AND YARDS FOR THE PURPOSE OF MAINTAINING ALL PUBLIC SEWER LINES AND SHALL BEAR NO RESPONSIBILITY FOR THE MAINTENANCE OF SAID PRIVATE DRIVES AND YARDS.
11. NO TREES, SHRUBS, PERMANENT STRUCTURES, OR OTHER UTILITIES (EXCEPT FOR CROSSINGS) WILL BE ALLOWED WITHIN SANITARY SEWER EASEMENT. NO OTHER UTILITIES OR SERVICES MAY OCCUPY SANITARY SEWER EASEMENTS IN PRIVATE DRIVES AND YARDS EXCEPT FOR CROSSINGS.
12. ALL SANITARY SEWER MANHOLES IN REVERSE CROWN STREETS, ALLEYS, OR DRIVES, (PUBLIC OR PRIVATE) SHALL BE PROVIDED WITH GASKETS AND PLUGS FOR PICK HOLES TO PREVENT DRAINAGE INFLOW INTO SEWER SYSTEM.
13. THE CONTRACTOR SHALL PROVIDE ADEQUATE AND EFFECTIVE EROSION CONTROL AS NECESSARY TO PREVENT ANY SILTATION INTO EXISTING DRAINAGE SYSTEM AND/OR ADJACENT PROPERTIES.
14. DOMESTIC WATER LINE IS 3 INCHES WHICH IS TO CONNECT THE HOUSE OR BUILDING WITH THE CITY OF BROWNSVILLE WATER METER.
15. TRACER WIRE SHALL BE INSTALLED ALONG THE LENGTH OF ALL SEWER PIPES, SERVICE CONNECTIONS, MANHOLES AND STUBS PER STANDARD CONSTRUCTION SPECIFICATIONS AND STANDARD DETAIL. (SST-17)

SITE BENCHMARK
RIM OF EXISTING S.M.H. LOCATED IN THE CENTER OF EAST JEFFERSON STREET
ELEVATION: 381.76

FLOOD NOTE:
THIS PROPERTY SHOWN HEREON DOES NOT GRAPHICALLY FALL WITHIN A SPECIAL DESIGNATED FLOODZONE PER FEMA FIRM MAP PANEL 47157C0185F, DATED 09/27/2007

Tennessee 811

REVISION

ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE
1	ASI #1	07/25
3	ASI #3	10/25
4	ASI #4	10/25
5	ASI #5	12/05/25

I Keeley Wooldridge, REGISTERED LANDSCAPE ARCHITECT, No. 104679, STATE OF TENNESSEE

THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.
DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.

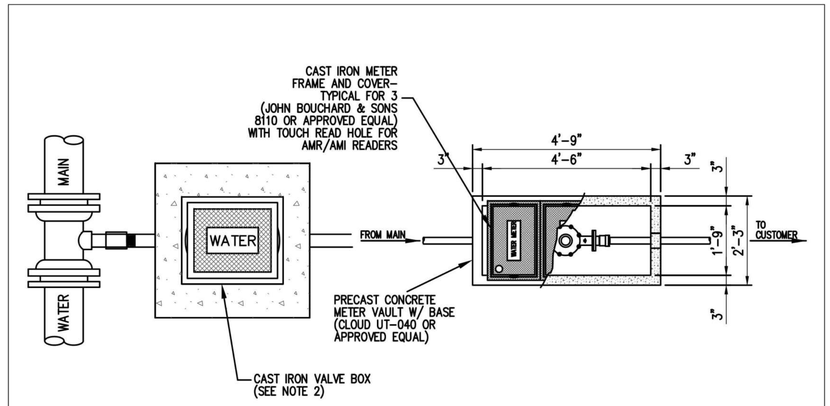
GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

SHEET 04 OF 05

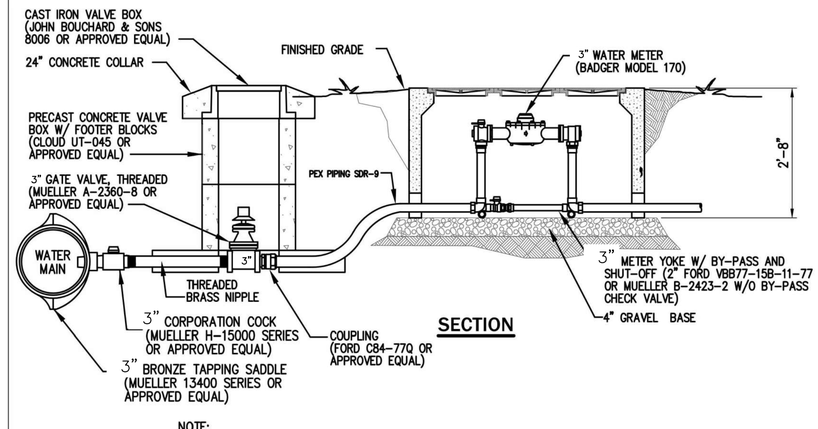
DIVISION OF ENGINEERING
UTILITY PLAN
LOCATION: 1616 EAST JEFFERSON STREET
BROWNSVILLE, TN.
SURVEY: SEAS DATE: 10/24 BOOK: _____
DESIGN: _____ DATE: 01/25 CKD: _____ DATE: 01/25 SCALE: _____

DEPUTY CITY ENGINEER DATE CITY ENGINEER DATE

RGI JOB NO. 24158



PLAN



SECTION

NOTE:

A PRESSURE REDUCING VALVE, NOT SHOWN, SHALL BE REQUIRED TO BE INSTALLED ON THE SERVICE LINE. IF THE PRESSURE REDUCING VALVE IS INSTALLED OUTDOORS, A METER BOX SHALL BE REQUIRED.

3" WATER METER SERVICE ASSEMBLY VAULT DETAIL

N.T.S.

W-7.5C

HYMAX®

a MUELLER brand

HYMAX® 2 REDUCER (1.5" - 12")

Product Specifications

FEATURES

- Advanced wide-range coupling with a patented flip gasket.
- Eliminates gasket removal mistakes and maximizes installer work efficiency.
- Using the game-changing HYMAX technology, proven in over 1M installations in the US.
- Suitable for many types of pipe.
- Patented hydraulically-assisted gasket with 2-stage sealing.
- Lightweight construction enables fast and easy installation.
- Allows 4° dynamic deflection per side, reducing future pipe damage.
- One product can connect pipes of two different materials.
- Lifting T-handle exists in all sizes.

SPECIFICATIONS

STANDARDS

- HYMAX reducer meets or exceeds requirements of standards: AWWA C-219, NSF-61, NSF 372.

SIZE

- Available in nominal diameter from 1.5" - 12" standard.

MATERIALS

END RING

- ASTM A283/A283M Grade C steel.

CENTER RING

- ASTM A53 Grade A steel.

GASKET

- EPDM compounded for water and sewerage in accordance with ASTM D2000, meets international standards for contact with drinking water.

BRIDGE

- AISI 304 stainless steel, ASTM A240.

SPHERICAL SPACERS

- AISI 304 stainless steel, ASTM A351 CF8.

COATING

- 100% fusion bonded epoxy for enhanced corrosion protection.
- Average thickness 14 mm

BOLTS, NUTS & WASHERS

- AISI 304 stainless steel. Rolled thread and anti-galling coating. ASTM F593, ASTM F594 and ASTM A240 respectively.

JOIN REPAIR RESTRAIN TAP

MUELLER

PRODUCT PERFORMANCE (*)

WORKING TEMPERATURE

- EPDM: -20°F up to +125°F

DYNAMIC DEFLECTION

- Up to 4° per side

MIN. PIPE INSERTION

- 2.25"

MAXIMUM OFFSET FOR MISALIGNED PIPES

- ND 1.5" - 3": 0.39"
- ND 4" – 12": 0.51"

MAXIMUM OUT OF ROUNDNESS

- ND 1.5": 0.08"
- ND 2" – 3": 0.20"
- ND 4" – 12": 0.31"

WORKING PRESSURE

- 260 psi

TEST PRESSURE

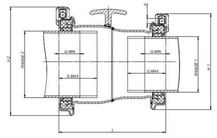
- 390 psi

VACUUM TEST

- 12 psi

* See submittal drawings for details.

PRODUCT TABLES



HYMAX 2 REDUCER NOMINAL SIZES 1.5" - 12"

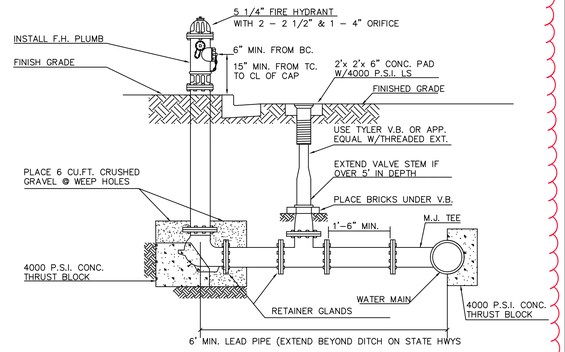
HYMAX Part Number	Nominal Diameter (inch)	Overall Range 1 (inch)	Closed Gasket Position 1 (inch)	Open Gasket Position 1 (inch)	Overall Range 2 (inch)	Closed Gasket Position 2 (inch)	Open Gasket Position 2 (inch)	Torque Side 1 (ft – lbs)	Torque Side 2 (ft – lbs)	Bolt Qty., and Size	H1 (inch)	H2 (inch)	L (inch)	Approx. Weight (lbs)
8615400401005616	1.5 x 2	1.61 - 2.13	1.61 - 1.97	1.96 - 2.13	2.30 - 3.03	2.30 - 2.60	2.56 - 3.03	35	50	2 – M12	5.0	5.7	8.6	7
8615400540008016	2 x 3	2.10 - 3.03	2.10 - 2.60	2.56 - 3.03	3.46 - 4.33	3.46 - 3.90	3.86 - 4.33	50	50	2 – M12	5.7	7.1	7.8	9
8615402640108016	2 x 4	2.10 - 3.03	2.10 - 2.60	2.56 - 3.03	4.25 - 5.63	4.25 - 5.00	4.92 - 5.63	50	75	2 – M14	7.1	9.3	8.7	15
8615400880101816	3 x 4	3.46 - 4.33	3.46 - 3.90	3.86 - 4.33	4.25 - 5.63	4.25 - 5.00	4.92 - 5.63	50	75	2 – M14	7.1	9.3	8.8	13
8615400881018016	3 x 6	3.46 - 4.33	3.46 - 3.90	3.86 - 4.33	5.71 - 6.38	5.71 - 6.38	6.02 - 6.38	50	75	2 – M14	7.1	9.3	8.8	13
8615401001016316	4 x 6	4.25 - 5.63	4.25 - 5.00	4.92 - 5.63	6.42 - 7.68	6.42 - 7.05	7.01 - 7.68	75	75	2 – M14	9.3	11.3	9.8	20
8615401301016316	5 x 6	5.12 - 6.38	5.12 - 5.75	5.71 - 6.38	6.42 - 7.68	6.42 - 7.05	7.01 - 7.68	75	75	2 – M14	10.0	11.3	10.8	20
8615401601901616	6 x 7	6.42 - 7.68	6.42 - 7.05	7.01 - 7.68	7.48 - 8.74	7.48 - 8.74	8.07 - 8.74	75	75	2 – M14	11.3	12.2	10.8	22
8615401602301716	6 x 8	6.42 - 7.68	6.42 - 7.05	7.01 - 7.68	8.54 - 9.84	8.54 - 9.17	9.13 - 9.84	75	75	2 – M14	11.3	13.1	10.8	24
8615401902301716	7 x 8	7.48 - 8.74	7.48 - 8.11	8.07 - 8.74	8.54 - 9.84	8.54 - 9.17	9.13 - 9.84	75	75	2 – M14	12.2	13.1	10.8	26
8615402170272716	8 x 10	8.54 - 9.84	8.54 - 9.17	9.13 - 9.84	10.70 - 12.00	10.70 - 11.37	11.33 - 12.00	75	75	2 – M14	13.1	15.4	10.8	29
8615402173103516	8 x 12	8.54 - 9.84	8.54 - 9.17	9.13 - 9.84	12.40 - 13.66	12.40 - 13.03	12.99 - 13.66	75	80	2 – M14	13.1	17.5	10.8	47
8615402720078916	10 x 10	10.70 - 12.00	10.70 - 11.37	11.33 - 12.00	10.96 - 12.26	10.96 - 11.63	11.59 - 12.26	75	75	2 – M14	15.4	15.8	10.8	32
8615402720103516	10 x 12	10.70 - 12.00	10.70 - 11.37	11.33 - 12.00	12.40 - 13.66	12.40 - 13.03	12.99 - 13.66	75	80	2 – M14	15.4	17.5	10.8	36
8615402780301516	10 x 12	10.96 - 12.26	10.96 - 11.63	11.59 - 12.26	12.40 - 13.66	12.40 - 13.03	12.99 - 13.66	75	80	2 – M14	15.8	17.5	10.8	36
8615402780303416	10 x 12	10.96 - 12.26	10.96 - 11.63	11.59 - 12.26	13.15 - 14.41	13.15 - 13.78	13.74 - 14.41	75	80	2 – M14	15.8	18.1	10.8	36
8615403103303416	12 x 12	12.40 - 13.66	12.40 - 13.03	12.99 - 13.66	13.15 - 14.41	13.15 - 13.78	13.74 - 14.41	80	80	2 – M14	17.5	18.1	10.8	37

To learn more, visit HymaxUSA.com.

F-14534-PSMKS-0823-03

MUELLER

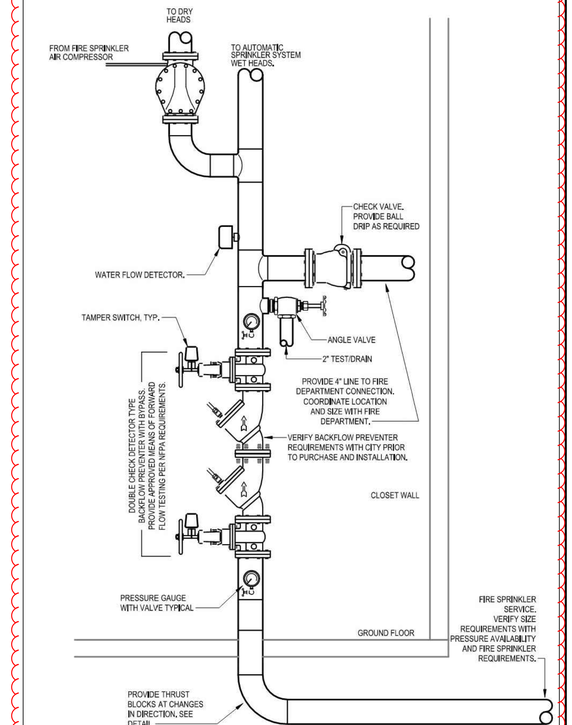
4



FIRE HYDRANT AND VALVE DETAIL

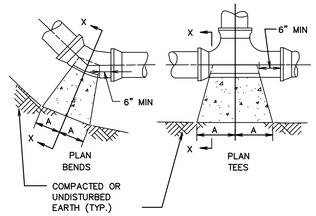
NTS

5



1 FIRE PROTECTION RISER DIAGRAM

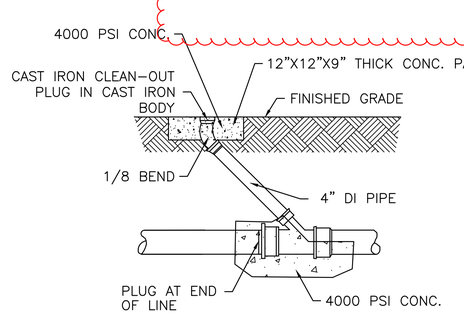
NO SCALE



SIZE	1/4 BENDS A	1/4 BENDS B	1/8 BENDS A	1/8 BENDS B	1/16 BENDS A	1/16 BENDS B	TEES A	TEES B	PLUGS C	PLUGS D
6"	16"	10"	9"	10"	6"	8"	10"	12"	10"	21"
8"	22"	13"	12"	13"	8"	10"	13"	16"	12"	29"
10"	26"	17"	14"	17"	10"	13"	16"	20"	14"	36"
12"	29"	21"	16"	21"	11"	16"	18"	24"	16"	41"
14"	35"	24"	19"	24"	12"	20"	22"	27"	18"	48"
16"	38"	27"	21"	27"	12"	24"	24"	30"	20"	54"

THRUST BLOCKS

N.T.S.



CLEANOUT DETAIL

N.T.S.

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE
4	ASI #4	10/25
5	ASI #5	12/05/25

Wesley Woodlief Jr. REGISTERED ENGINEER AGRICULTURE No. 104679 STATE OF TENNESSEE

THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.

DEVELOPER:

ENGINEER: RENAISSANCE GROUP, INC.

5

SHEET 05 OF 05

DIVISION OF ENGINEERING

UTILITY DETAILS

LOCATION: 1616 EAST JEFFERSON STREET
BROWNSVILLE, TN.

SURVEY: SEAS DATE: 10/24 BOOK: _____

DESIGN: JWW DATE: 01/25 CKD: JWW DATE: 01/25 SCALE: _____

DEPUTY CITY ENGINEER DATE CITY ENGINEER DATE

RGI JOB NO. 24158

LEGEND

X
XX
XXXX

XXX
XXXX

– TEMPORARY TRAFFIC CONTROL SIGN

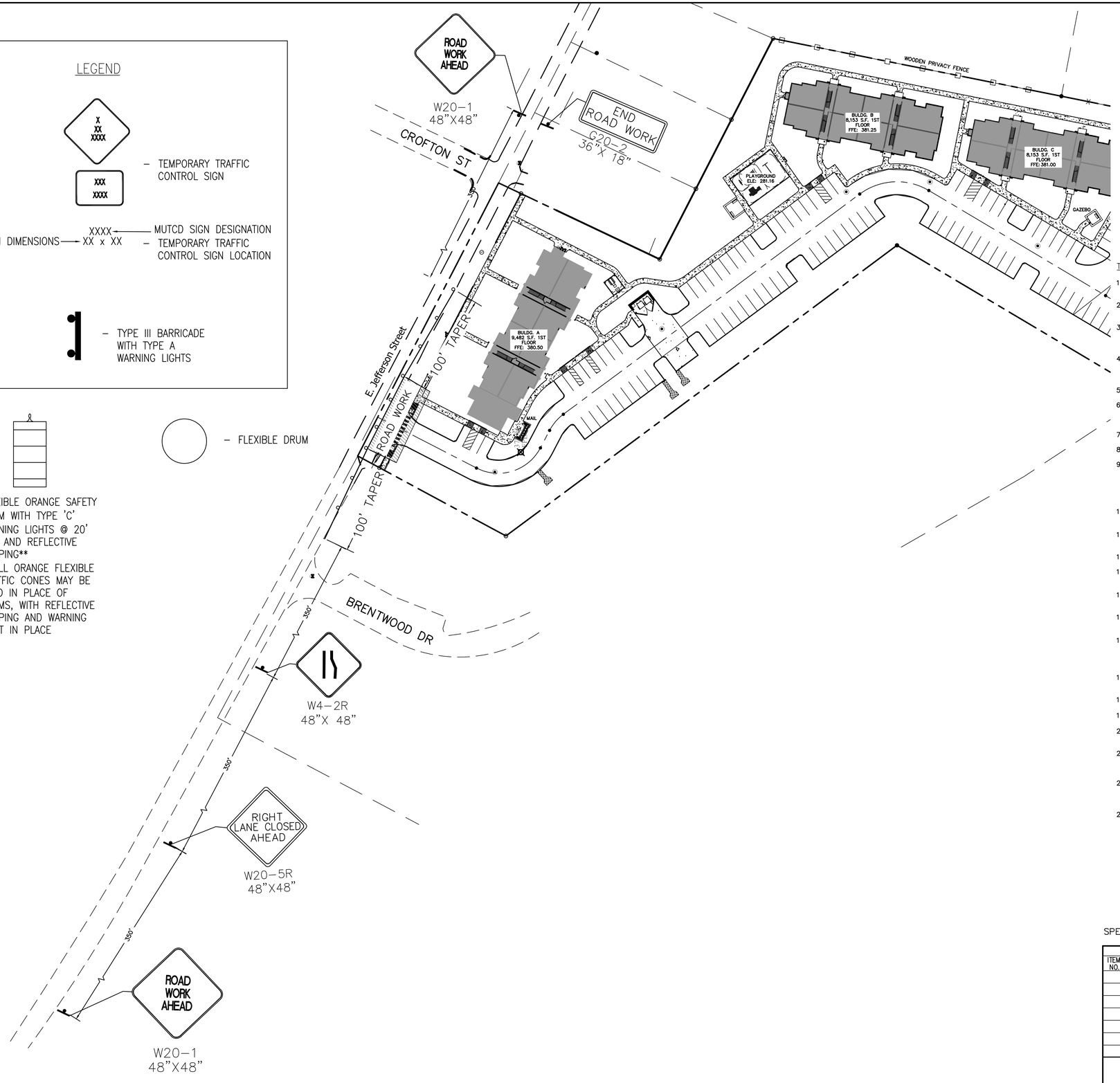
SIGN DIMENSIONS — XX x XX
XXXX — MUTCD SIGN DESIGNATION
– TEMPORARY TRAFFIC CONTROL SIGN LOCATION

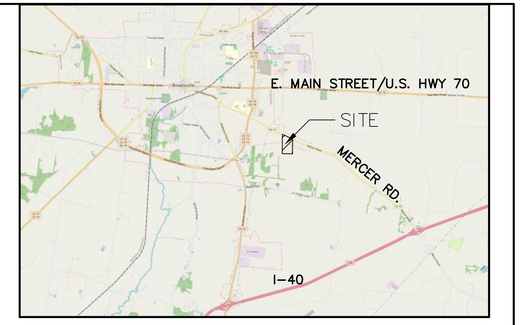
– TYPE III BARRICADE WITH TYPE A WARNING LIGHTS

– FLEXIBLE DRUM

– FLEXIBLE ORANGE SAFETY DRUM WITH TYPE 'C' WARNING LIGHTS @ 20' O.C. AND REFLECTIVE STRIPING**

**4' TALL ORANGE FLEXIBLE TRAFFIC CONES MAY BE USED IN PLACE OF DRUMS, WITH REFLECTIVE STRIPING AND WARNING LIGHT IN PLACE





VICINITY

TRAFFIC CONTROL PLAN NOTES:

1. SEE SECTION 6F.03, SIGN PLACEMENT,OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR INFORMATION N PLACEMENT AND MOUNTING OF SIGNS.
2. SIGNS SHOWN ON THIS PLAN ARE TO WARN TRAFFIC ABOUT THE CONSTRUCTION. OTHER TRAFFIC CONTROL DEVICES MAY BE REQUIRED DURING VARIOUS PHASES OF CONSTRUCTION.
3. NOTHING IN THIS PLAN IS INTENDED TO SUPERSEDE OR RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF INSTALLING THE APPROPRIATE TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS".
4. CONTRACTOR SHALL BE REQUIRED TO NOTIFY THE CITY OF BROWNSVILLE CONSTRUCTION INSPECTION DEPARTMENT AND TRAFFIC ENGINEERING DEPARTMENT) A MINIMUM OF 24 HOURS PRIOR TO COMMENCING CONSTRUCTION OR IMPLEMENTING A TRAFFIC CONTROL PLAN. ALL TRAFFIC CONTROL DEVICES MUST BE IN PLACE BEFORE CONSTRUCTION ACTIVITY BEGINS.
5. SIZES OF ALL SIGNS SHALL COMPLY WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
6. ALL TRAFFIC CONTROL DEVICES AND THEIR INSTALLATION SHALL MEET THE STANDARD PRESCRIBED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND SHALL COMPLY WITH THE STATE OF TENNESSEE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 712 TEMPORARY TRAFFIC CONTROL.
7. ACCESS TO ADJACENT PROPERTIES SHALL BE MAINTAINED AT ALL TIMES.
8. SIDE STREET, DRIVEWAY ACCESS, AND SAFE PEDESTRIAN WAYS SHALL BE MAINTAINED AT ALL TIMES.
9. THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THE RIGHT–OF–WAY OR WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHICHEVER IS LESS, WHEN THE LANE IS OPEN TO TRAFFIC, UNLESS PROTECTED BY GUARDRAIL, BRIDGERAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES, PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO BE PARKED WITHIN THE RIGHT–OF–WAY OR WITHIN THIRTY (30) FEET OF AN OPEN TRAFFIC LANE WHICHEVER IS LESS, AT ANY TIME UNLESS PROTECTED AS DESCRIBED ABOVE.
10. CONTRACTOR SHALL COVER ALL EXISTING SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL PLAN SIGNS OR DEVICES DURING CONSTRUCTION AND THEY SHALL REMAIN COVERED DURING CONSTRUCTION AND UNTIL SUCH TIME THAT NO CONFLICT EXISTS.
11. ALL TEMPORARY OR PERMANENT TRAVELED SURFACE SHALL BE INSPECTED DAILY BY THE CONTRACTOR (INCLUDING WEEKENDS) AND NECESSARY PATCHING OR RE–FINISHING PERFORMED.
12. CONTRACTOR SHALL CONTACT THE CITY OF MEMPHIS SIGNAL SHOP AT 528–2844 FOR LOCATION OF SIGNAL CONDUIT AND WIRES.
13. ALL TRAFFIC CONTROL SIGNS SHALL MEET THE MINIMUM RETRO–REFLECTIVITY LEVELS SPECIFIED IN THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
14. WORK WITHIN THE ROADWAY SHALL BE CONDUCTED BETWEEN 9:00 A.M. AND 4:00 P.M. AND THE ROADWAY SHALL BE COMPLETELY OPEN TO TRAFFIC AT ALL OTHER TIMES AND ALL INAPPROPRIATE SIGNS SHALL BE COVERED OR REMOVED.
15. IF CONSTRUCTION ACTIVITIES REQUIRE OVER–NIGHT CLOSURE OF ANY PORTION OF THE ROADWAY, A REVISED TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER'S OFFICE
16. ANY CLOSURE OF THE RIGHT OF WAY SHALL BE TIME LIMITED TO THE ACTIVE DEMOLITION OR CONSTRUCTION. CONTINUOUS UNWARRANTED CLOSURE OF THE RIGHT OF WAY SHALL NOT BE ALLOWED FOR THE DURATION OF THE PROJECT. THE DEVELOPER SHALL PROVIDE ON THE TRAFFIC CONTROL PLAN, THE TIME NEEDED PER PHASE TO COMPLETE THAT PORTION OF THE WORK. TIME LIMITS WILL BEGIN ON THE DAY OF CLOSURE AND WILL BE MONITORED BY THE ENGINEERING CONSTRUCTION INSPECTORS ON THE JOB.
17. EXISTING STRIPING THAT CONFLICTS WITH THE TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE COVERED OR REMOVED DURING CONSTRUCTION. WHEN CONSTRUCTION IS COMPLETE, THE EXISTING STRIPING SHALL BE RETURNED TO ITS ORIGINAL STATE.
18. TWO WAY TRAFFIC SHALL BE MAINTAINED ON PARK AVENUE AT ALL TIMES.
19. CONTRACTOR SHALL USE PLASTIC DRUMS WITH TYPE 'C' WARNING LIGHTS TO SEPARATE TRAFFIC FROM THE CONSTRUCTION AREA.
20. THE CONTRACTOR SHALL NOTIFY MEMPHIS AREA TRANSIT AUTHORITY (901)722–7100 A MINIMUM OF 48 HOURS PRIOR TO IMPLEMENTING A TRAFFIC CONTROL PLAN.
21. THE DEVELOPER SHALL PROVIDE A TRAFFIC CONTROL PLAN TO THE CITY ENGINEER THAT SHOWS THE PHASING FOR EACH STREET FRONTAGE DURING DEMOLITION OR CONSTRUCTION OF CURB, GUTTER AND SIDEWALK. IF A TEMPORARY SIDEWALK IS PROVIDED, IT SHALL BE ADA ACCESSIBLE AND A MINIMUM 5FEET WIDE PEDESTRIAN PATHWAY.
22. THE CONTRACTOR SHALL CONTACT THE CITY OF MEMPHIS TRAFFIC ENGINEERING DEPARTMENT AT 901–636–6710 AT LEAST ONE WEEK PRIOR TO IMPLEMENTING THE TRAFFIC CONTROL PLAN TO DETERMINE FEES ASSOCIATED WITH ANY ENGINEERING PERMITS REQUIRED(I.E. DUMPSTER PERMITS, PARKING METER PERMITS, ETC.).
23. THE APPROPRIATE TRAFFIC CONTROL SHALL BE INSTALLED AT THE INCEPTION OF EACH STAGE OF CONSTRUCTION AND SHALL BE PROPERLY MAINTAINED AND/OR OPERATED DURING THE TIME SUCH SPECIAL CONDITIONS EXIST. THEY SHALL REMAIN IN PLACE ONLY AS LONG AS THEY ARE NEEDED AND SHALL BE IMMEDIATELY REMOVED THEREAFTER.

SPEED LIMIT: 35 M.P.H.

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 50 ft.

SHEET 01 OF 01

REVISION

ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE

J. Wesley Woodridge, Registered Engineer, Agriculture, Surveyor, Tennessee, No. 104878, State of Tennessee

THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.

DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.

DIVISION OF ENGINEERING

TRAFFIC CONTROL PLAN

LOCATION: 1616 EAST JEFFERSON STREET
BROWNSVILLE, TN.

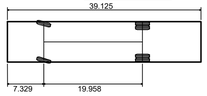
SURVEY: SEAS DATE: 10/24 BOOK: _____

DESIGN: _____ DATE: 01/25 CKD: _____ DATE: 01/25 SCALE: 1"=40'

DEPUTY CITY ENGINEER DATE CITY ENGINEER DATE

RGI JOB NO. 24158

DESIGN VEHICLE
SPECIFICATIONS*



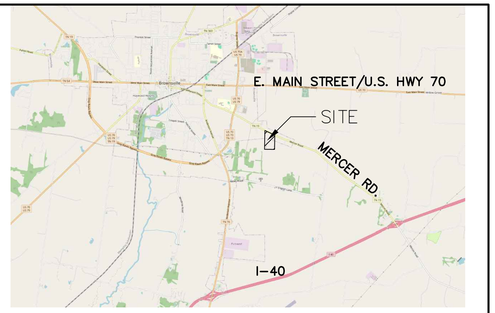
FD Aerial Truck	
Overall Length	39.125ft
Overall Width	8.167ft
Overall Body Height	10.461ft
Min Body Ground Clearance	0.891ft
Track Width	8.167ft
Lock-to-lock time	5.00s
Curb to Curb Turning Radius	34.500ft

MINIMUM CLEAR PATH: 26 FT

SWEPT PATH SPEED: 5 MPH

LEGEND

- INGRESS WHEEL PATH
- OUTGRESS WHEEL PATH
- VEHICLE BODY OUTLINE
- DUMPSTER TRUCK EXHIBIT



GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 30 ft.

SHEET 2 OF 3

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE

Wesley Woodruff
REGISTERED
LANDSCAPE
ARCHITECT
No. 10407B
STATE OF TENNESSEE

THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.

DEVELOPER:

ENGINEER: RENAISSANCE GROUP, INC.

DIVISION OF ENGINEERING

FIRE TRUCK EXHIBIT

LOCATION: 1616 EAST JEFFERSON STREET
BROWNSVILLE, TN.

SURVEY: SEAS DATE: 10/24 BOOK: _____

DESIGN: _____ DATE: 01/25 CKD: _____ DATE: 01/25 SCALE: _____

DEPUTY CITY ENGINEER _____ DATE _____ CITY ENGINEER _____ DATE _____

RGI JOB NO. 24158