

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:

- The horizontal datum is based on the Tennessee State Plane Coordinate System (NAD1983)
- The vertical datum is based on the NAVD88 vertical datum

Symbol Legend

- Property Corner

⊗

Benchmark

○

Parking Spaces

⊗

curb drain inlet

⊗

Sewer Man Hole

⊗

Drainage Man Hole

⊗

Gas Meter

⊗

Electric Meter

⊗

Water Meter

⊗

Power Pole

⊗

Light Pole

⊗

PIV valve

⊗

water valve

⊗

fire hydrant

PMT

Pad-Mount Trans.

A/C

Air Conditioner

CO

Clean Out
- Wood Fence line
- Chain-linked Fence line
- Barbed-Wire Fence line
- Under Ground Electric
- Over-Head Electric
- Drain line
- Major Contours
- Minor Contours
- Guy Anchor
- RailRoad Easement
- FEMA Flood Zone Area
- Building
- Concrete
- Asphalt
- Grass
- Easements



Survey Notes:

- All bearings are referenced to the Tennessee State Plane Coordinate System (NAD83)
- All new property corners shall be 1/2" rebar with orange plastic caps reading "SEAS TN 2195".
- Standard deed and title research was performed by Arc and current Title Commitment was provided to this firm by the client.
- The property shown hereon does NOT graphically fall within a special designated Floodzone per FEMA FIRM Map Panel 47157C0185F, Dated 09/27/2007.
- 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.

SEAS
Seaside Engineering And Surveying, LLC

5567 Commander Dr. Suite 101
Arlington, Tennessee 38002
Office: (901) 881-9757
Fax: (850) 398-6812

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

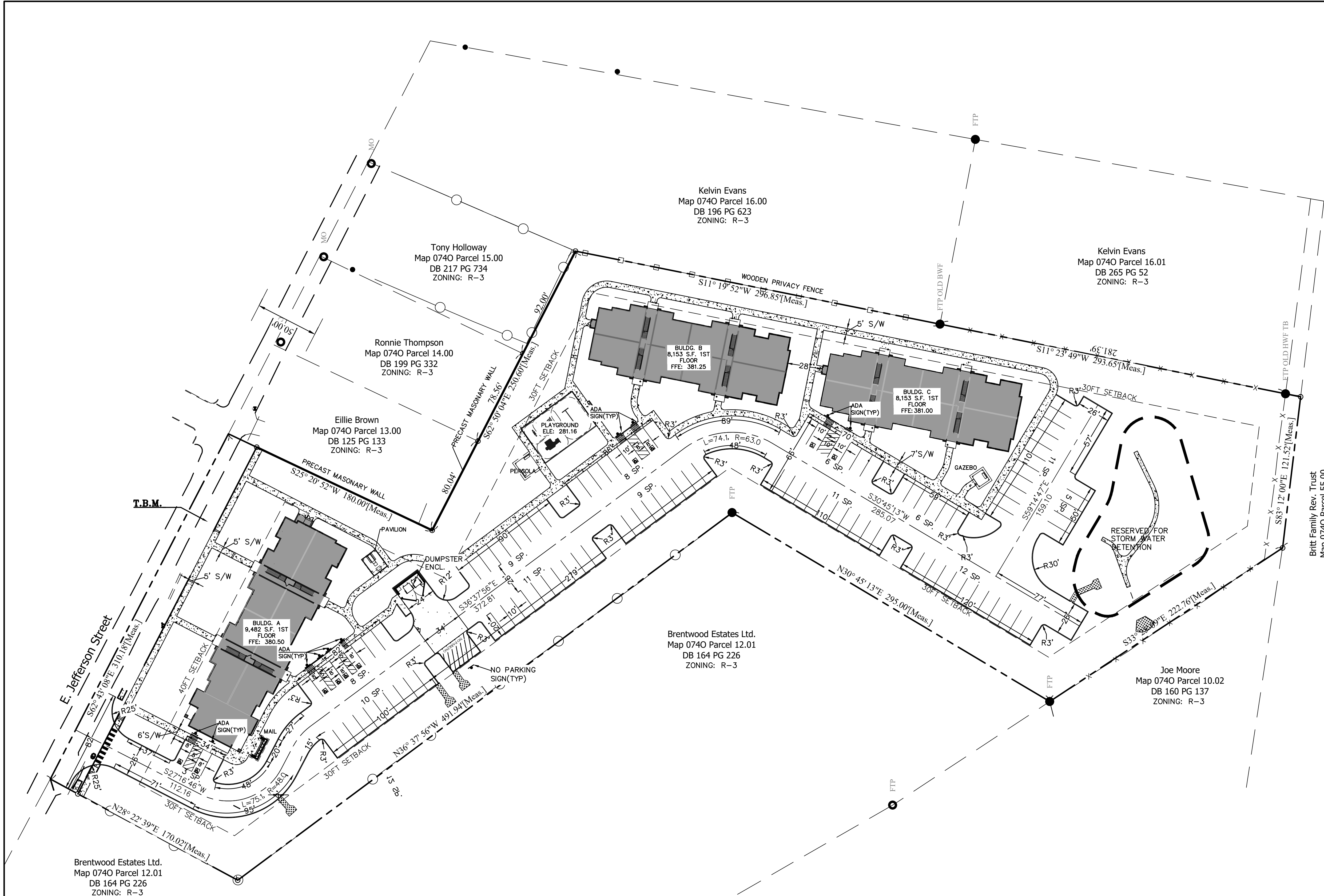
Tax Parcel #: Map 0740 Group B Parcel 012.00
Instrument #: RB 232 PG 778

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

COPYRIGHT - No unauthorized copies of this plat are permitted. Original seal is affixed in blue ink.

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 REQUIREMT: 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

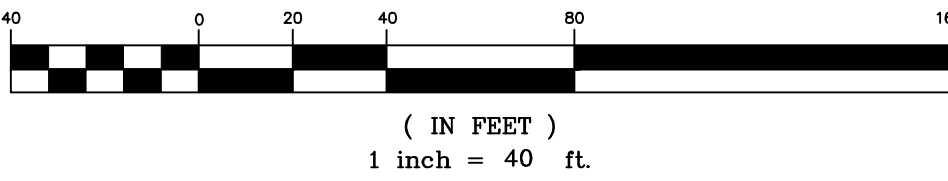
PARKING MEETS BROWNSVILLE'S LOCAL ZONING REQ':
CHAPTER 8: OFF-STREET PARKING & LOADING REGULATIONS.

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



GRAPHIC SCALE



(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



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



THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.

DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.

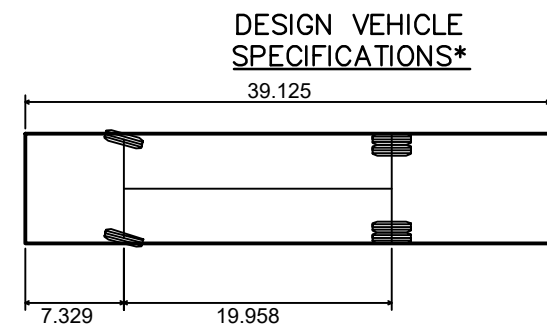
DIVISION OF ENGINEERING

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'

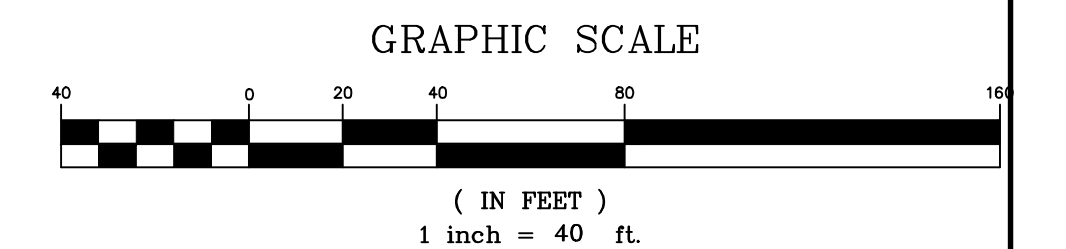
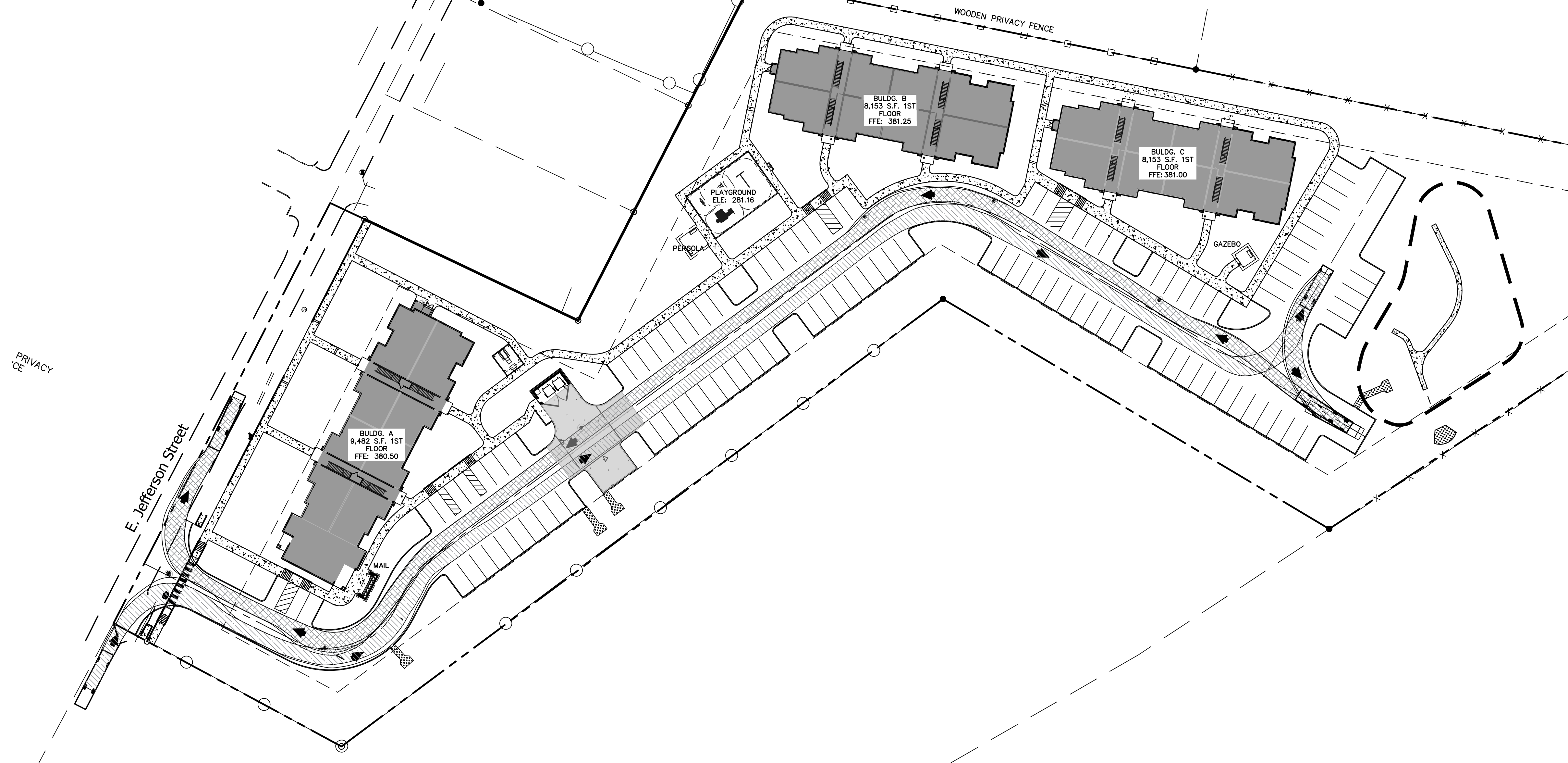
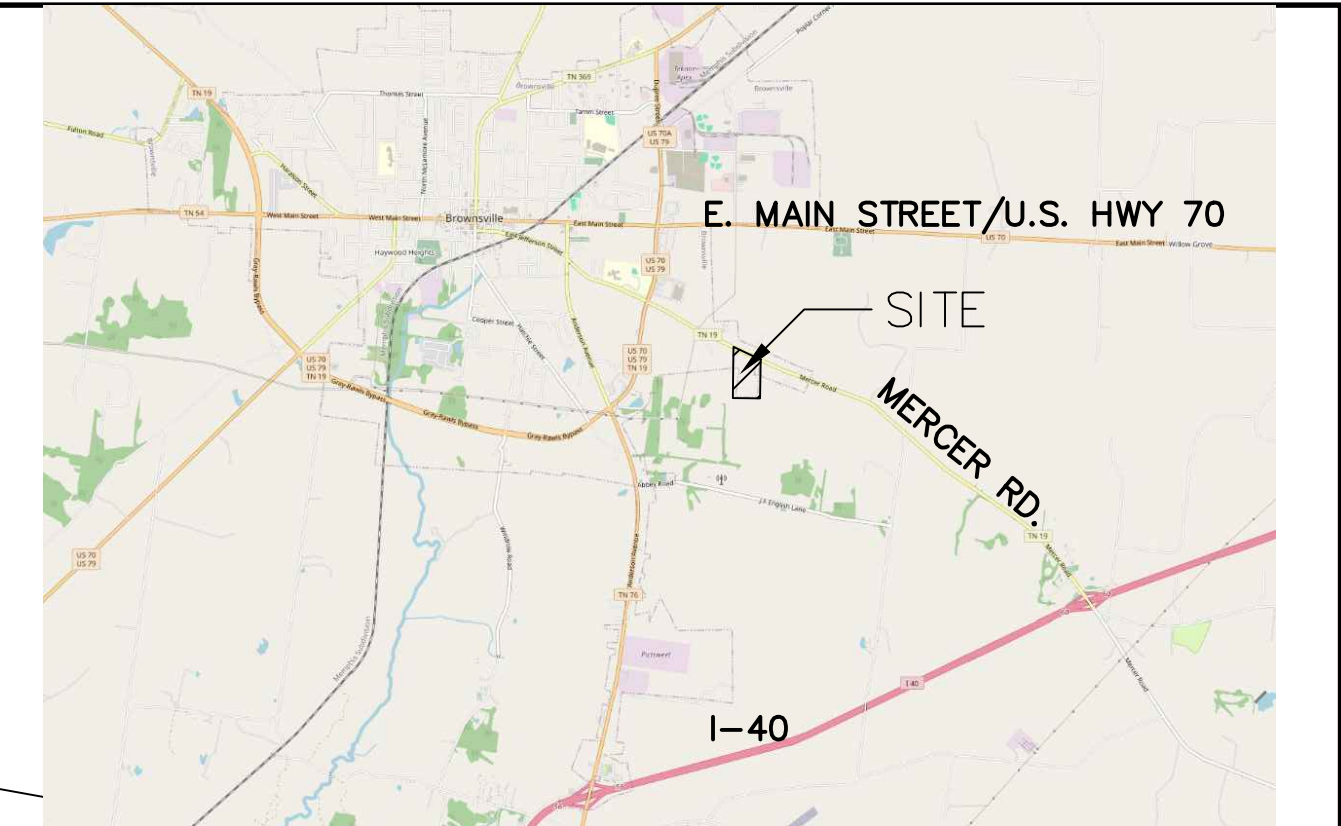
DEPUTY CITY ENGINEER _____ DATE _____ CITY ENGINEER _____ DATE _____



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 5.008s
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



SHEET 2 OF 3

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE

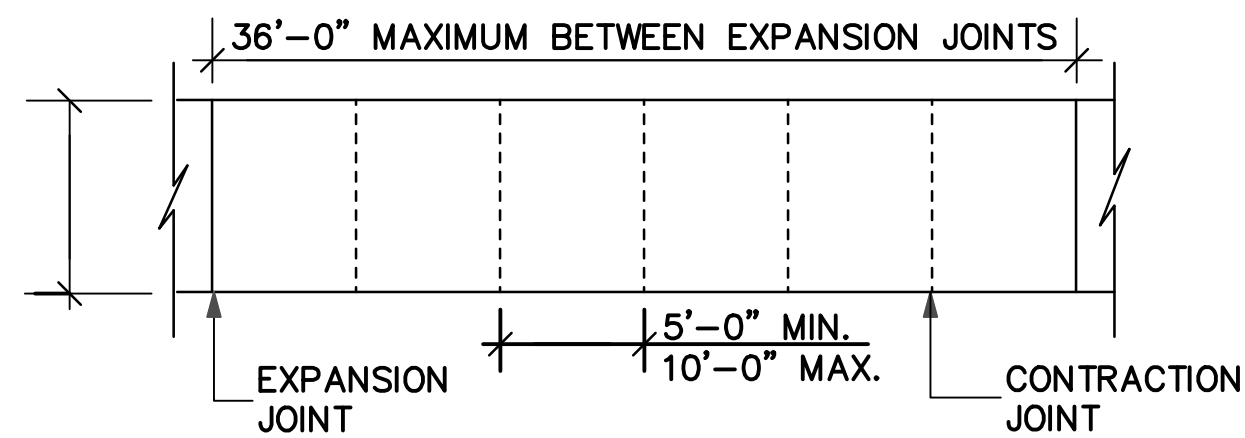


THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.

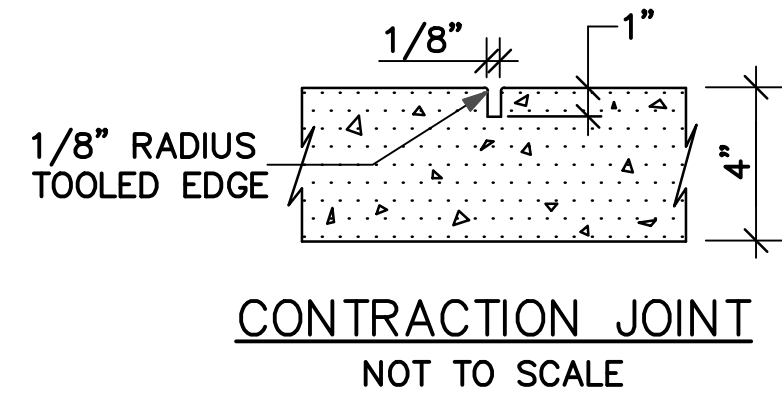
DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.

DIVISION OF ENGINEERING
VEHICLE TURNING EXHIBIT
LOCATION: 1616 EAST JEFFERSON STREET
BROWNSVILLE, TN.

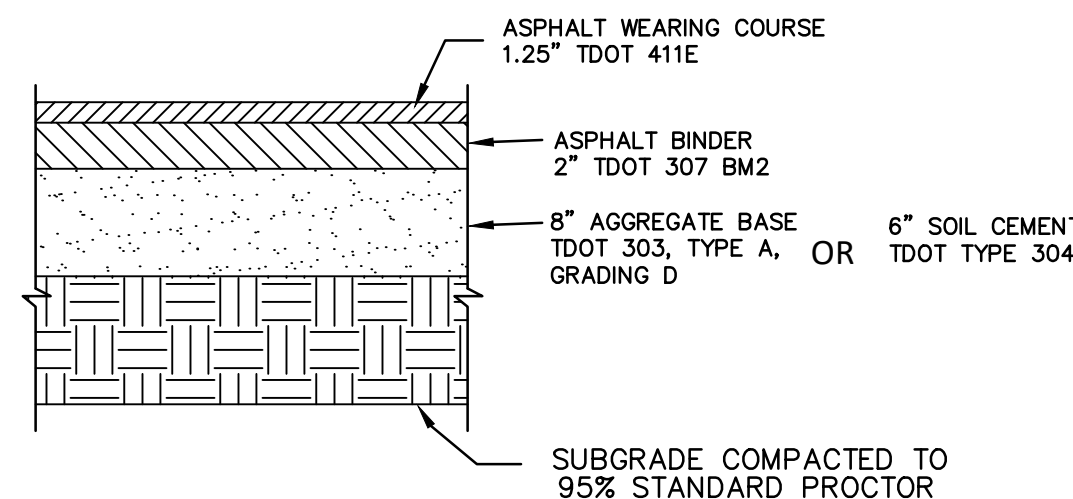
SURVEY: SEAS DATE: 10/24 BOOK:
DESIGN: DATE: 01/25 CKD: DATE: 01/25 SCALE:
DEPUTY CITY ENGINEER DATE CITY ENGINEER DATE



SIDEWALK PLAN
NOT TO SCALE

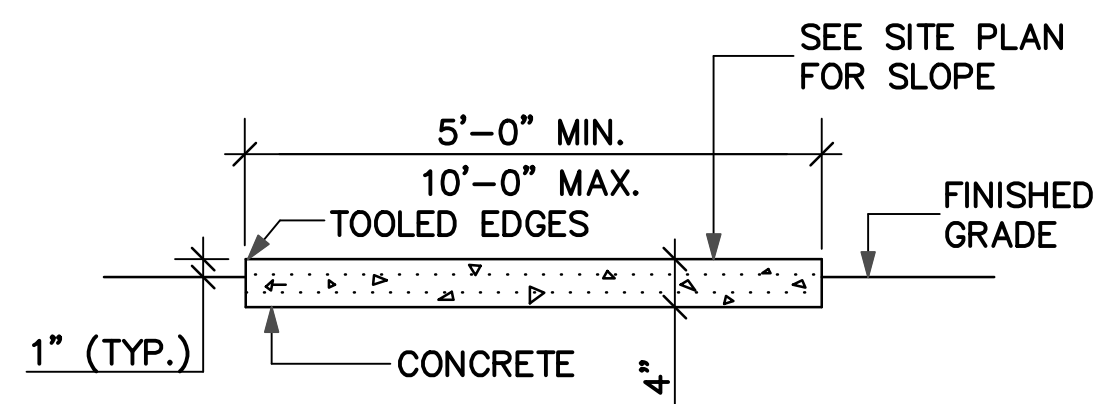
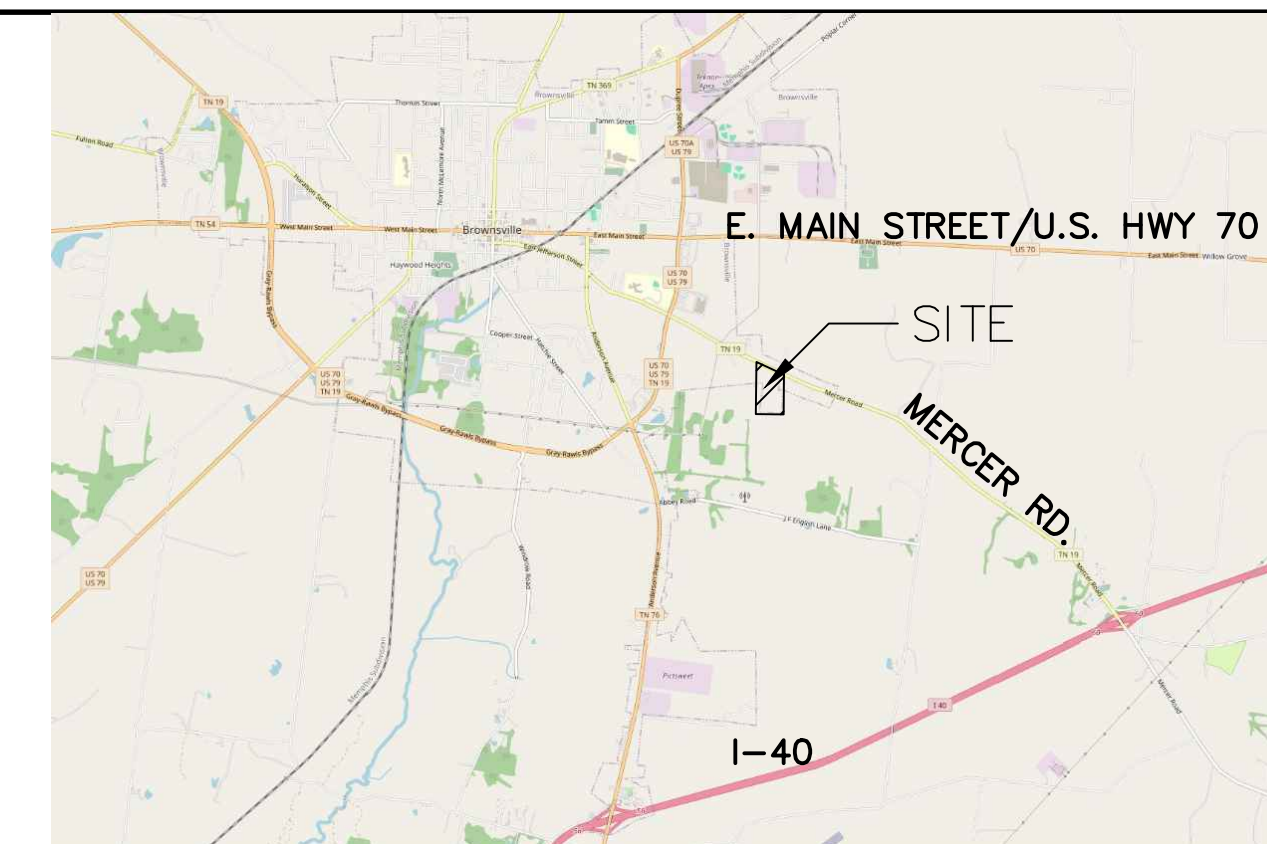


CONTRACTION JOINT
NOT TO SCALE

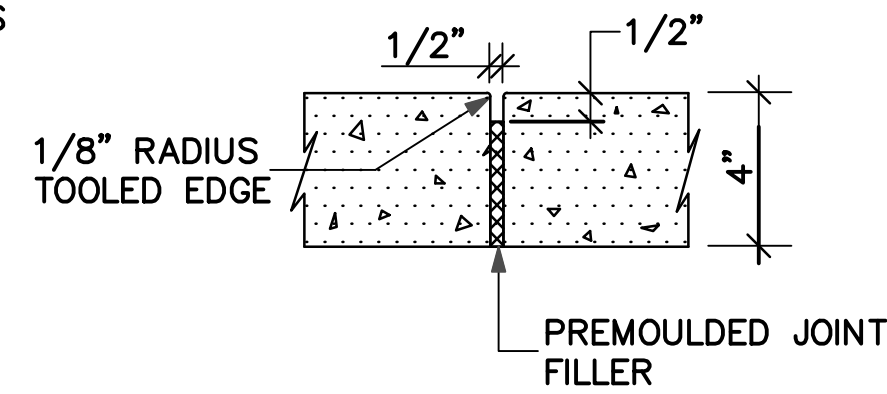


LIGHT DUTY

TYPICAL PAVEMENT DETAIL
N.T.S.



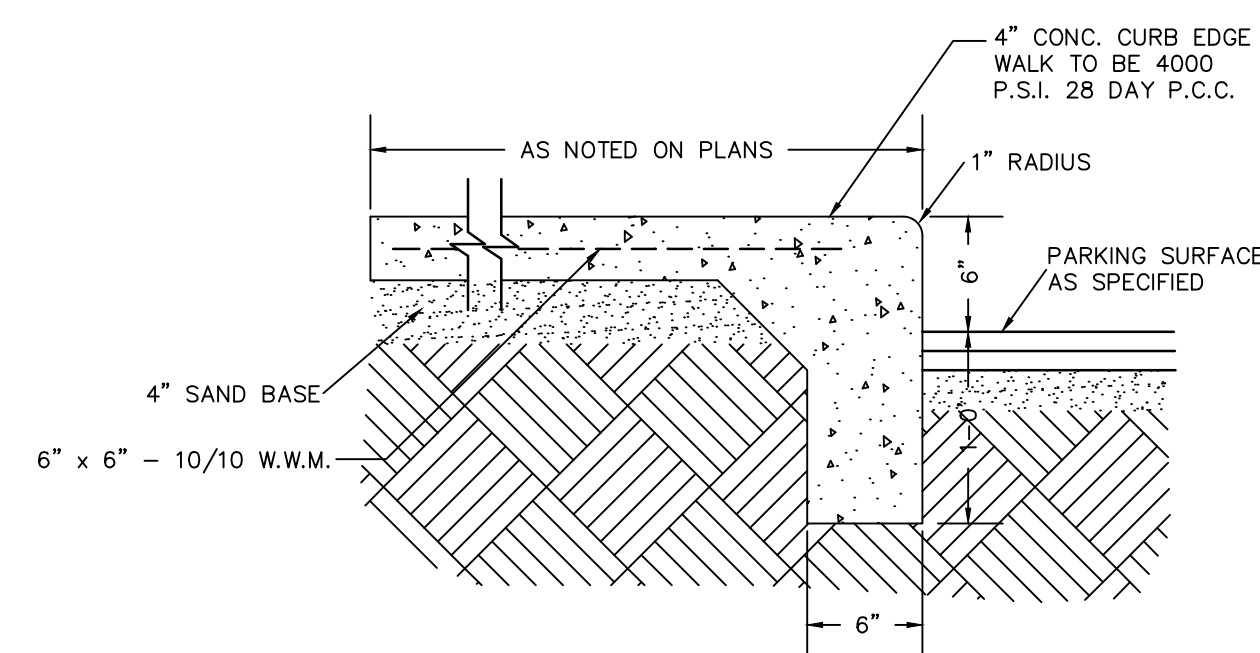
TYPICAL SIDEWALK SECTION
NOT TO SCALE



EXPANSION JOINT
NOT TO SCALE

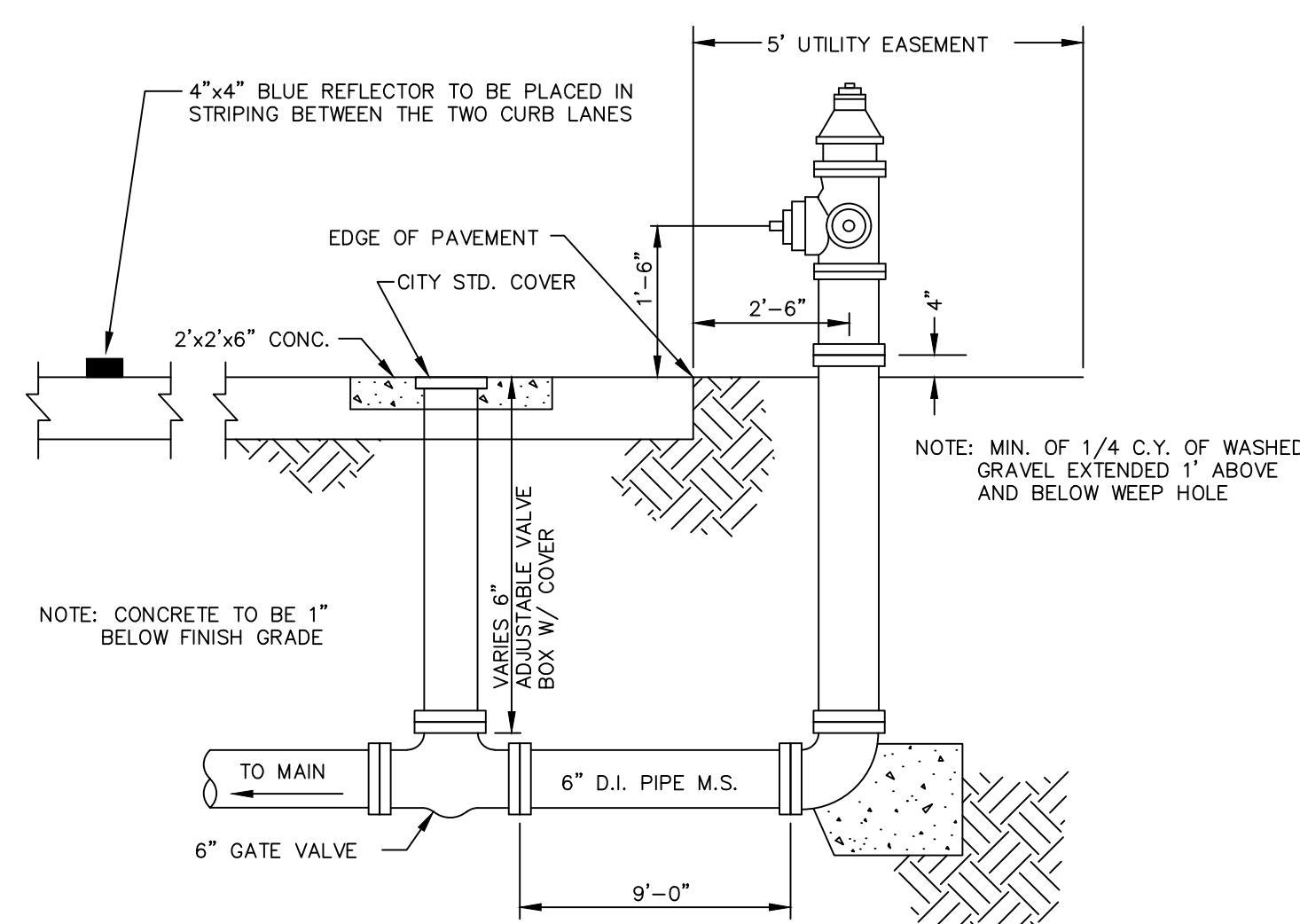
SIDEWALK DETAIL

N.T.S.



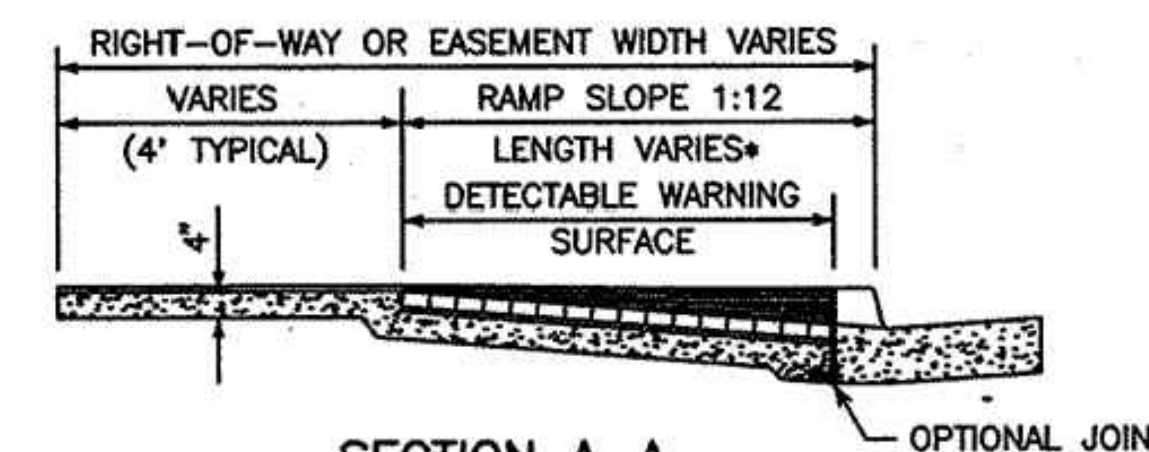
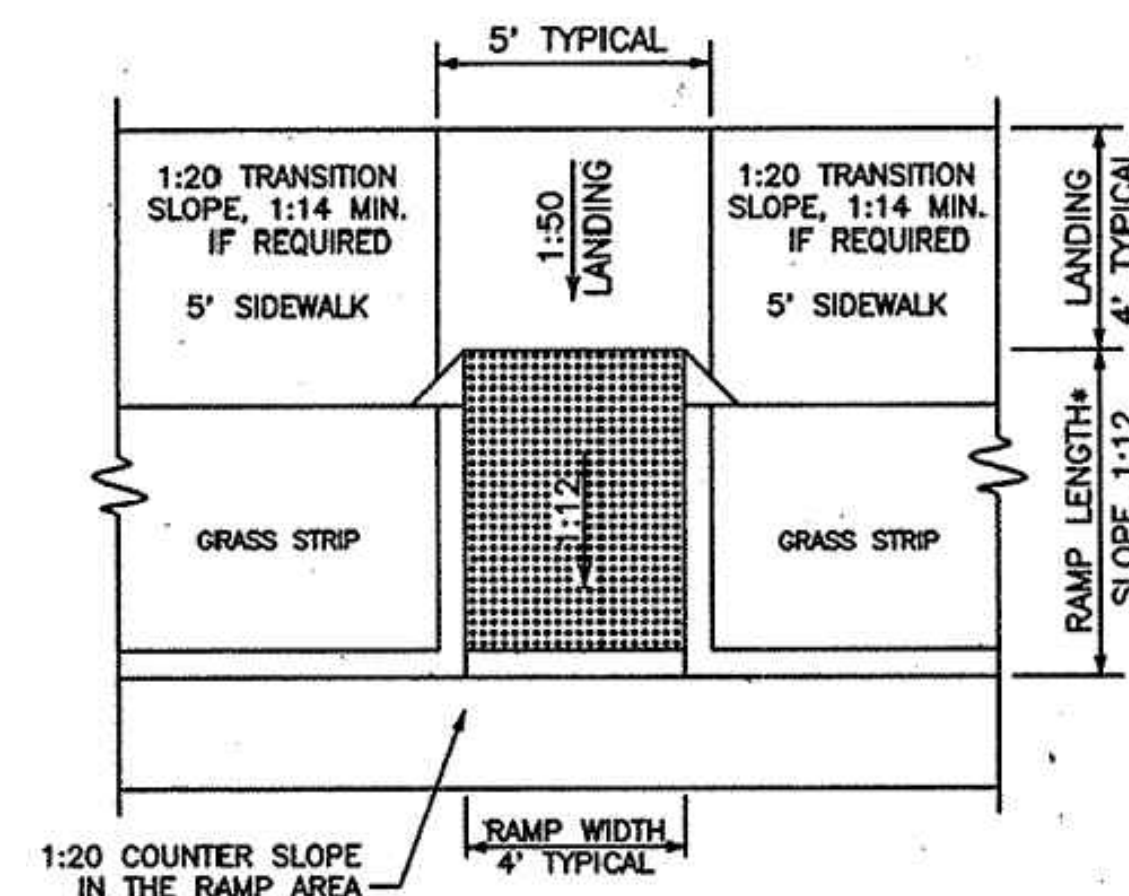
CURBED SIDEWALK

N.T.S.

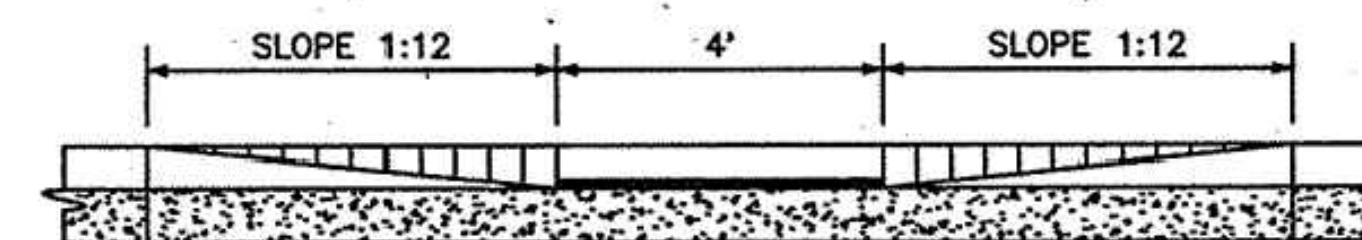


TYPICAL FIRE HYDRANT INSTALLATION

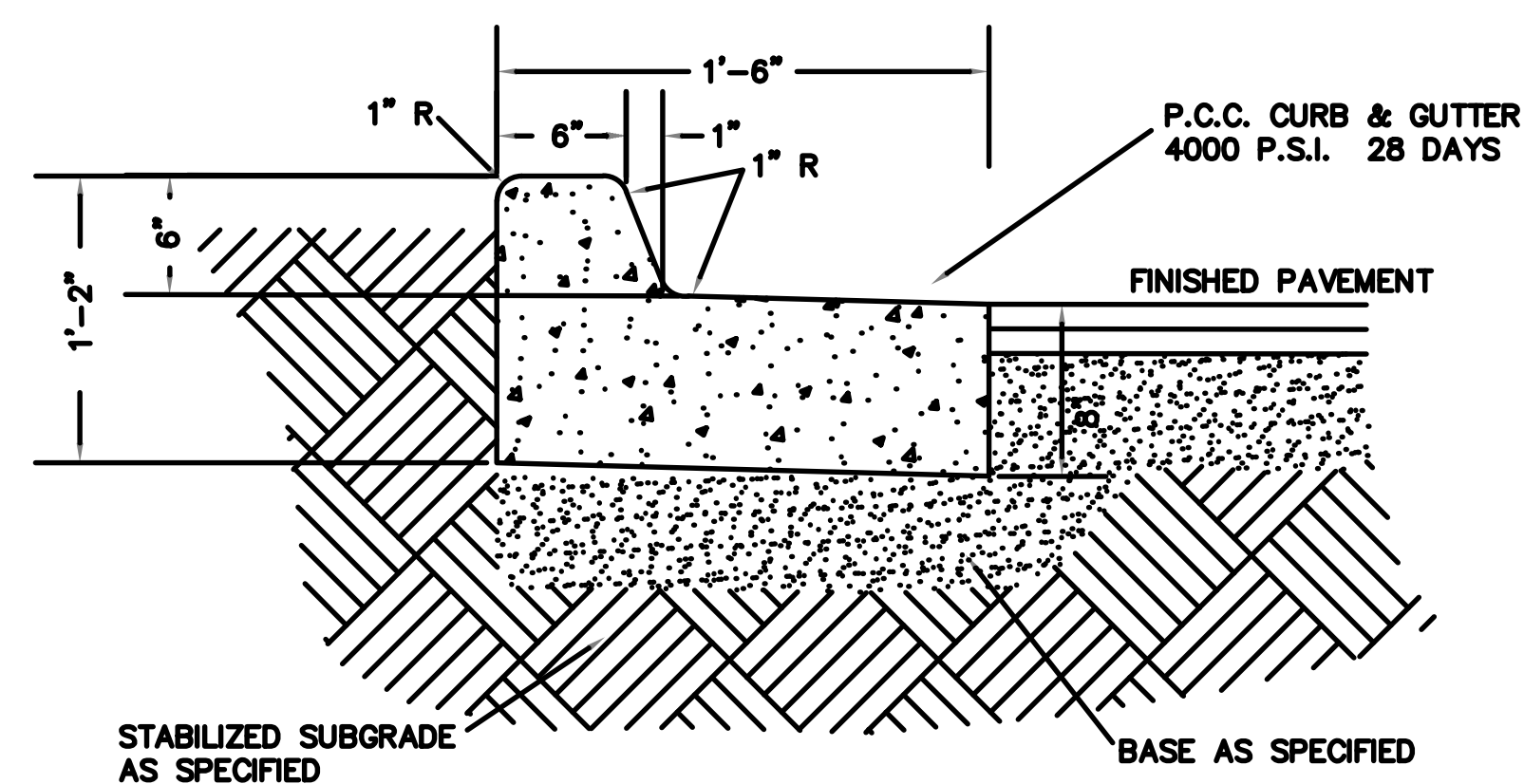
N.T.S.



SECTION A-A



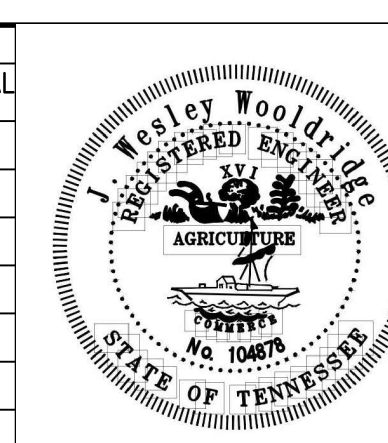
SECTION B-B



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 2 OF 3

DIVISION OF ENGINEERING
SITE DETAILS
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

➡ —GROUND DRAINAGE DIRECTION

*SEE SHEET #5 FOR TDOT SIDEDRAIN ENDWALL DETAILS

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 SODED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.
3. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT NECESSARILY ACCURATE. 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 SOIL 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 PROPERTIES.
7. VERY 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 SHALL BEGIN AT LEAST 12-INCHES BELOW THE TOP OF THE FOUNDATION WALL AND SLOPE AWAY FROM THE CONCRETE SLAB ON THE EXTERIOR IN THE CASE OF AN ELEVATED SLAB ON GRADE. THE MINIMUM GRADE AWAY FROM THE FOUNDATION SHALL BE TWO PERCENT (2%) IN ALL DIRECTIONS. THE DRIVEWAY SLAB BE SLOPED DOWN AT TWO PERCENT (2%) FOR AT LEAST EIGHT FEET FROM THE STRUCTURE.

1900

(IN FEET)
inch = 40 ft.

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

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

DEPUTY CITY ENGINEER DATE CITY ENGINEER DATE

* denotes 18"X28' Arch end pipe

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

DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.

**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 = 13.82 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)

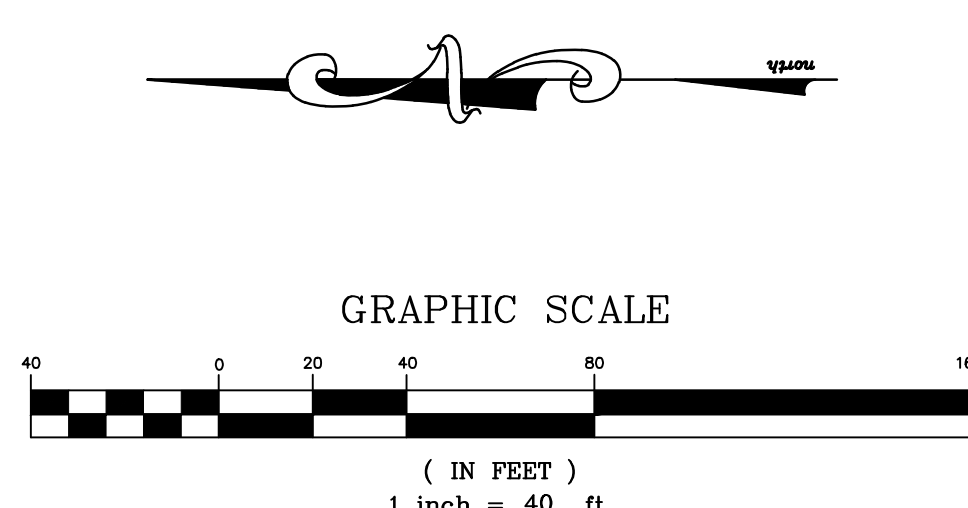
1. A MINIMUM OF 24-HOURS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CITY OF BROWNSVILLE PUBLIC WORKS OFFICE AT (731) 772-9978.
2. ALL NEWLY CUT OR FILLED AREAS, LACKING ADEQUATE VEGETATION, SHALL BE SEED, MULCHED, FERTILIZED AND/OR SODED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.
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

**Developed Off-Site
Detained**
Area: 3.86 ac.
CN: 77
Q25: 14.90 cfs

**Post-Developed On-Site
Undetained**
Area: 2.36 ac.
C: 88
Q25: 19.21 cfs



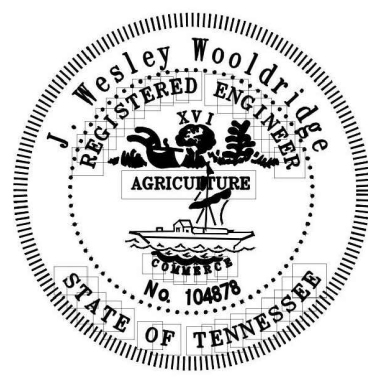
SITE BENCHMARK

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

ITEM NO.	REVISION DESCRIPTION OF CHANGE	APPROVAL DATE



**THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.**

DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.

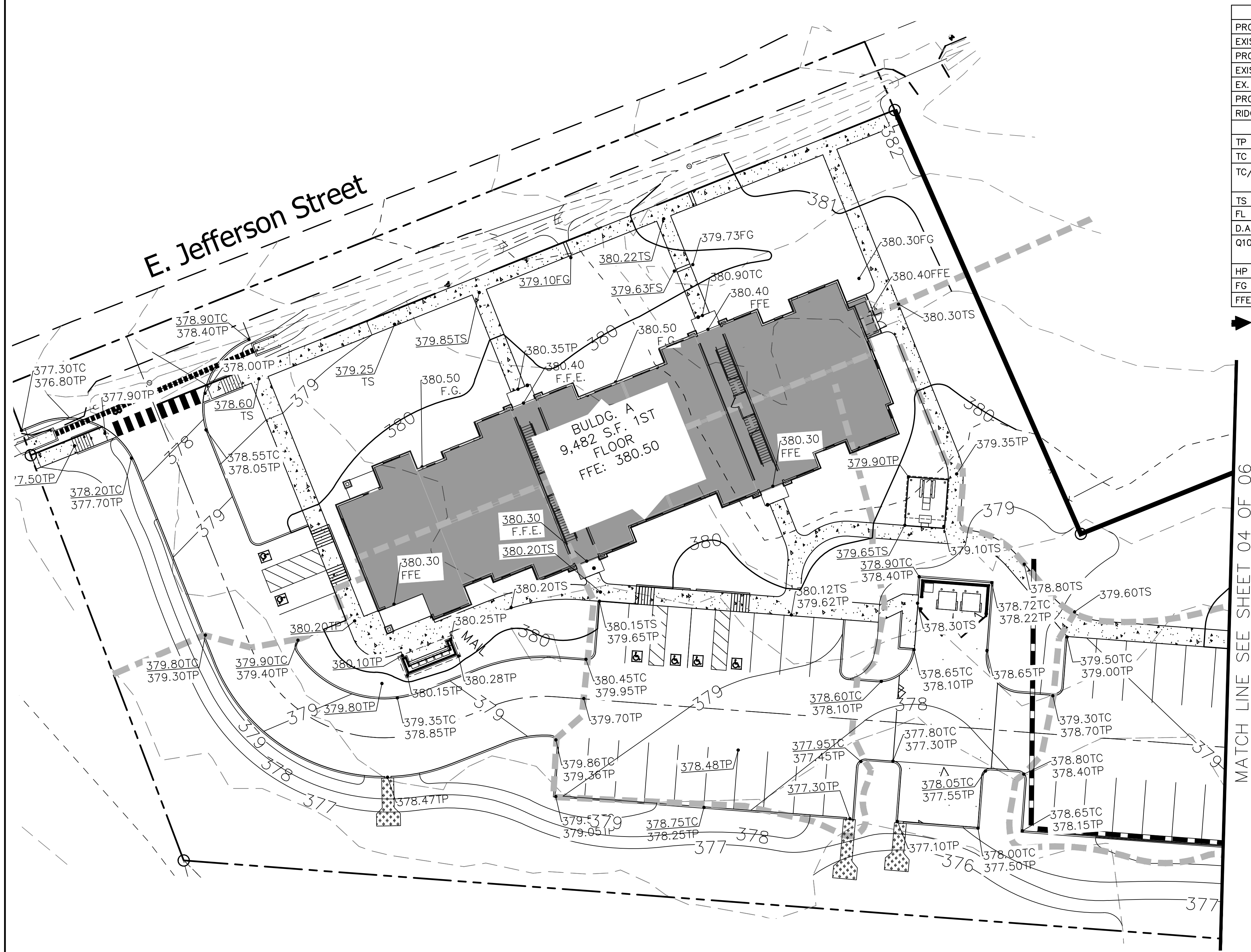
DETENTION PLAN

LOCATION: 1616 EAST JEFFERSON STREET
BROWNSVILLE, TN.

SURVEY: SEAS DATE: 10/24/ BOOK: _____

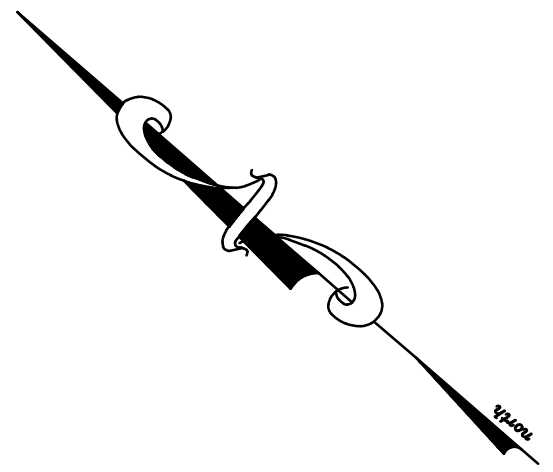
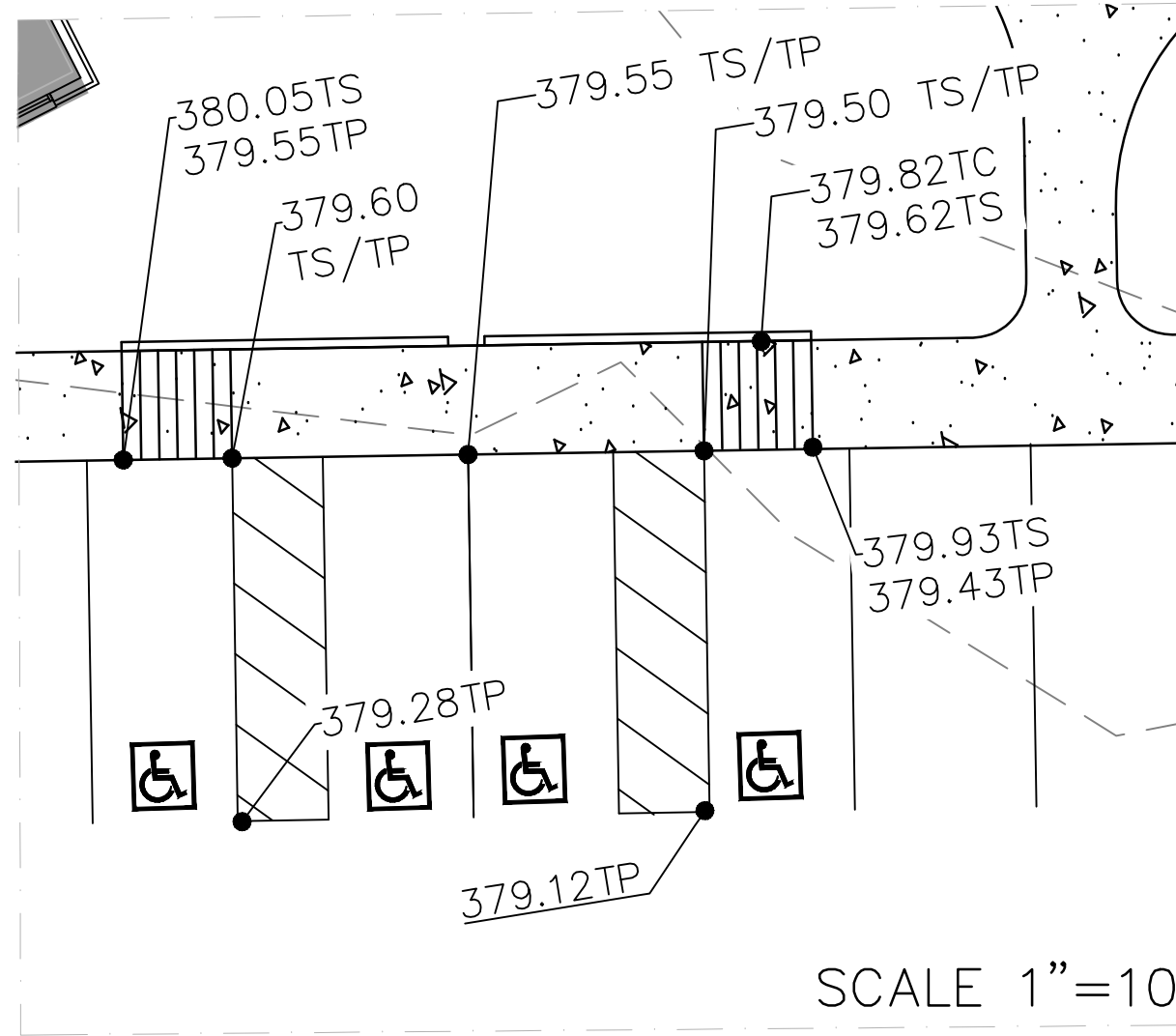
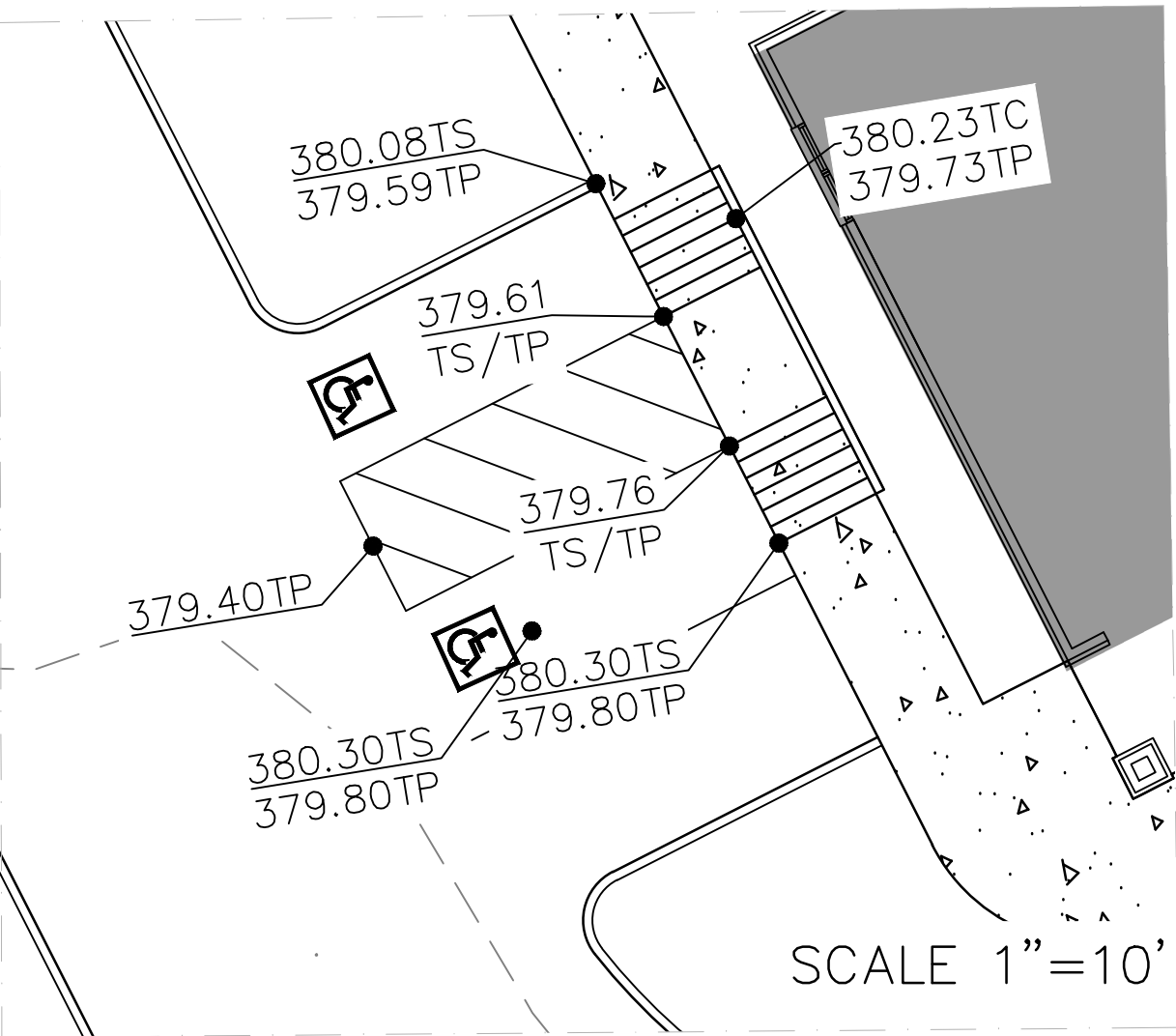
DESIGN: _____ DATE: 01/25/ CKD: _____ DATE: 01/25/ SCALE: 1"=40'

DEPUTY CITY ENGINEER DATE CITY ENGINEER DATE



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)

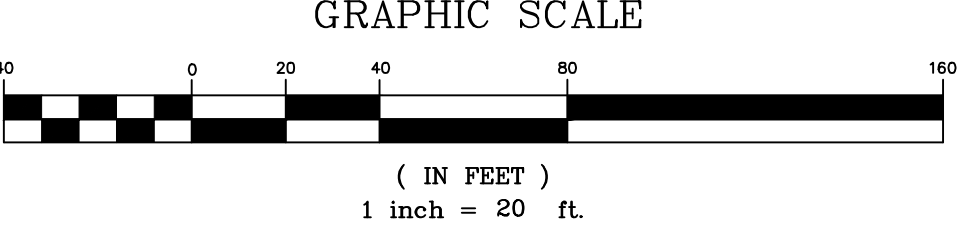
FLOOD NOTE:
THIS PROPERTY IS NOT LOCATED IN A
SPECIAL FLOOD HAZARD AREA PER FLOOD
INSURANCE RATE MAP, MAP No. 47157C
0290 F. COMMUNITY PANEL No. 470177
0290 F. EFFECTIVE DATE: SEPTEMBER 28,
2007. NEAREST BFE: 233.0

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.

DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.



SHEET 03 OF 06

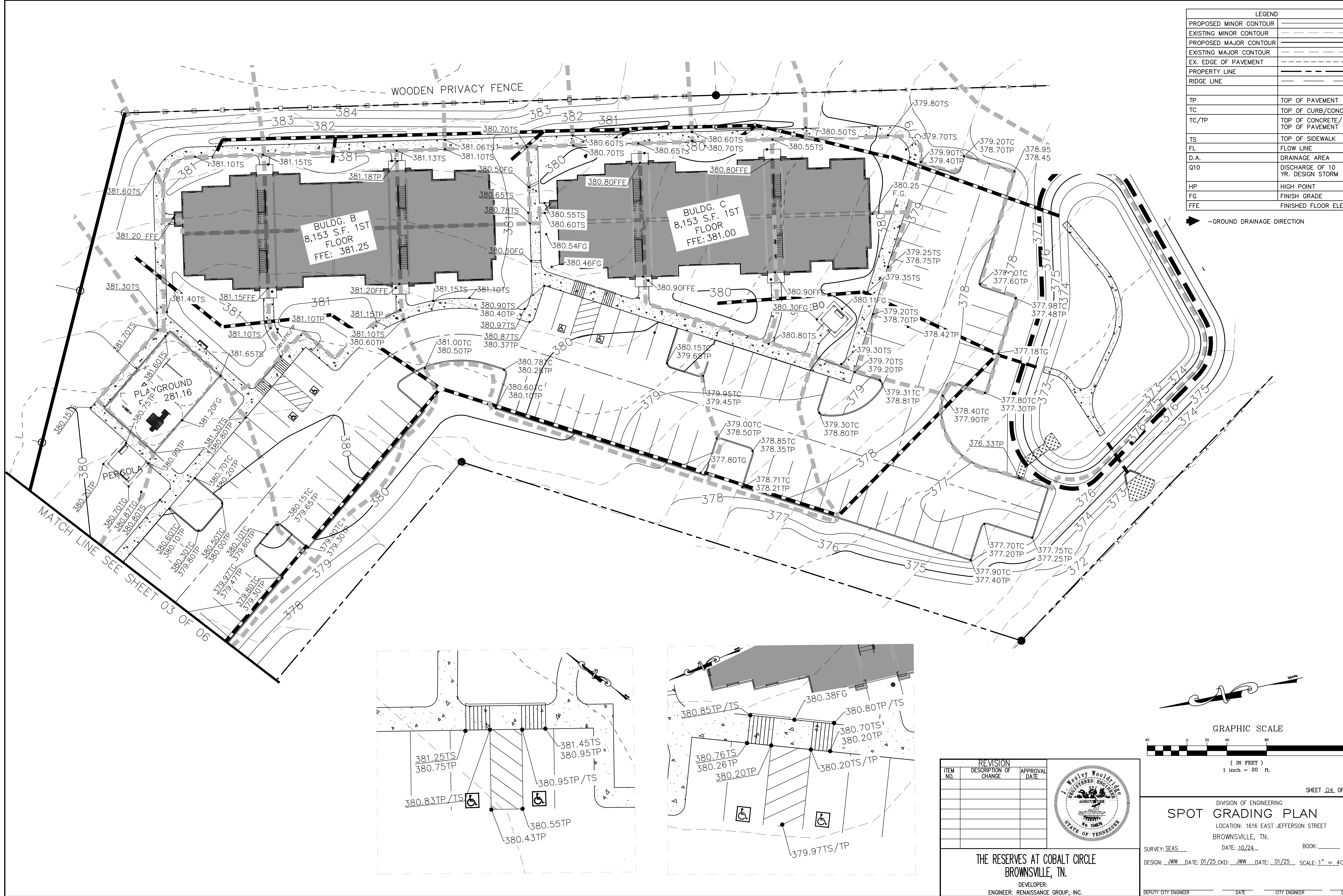
DIVISION OF ENGINEERING
SPOT GRADING PLAN

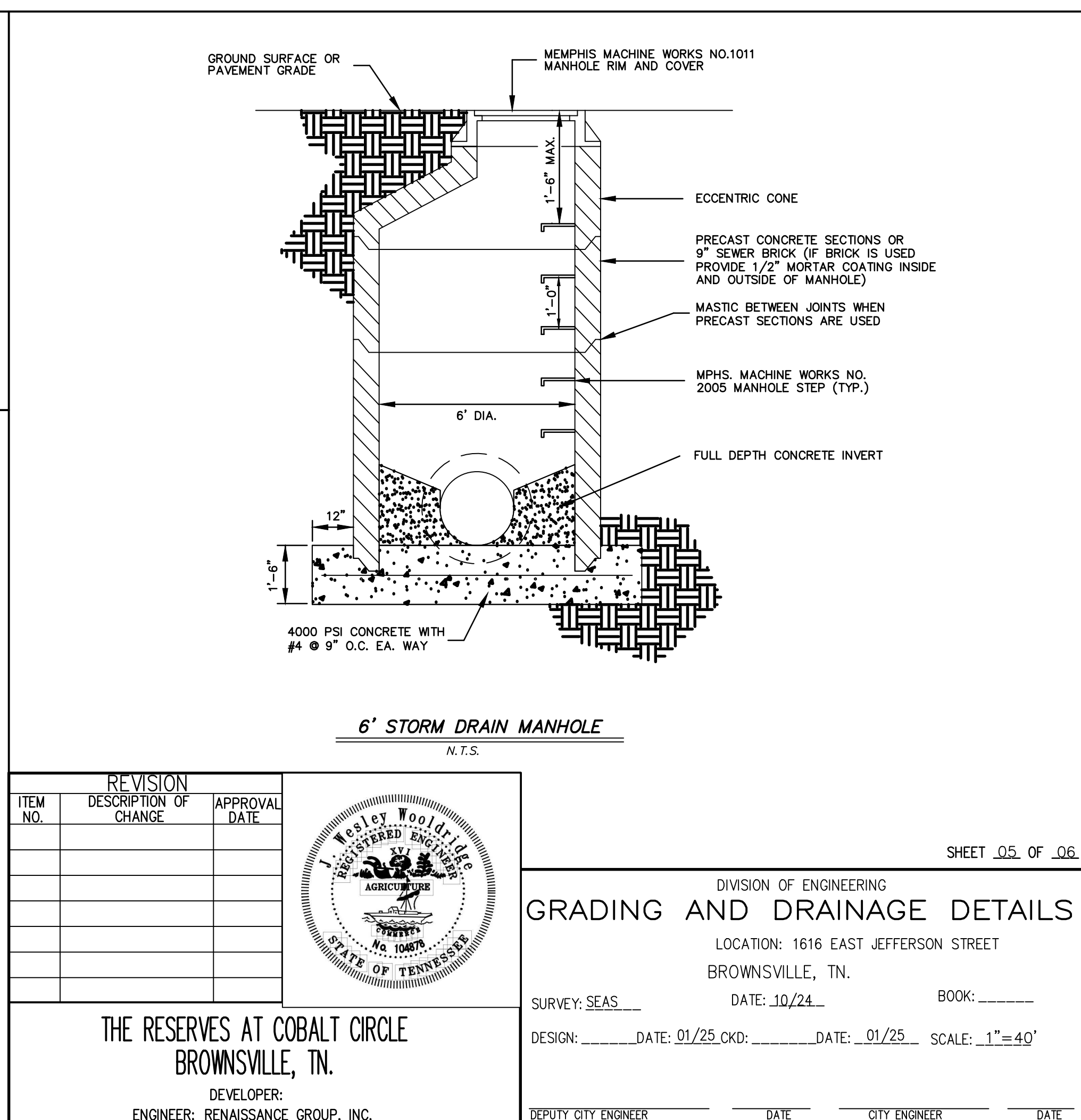
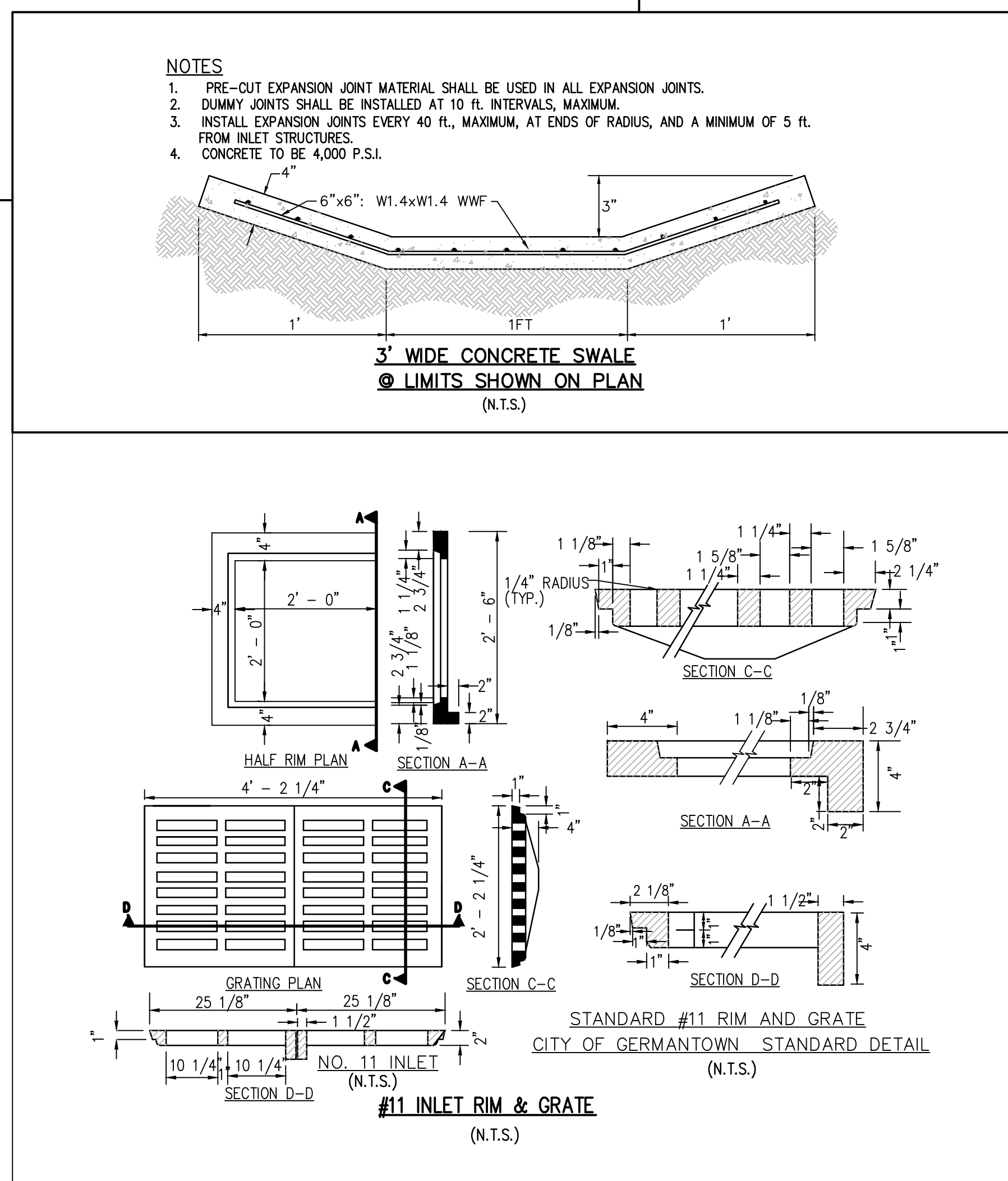
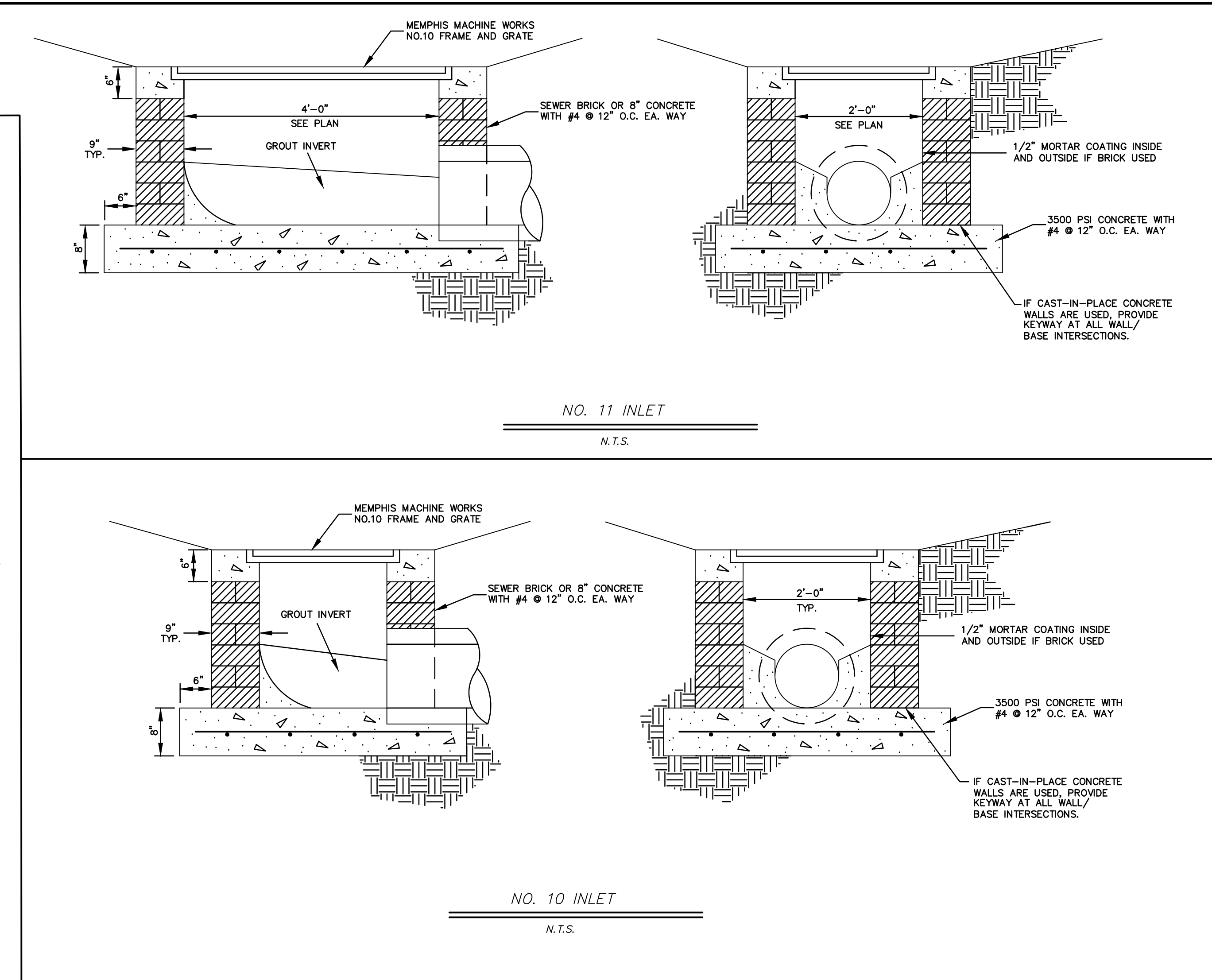
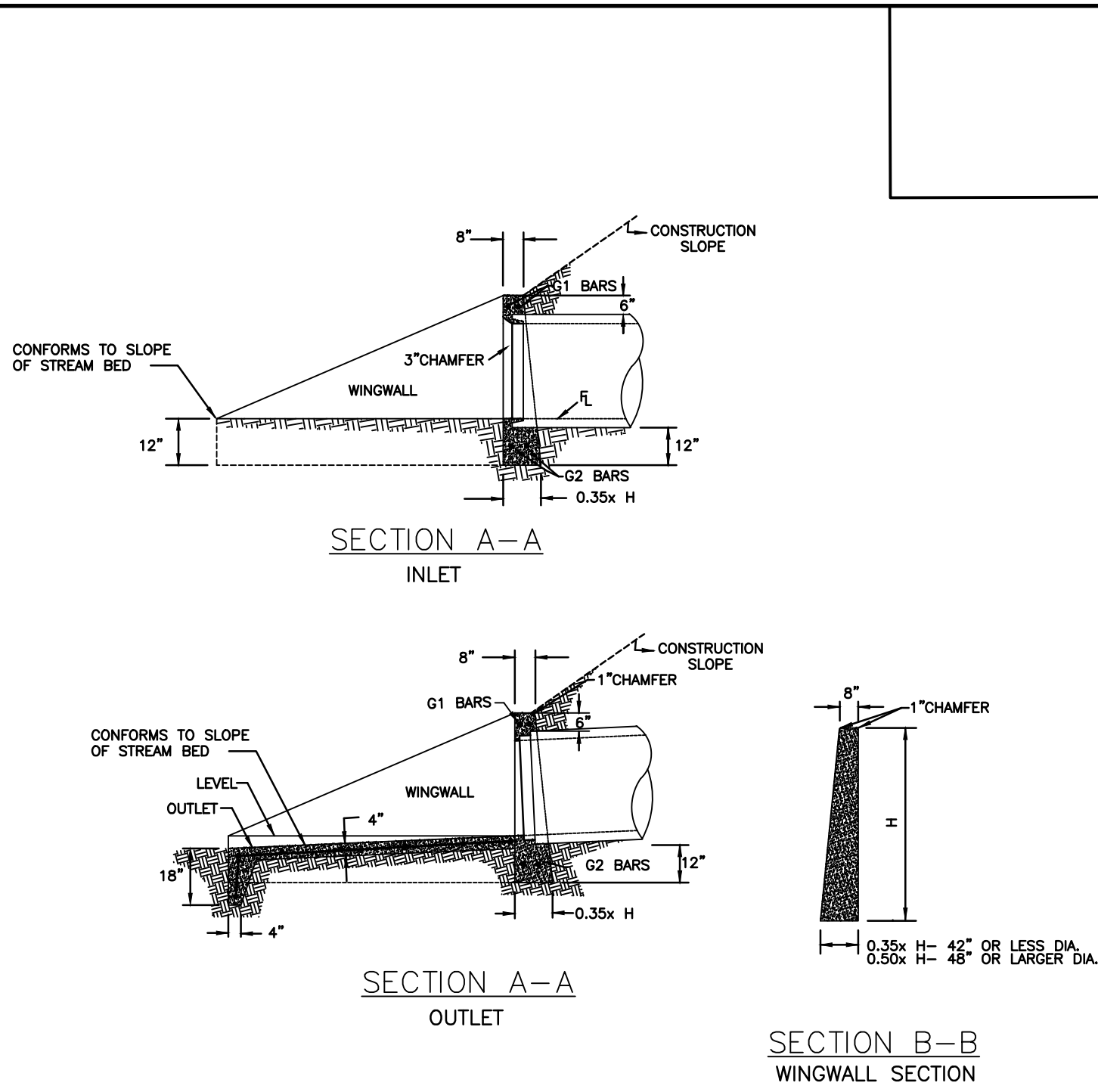
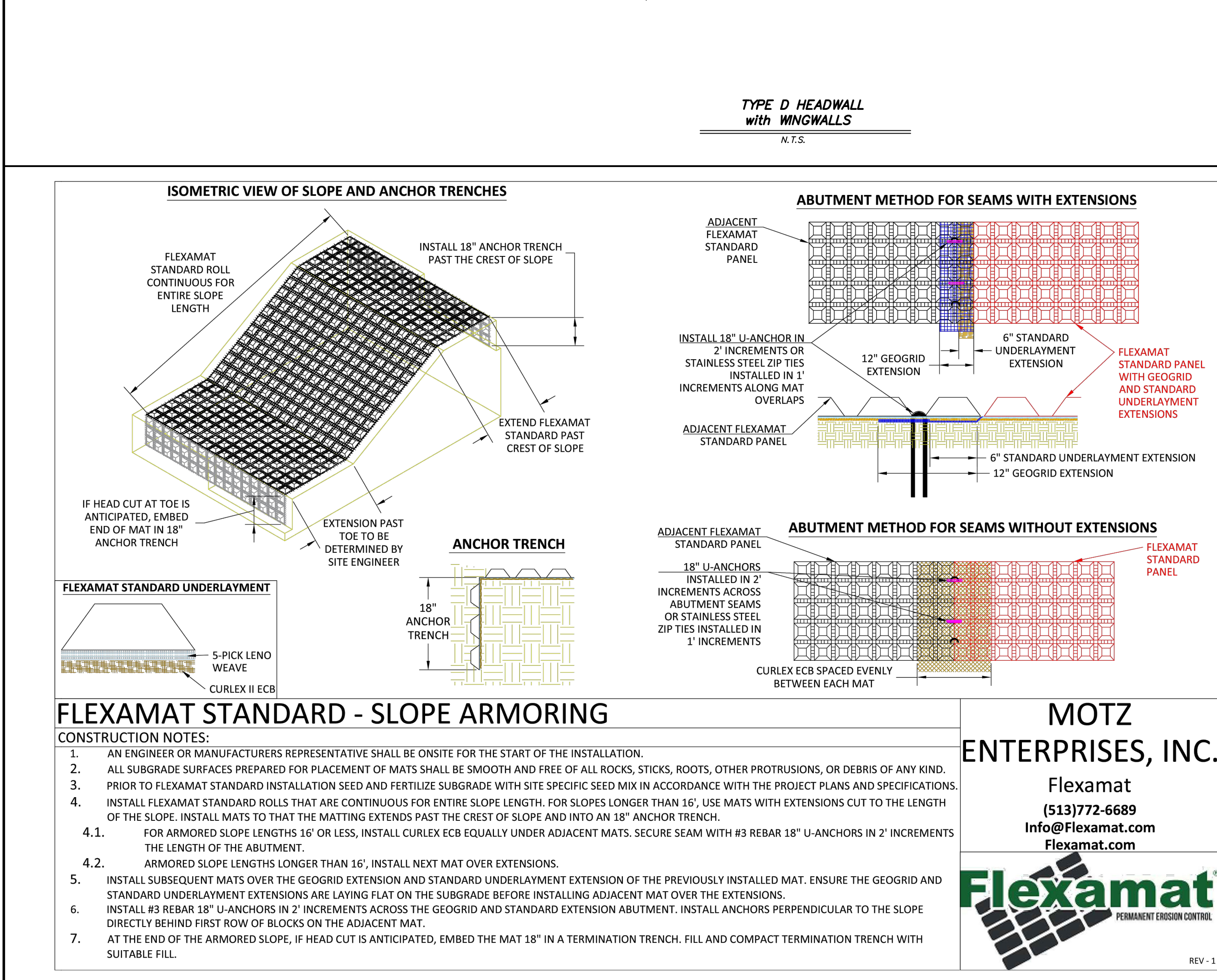
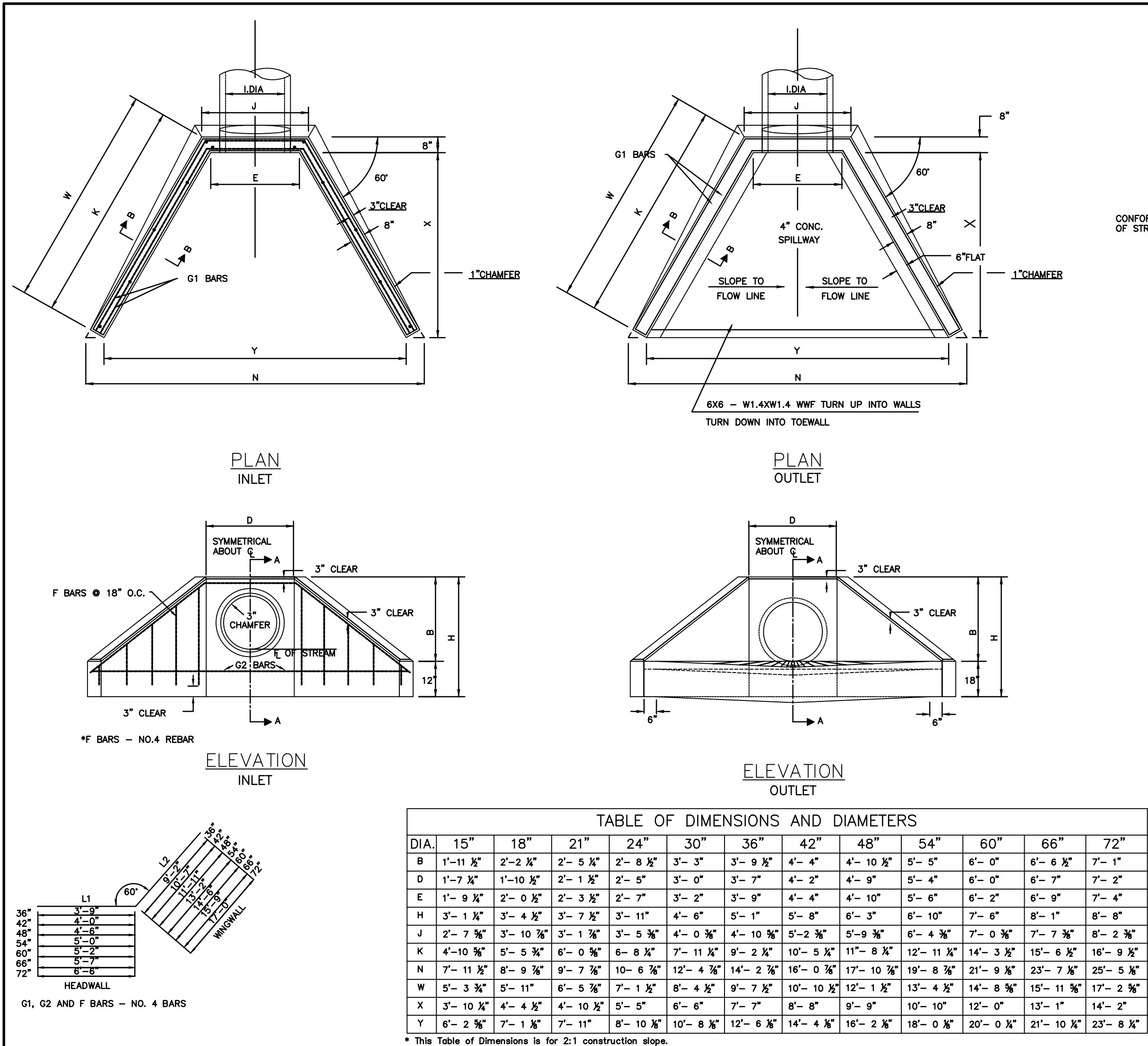
LOCATION: 1616 EAST JEFFERSON STREET
BROWNSVILLE, TN.

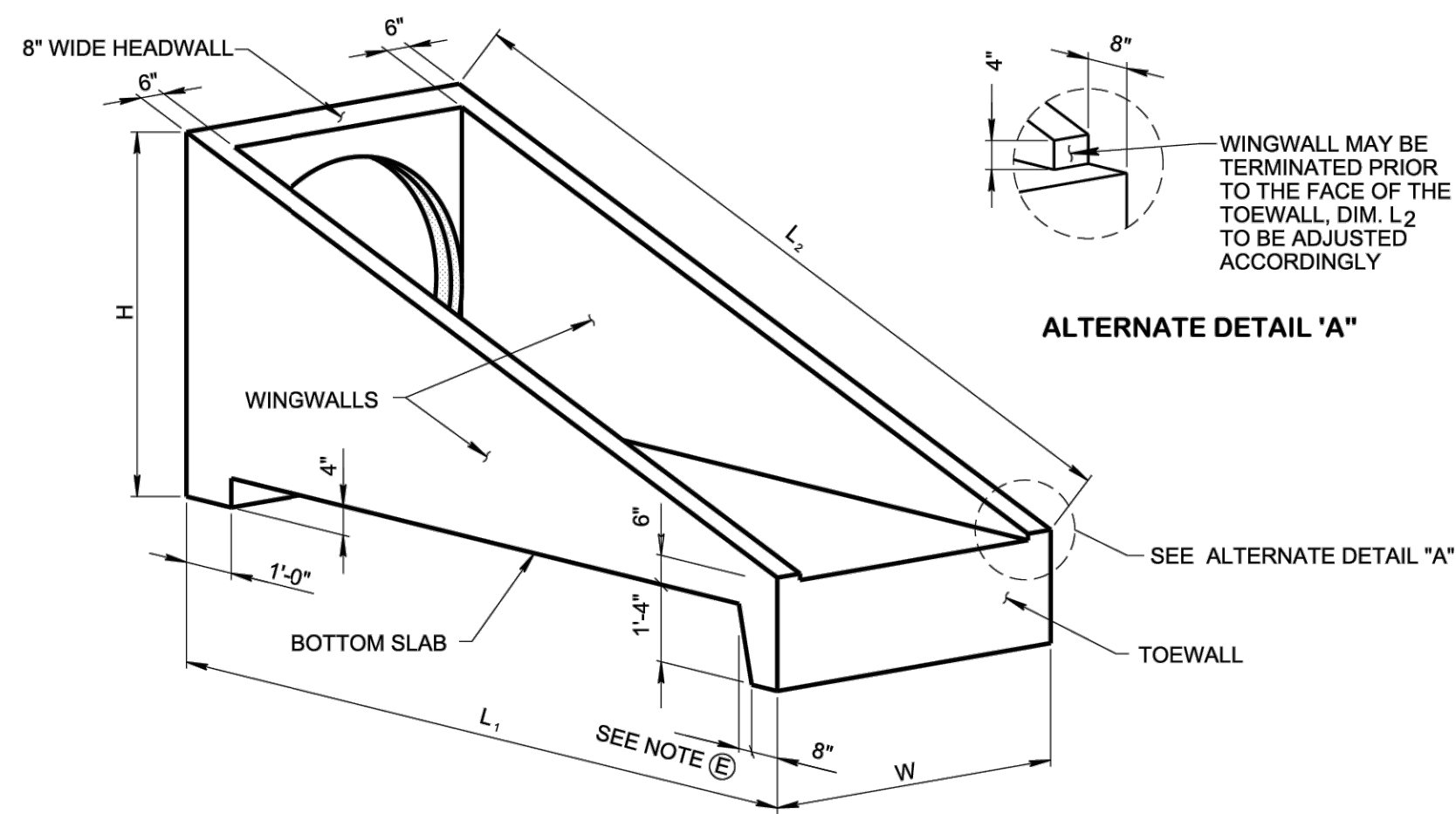
SURVEY: SEAS DATE: 10/24/2024 BOOK: _____

DESIGN: _____ DATE: 01/25/2025 CKD: _____ DATE: 01/25/2025 SCALE: 1" = 40'

DEPUTY CITY ENGINEER _____ DATE _____ CITY ENGINEER _____ DATE _____

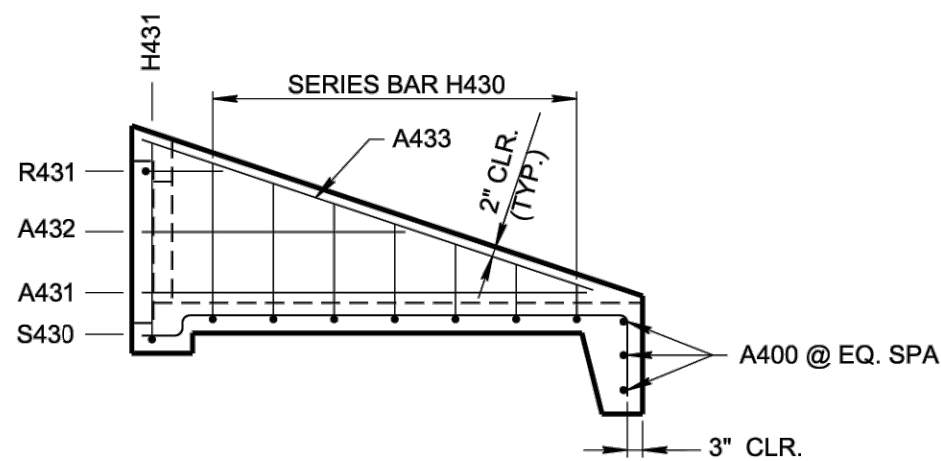






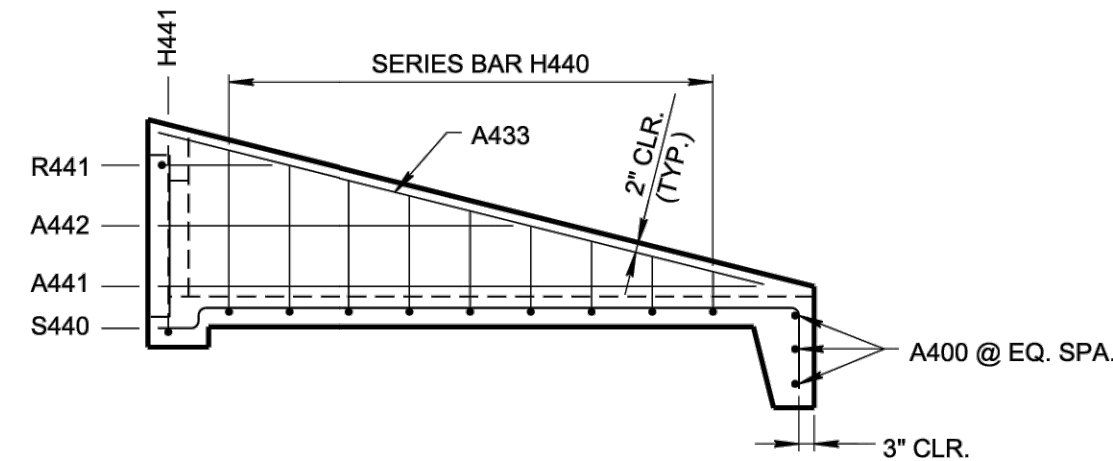
ISOMETRIC VIEW

NOTE: 3/4" CHAMFER REQUIRED ON ALL EXPOSED EDGES



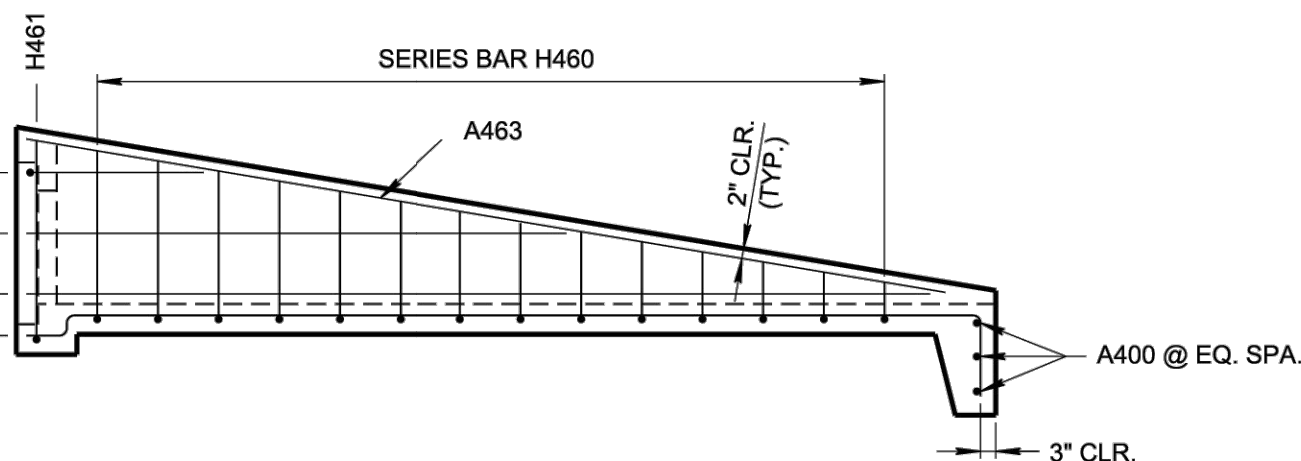
3:1 WINGWALL ELEVATION

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



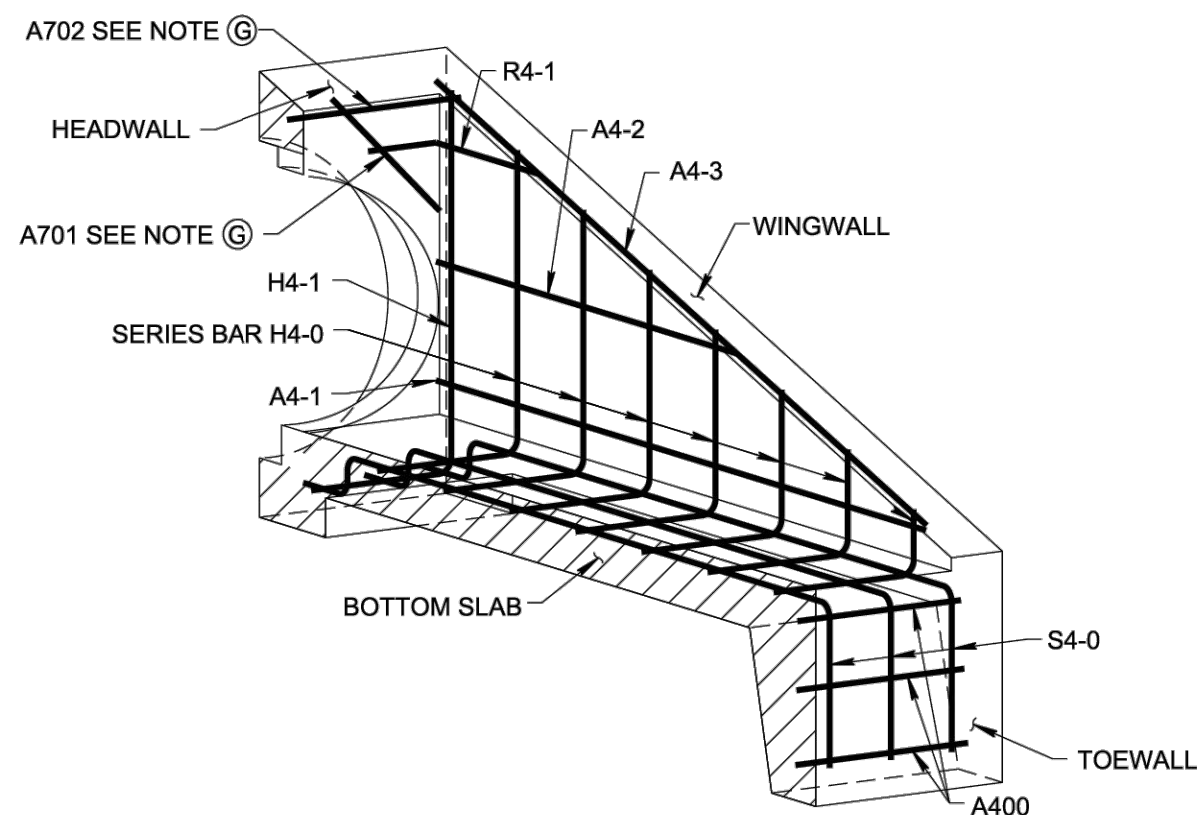
4:1 WINGWALL ELEVATION

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



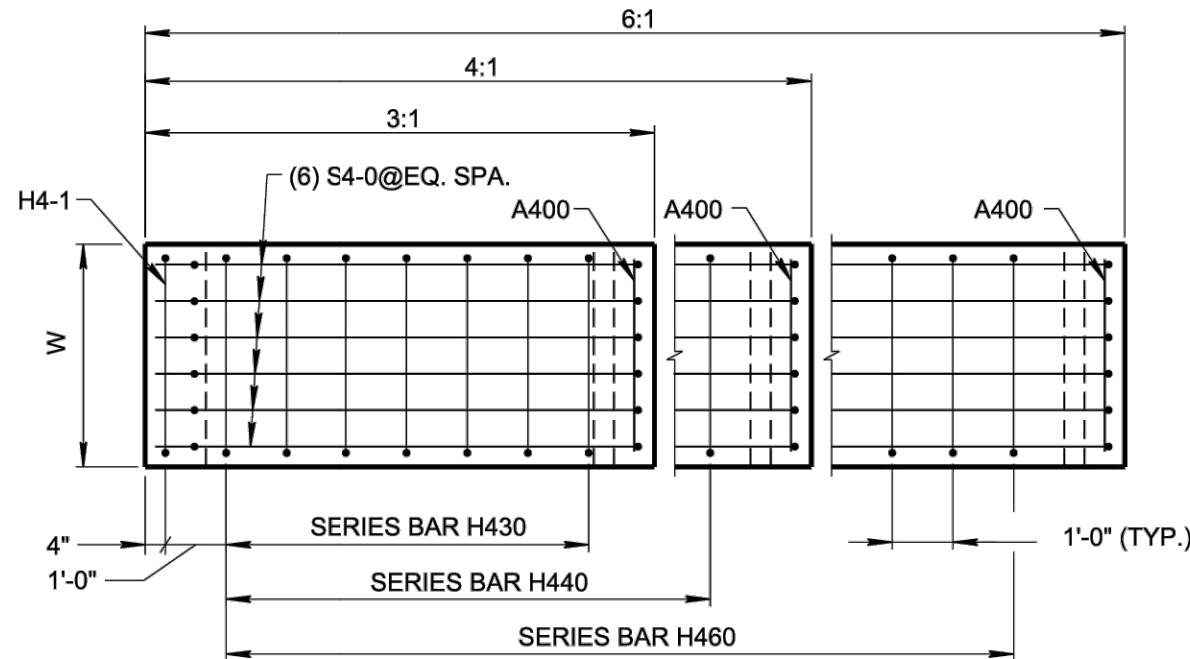
6:1 WINGWALL ELEVATION

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



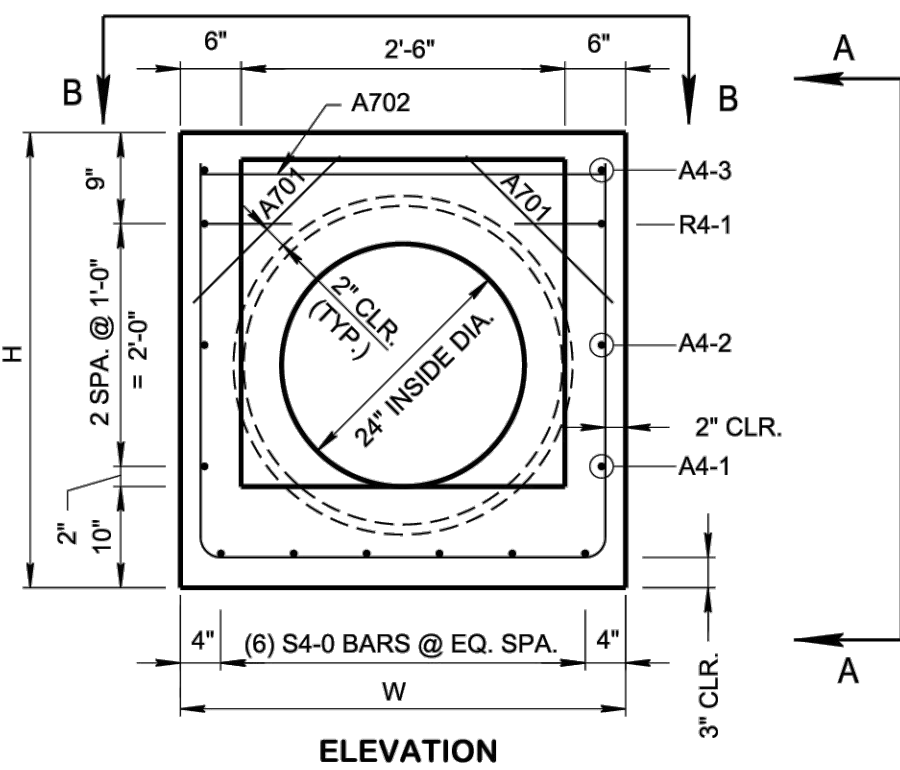
ISOMETRIC HALF-SECTION
SHOWING REINFORCEMENT

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

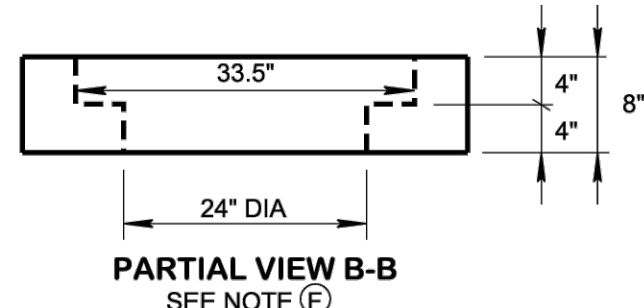


BOTTOM SLAB PLAN

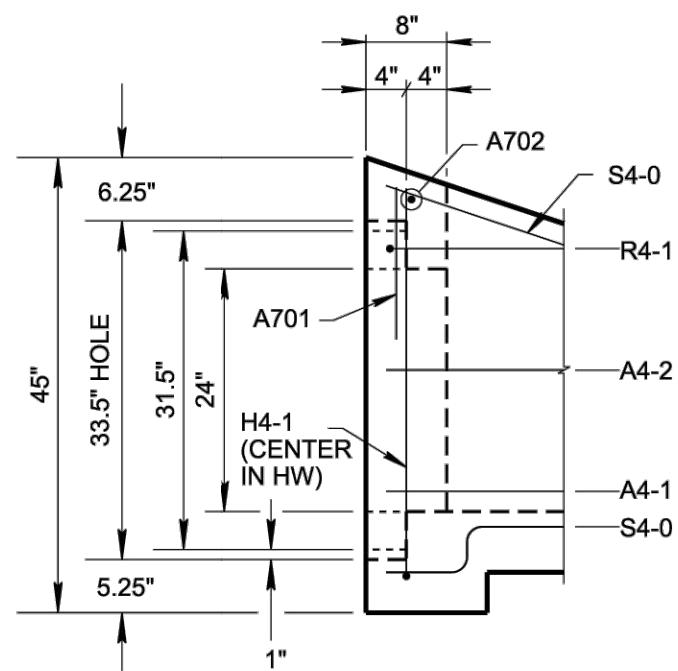
DIMENSIONS AND QUANTITIES FOR ONE ENDWALL 24" PIPE					
SLOPE	CONCRETE ENDWALL DIMENSIONS				ESTIMATED QUANTITIES
	H	L ₁	L ₂	W	CLASS "A" CONC. CU. YD. STEEL BAR REINF. LB.
3:1	3'-9"	8'-5"	8'-10 1/2"	3'-6"	1.28 124
4:1		11'-0"	11'-4"		1.61 153
6:1		16'-2"	16'-4 3/8"		2.26 215



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 (I)
- REV. 06-28-19: ADJUSTED A-A, B-B AND ELEVATION VIEWS. RENAMED AND REDREW SHEET.

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

DEPUTY CITY ENGINEER DATE CITY ENGINEER DATE

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 ML&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.

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



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

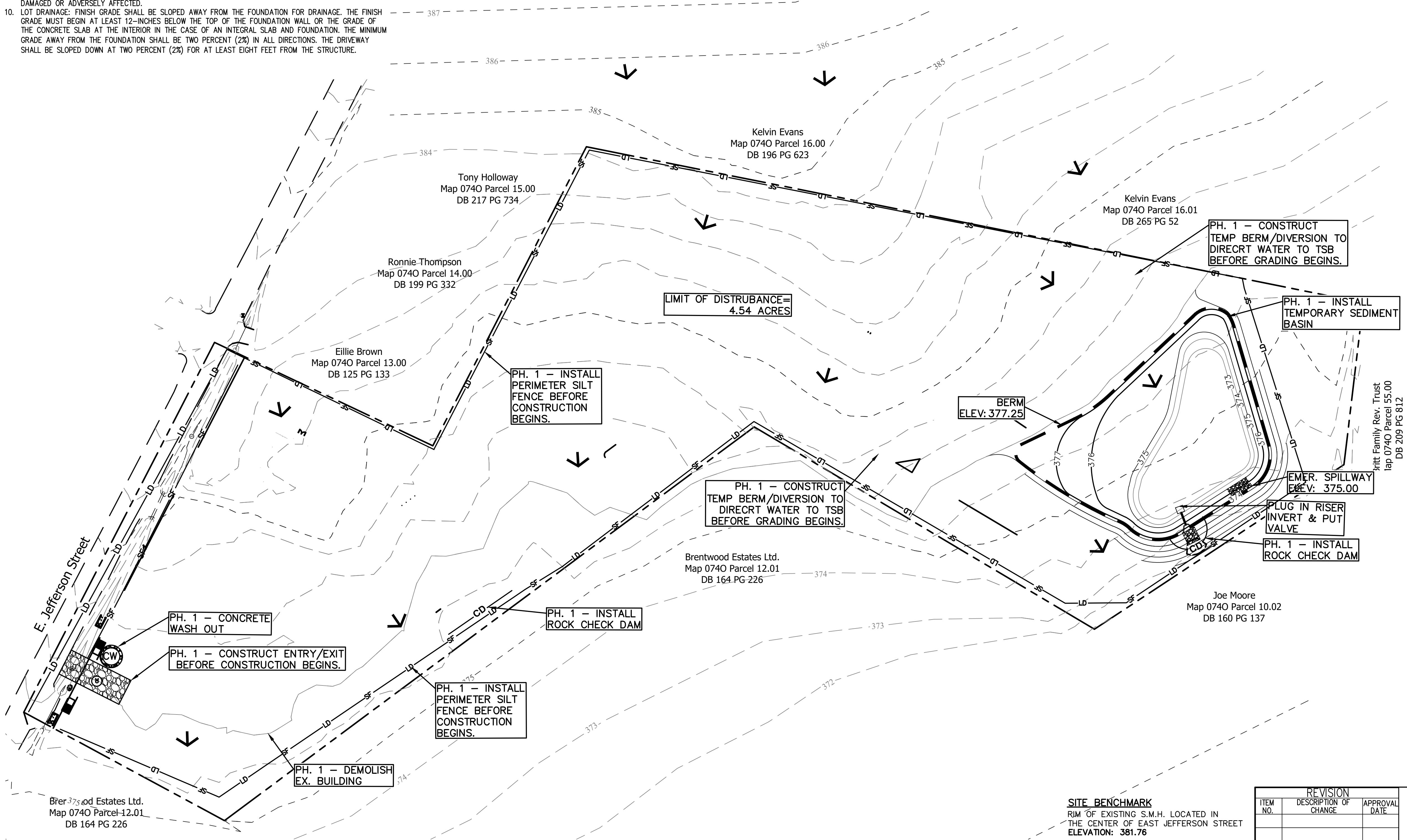
1. INSTALL PERIMETER SILT FENCE.
2. CONSTRUCT ENTRY/EXIT & CONC. WASHOUT
3. CONSTRUCT SEDIMENT TRAP AND TEMPORARY DIVERSION BERMS/DITCHES.
4. DEMOLISH EXISTING STRUCTURES.

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 PRACTICES 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.



SITE BENCHMARK

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

FLOOD NOTE:

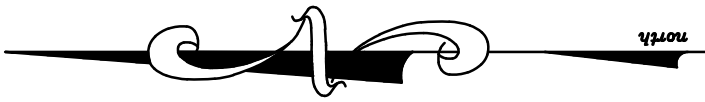
THIS PROPERTY SHOWN HEREON DOES NOT GRAPHICALLY FALL WITHIN A SPECIAL DESIGNATED FLOODZONE PER FEMA FIRM MAP PANEL 47157C0185F, DATED 09/27/2007

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.

DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.



GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

SHEET 01 OF 04

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

MAP LEGEND

SF — SILT FENCE

LOD — LIMIT OF DISTURBANCE



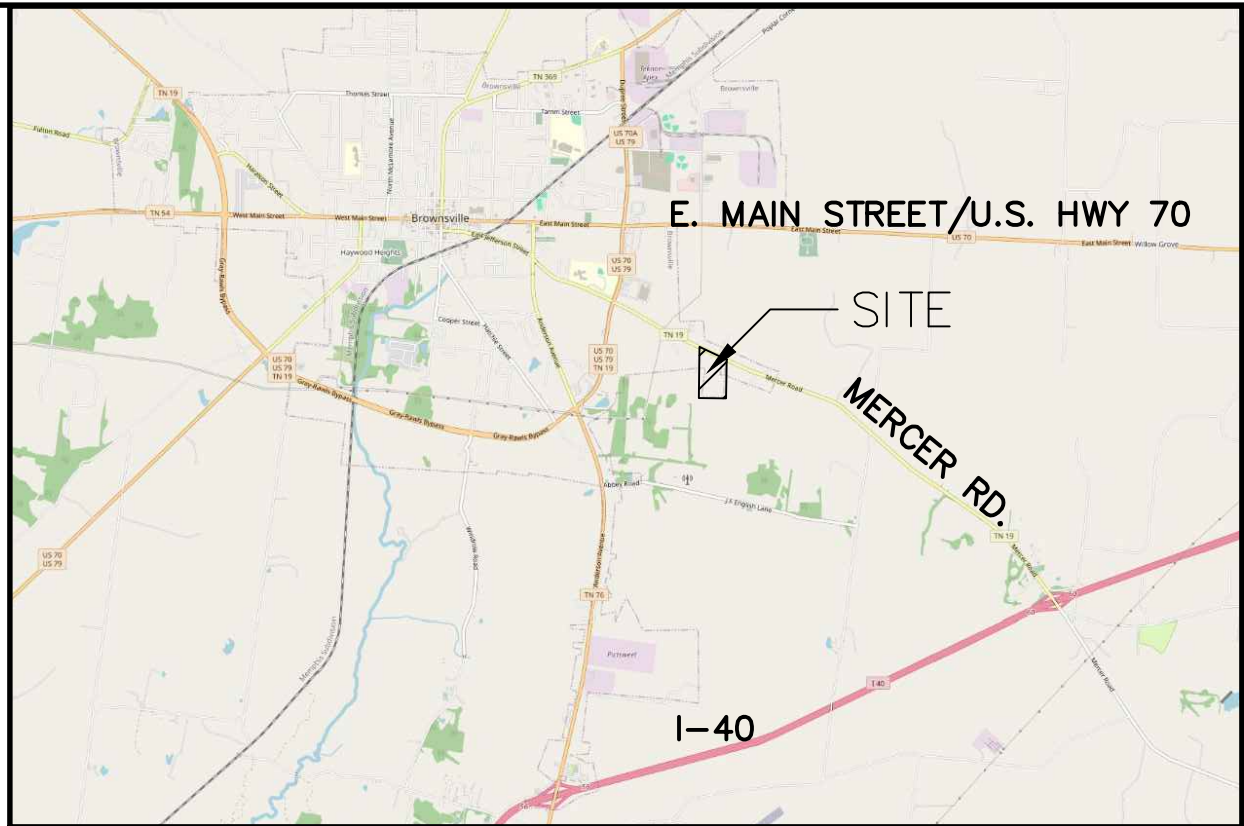
— CONCRETE WASHOUT



— CONSTRUCTION ENTRANCE

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 MLC&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

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 PRACTICES SEQUENCE

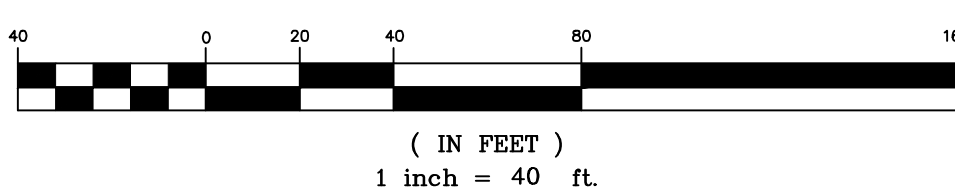
NOTE: UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS (AS APPLICABLE): TRAILER, PARKING, LAY DOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, MASON'S AREA, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC, IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION 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/SEEDDED AREA AT COMPLETION	2.99 ACRES
TOTAL AREA	5.12 ACRES



GRAPHIC SCALE



SHEET 02 OF 04

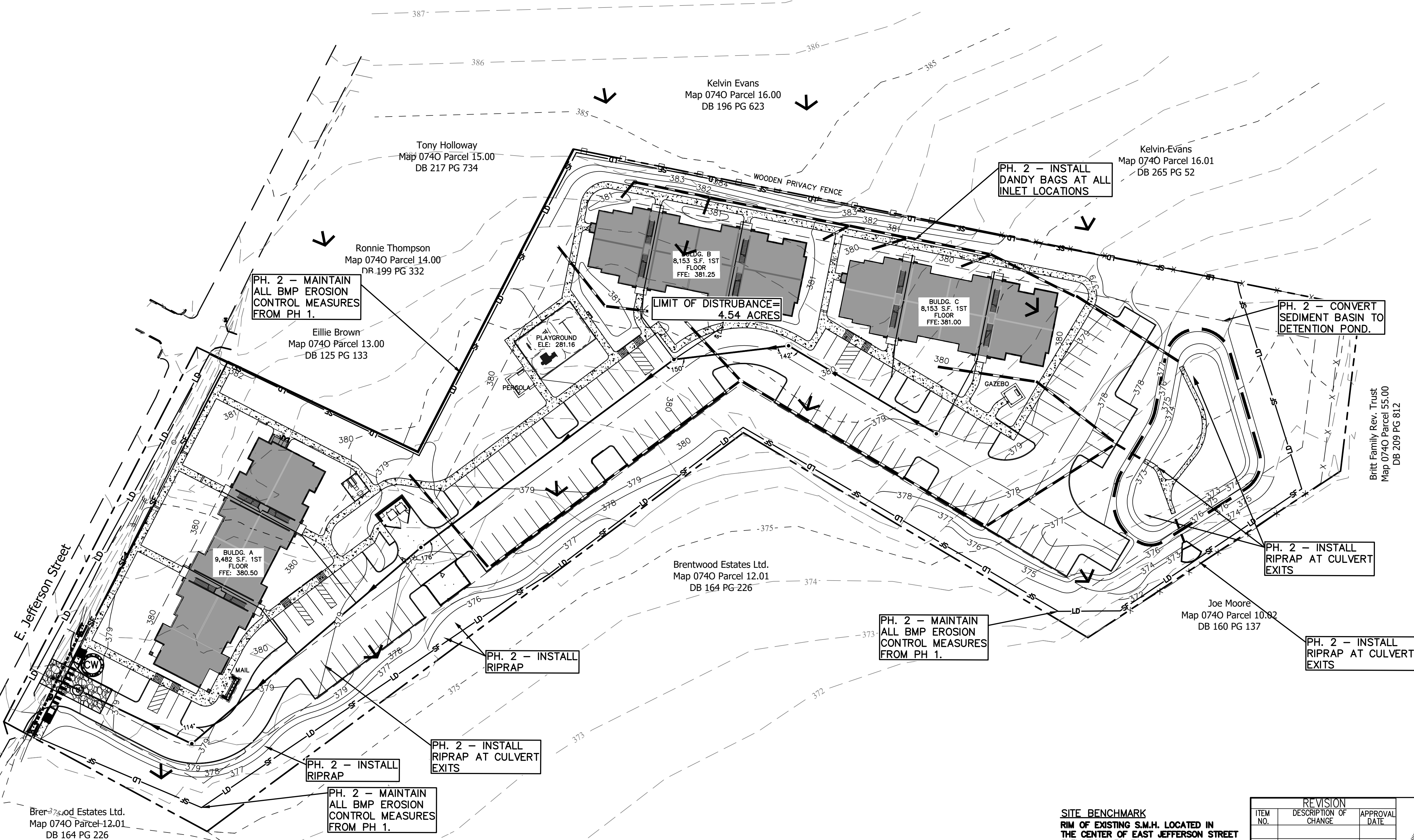
EROSION PREVENTION & SEDIMENT CONTROL PH. 2

DIVISION OF ENGINEERING
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



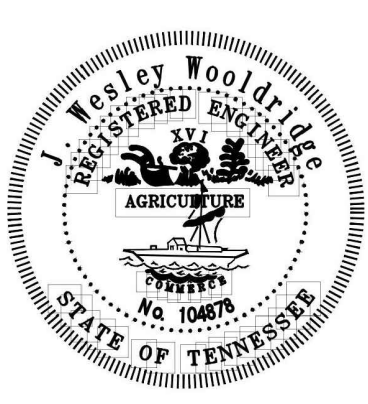
SITE BENCHMARK

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



THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.

DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.

MAP LEGEND

SF — SILT FENCE

LOD — LIMIT OF DISTURBANCE



— CONCRETE WASHOUT



— CONSTRUCTION ENTRANCE

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 SEED, 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 ML&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.

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%
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

—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 3 SEQUENCING

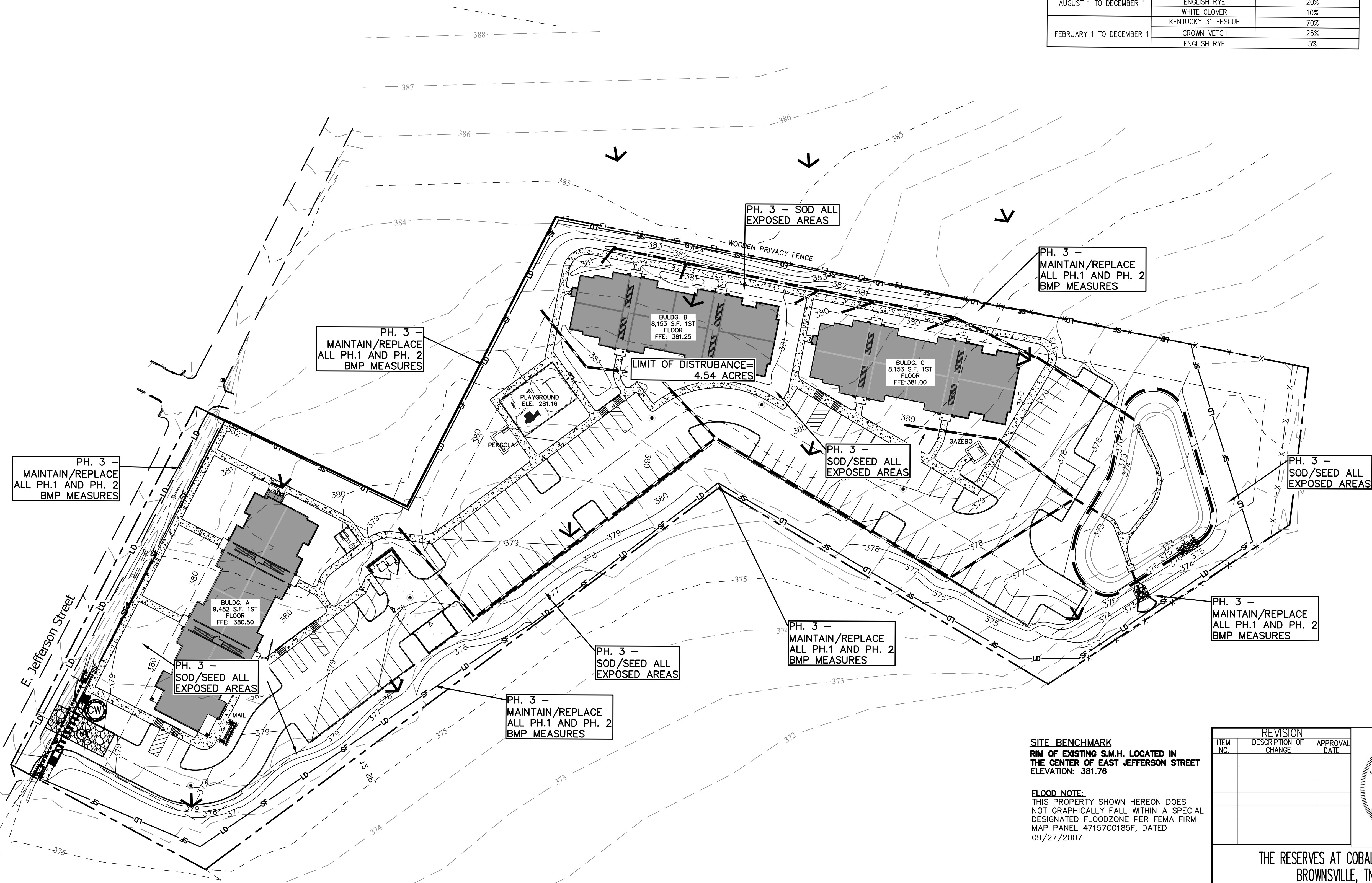
1. MAINTAIN/REPLACE/REPAIR ALL BMP MEASURES FROM PH. 1 AND PH. 2.
2. BEGIN/COMPLETE ALL SEEDING AND SODDING OPERATIONS
3. REMOVE SILT FENCE BARRIER AND TEMPORARY EROSION CONTROL MEASURES
4. REMOVE CONSTRUCTION EXIT AND CLEAN UP COMPLETED SITE

LIMITS OF DISTURBANCE

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 PRACTICES 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.



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

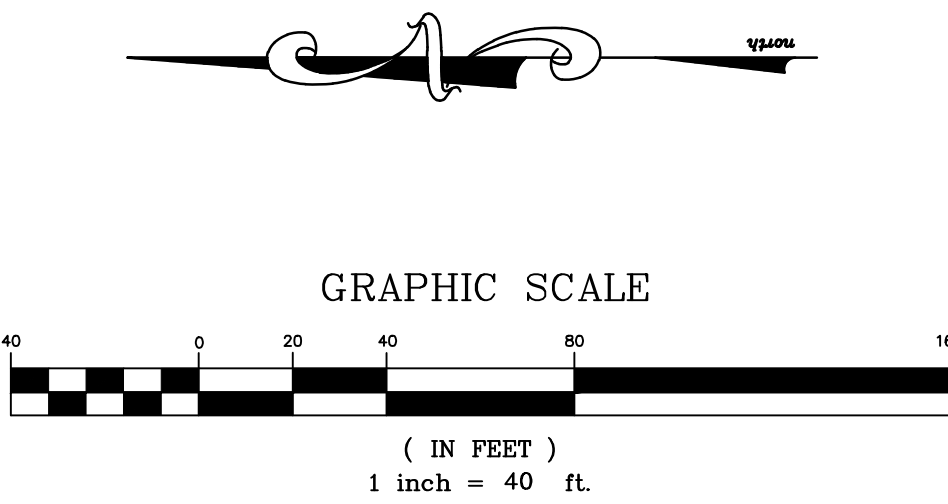
FLOOD NOTE:
THIS PROPERTY SHOWN HEREON DOES NOT GRAPHICALLY FALL WITHIN A SPECIAL DESIGNATED FLOODZONE PER FEMA FIRM MAP PANEL 47157C0185F, DATED 09/27/2007

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.

DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.



SHEET 03 OF 04

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'

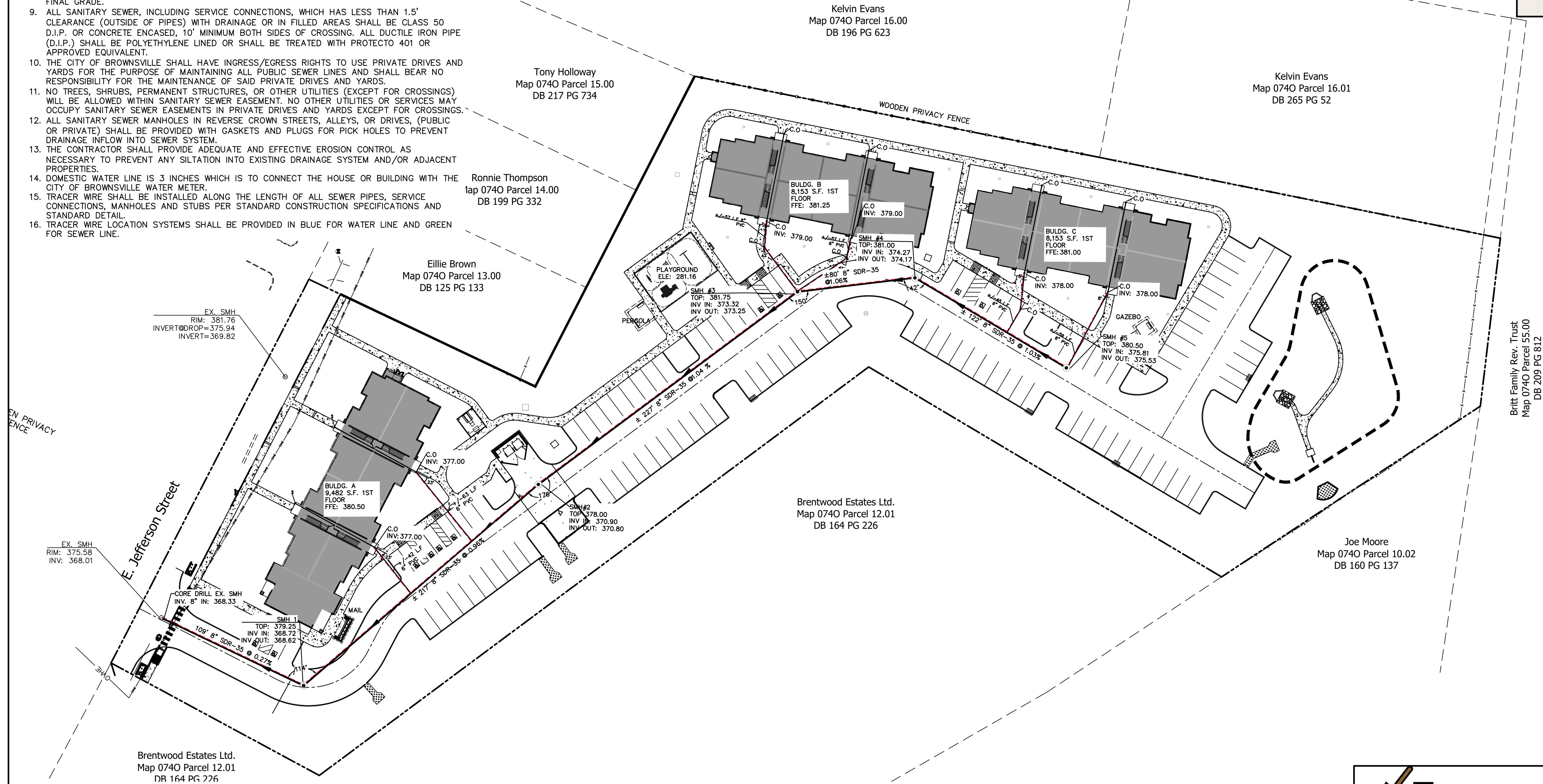
DEPUTY CITY ENGINEER _____ DATE _____ CITY ENGINEER _____ DATE _____

- 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

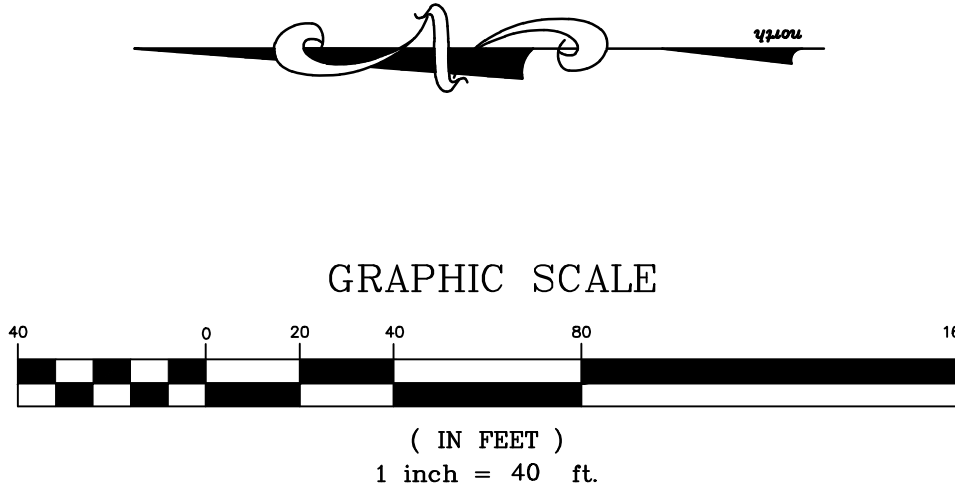


REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.

DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.



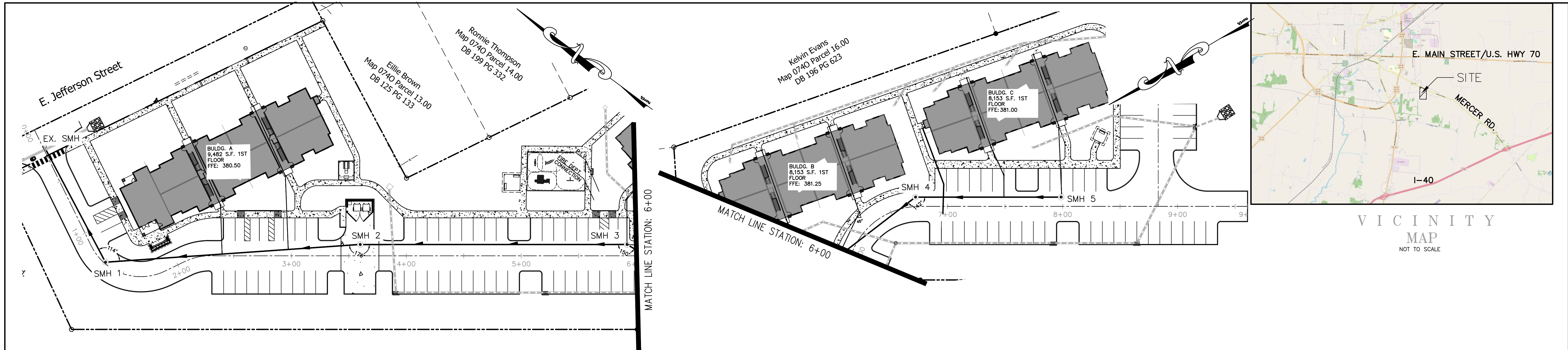
SHEET 01 OF 04

DIVISION OF ENGINEERING
SANITARY SEWER PLAN
LOCATION: 1616 EAST JEFFERSON STREET
BROWNSVILLE, TN.

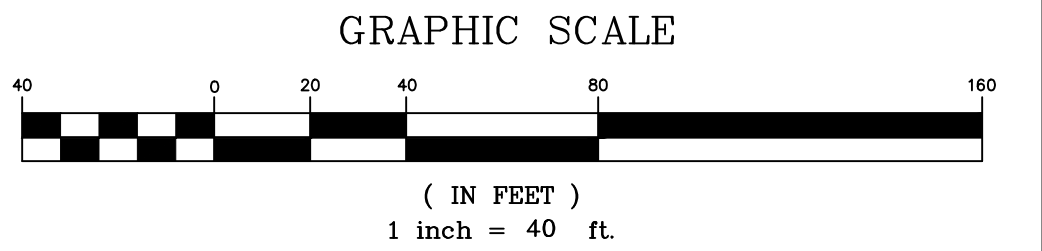
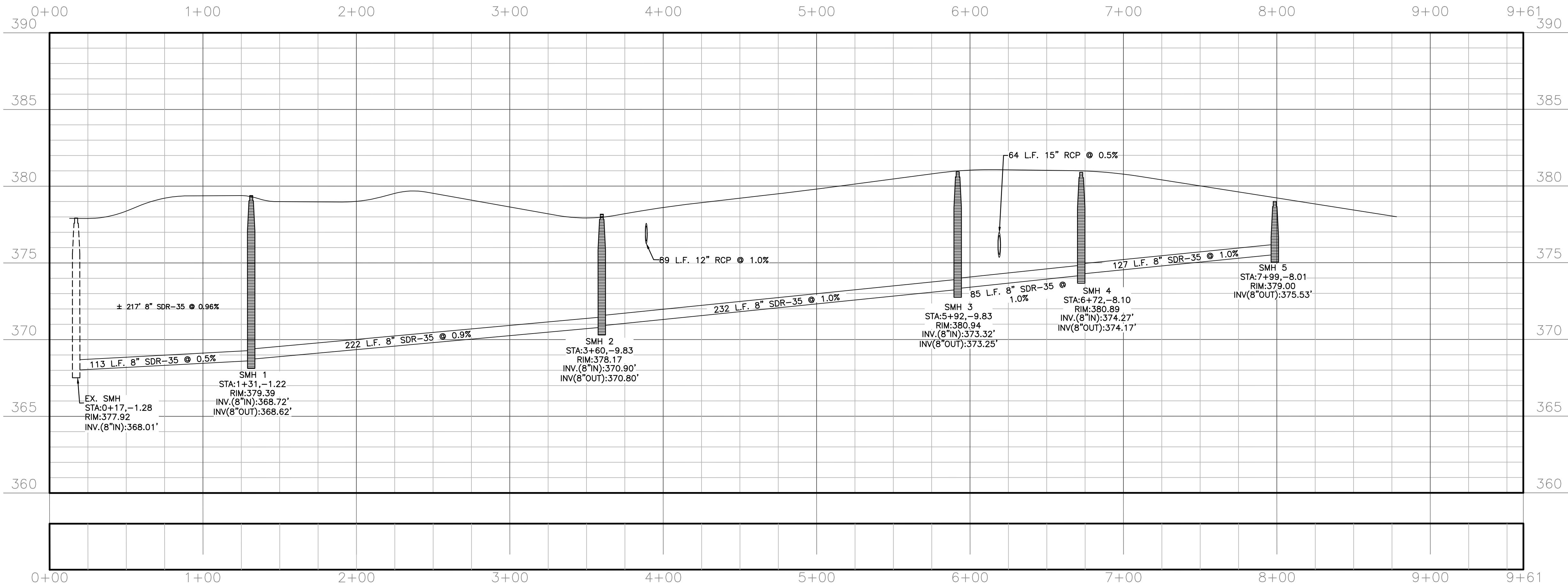
SURVEY: SEAS DATE: 10/24 BOOK: _____

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

DEPUTY CITY ENGINEER _____ DATE _____ CITY ENGINEER _____ DATE _____



ROAD CENTER PROFILE



SITE BENCHMARK
RIM OF EXISTING S.M.H. LOCATED IN THE CENTER OF EAST JEFFERSON STREET
ELEVATION: 361.76

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



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

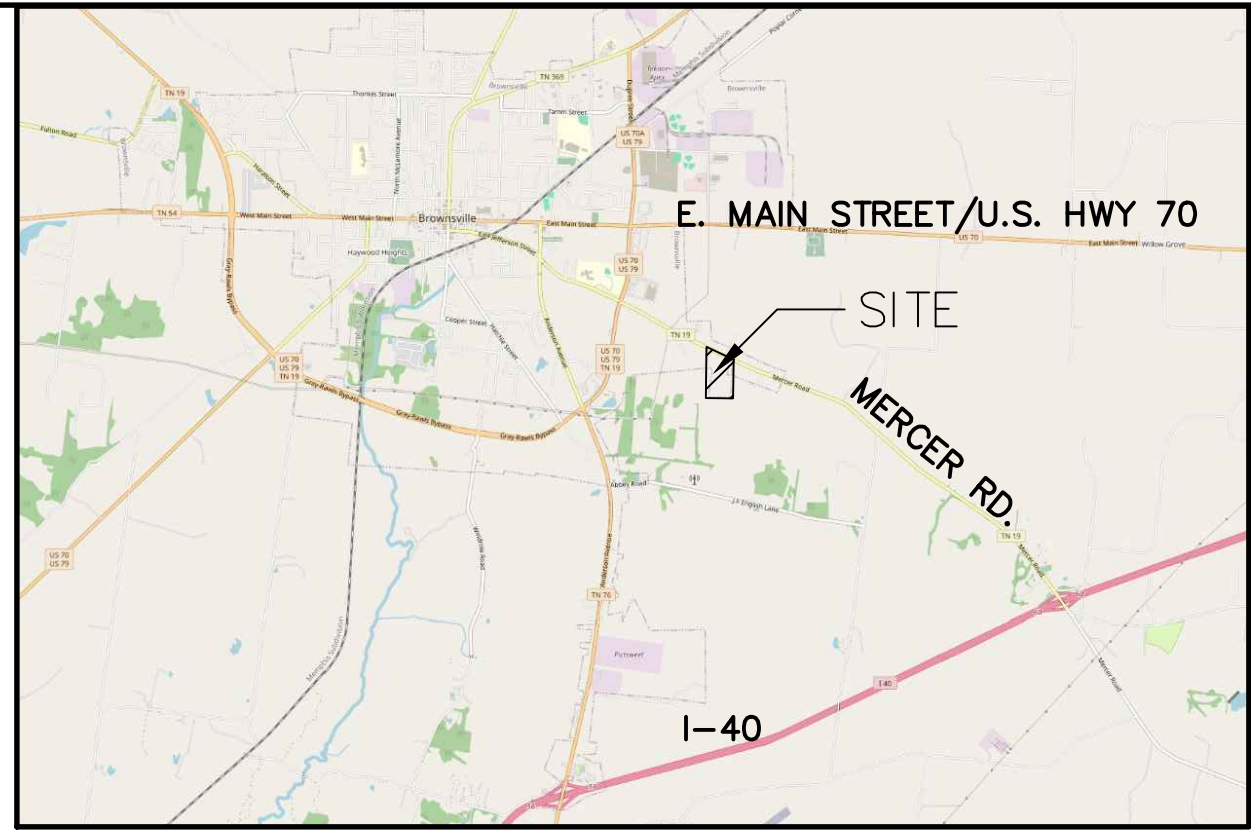
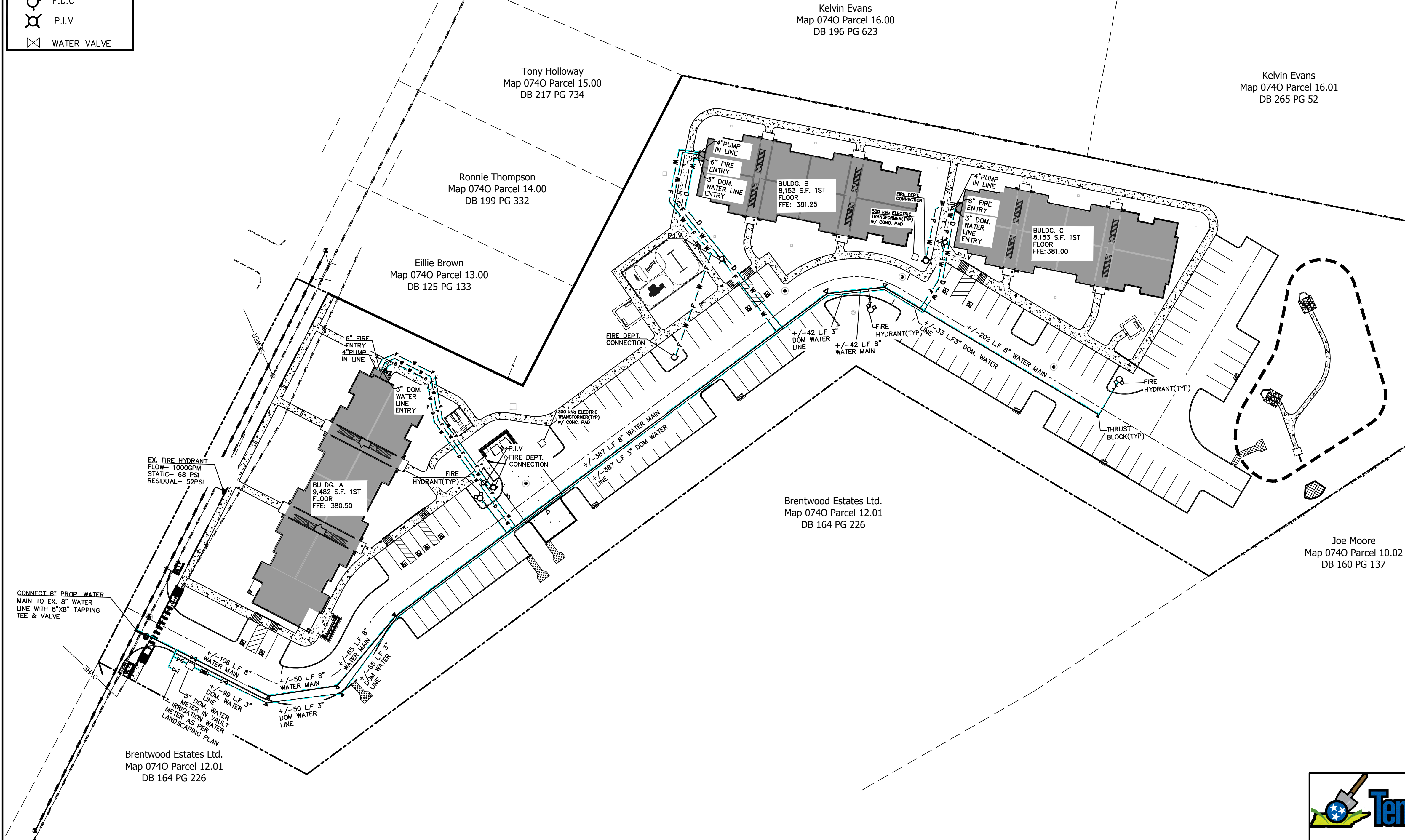
SHEET 01 OF 01

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 _____

LEGEND	
SEWER LINE	—
WATER LINE	—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

- 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)



GRAPHIC SCALE



(IN FEET)
1 inch = 40 ft.

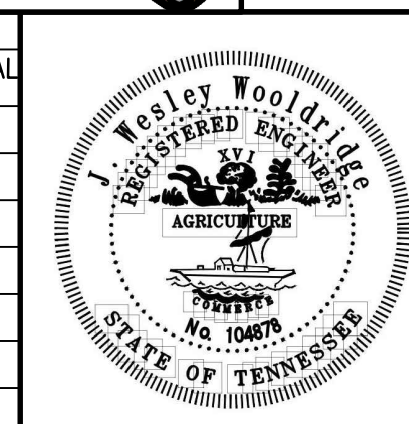
SHEET 02 OF 04

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



THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.

DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.

DIVISION OF ENGINEERING
WATER PLAN

LOCATION: 1616 EAST JEFFERSON STREET
BROWNSVILLE, TN.

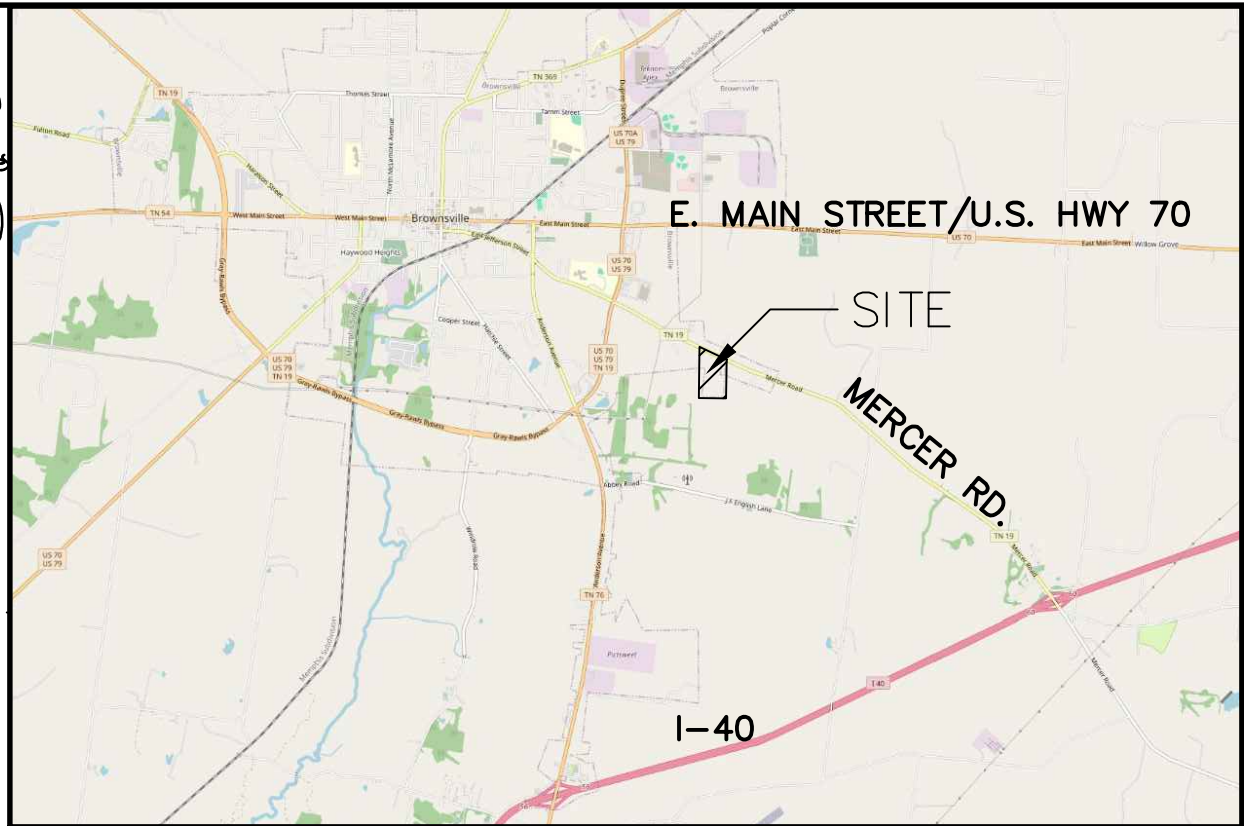
SURVEY: SEAS DATE: 10/24/2024 BOOK: _____

DESIGN: _____ DATE: 01/25/2025 CKD: _____ DATE: 01/25/2025 SCALE: _____

DEPUTY CITY ENGINEER _____ DATE _____ CITY ENGINEER _____ DATE _____

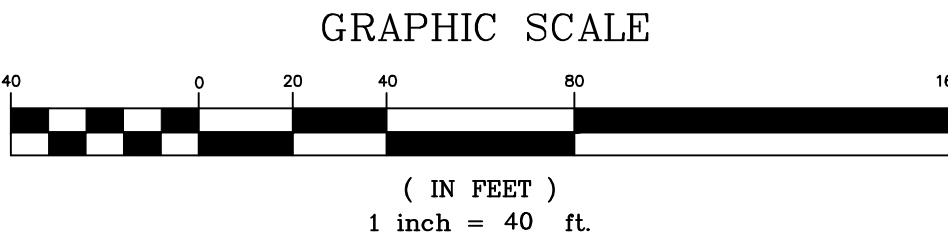
LEGEND	
SEWER LINE	—
WATER LINE	—W—W—W—
PROPERTY LINE	- - - - -
TRACER WIRE (WATER)	- - - - -
TRACER WIRE (SEWER)	- - - - -

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



VICINITY MAP NOT TO SCALE

- 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)



SHEET 03 OF 04

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



REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



THE RESERVES AT COBALT CIRCLE
BROWNSVILLE, TN.

DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.

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

Kelvin Evans
Map 0740 Parcel 16.00
DB 196 PG 623

Kelvin Evans
Map 0740 Parcel 16.01
DB 265 PG 52

Tony Holloway
Map 0740 Parcel 15.00
DB 217 PG 734

Ronnie Thompson
Map 0740 Parcel 14.00
DB 199 PG 332

Eillie Brown
Map 0740 Parcel 13.00
DB 125 PG 133

Brentwood Estates Ltd.
Map 0740 Parcel 12.01
DB 164 PG 226

Joe Moore
Map 0740 Parcel 10.02
DB 160 PG 137

Brentwood Estates Ltd.
Map 0740 Parcel 12.01
DB 164 PG 226

WOODEN PRIVACY FENCE

CONNECT 8" PROP. WATER MAIN TO EX. 8" WATER LINE WITH 8"x8" TAPPING TEE & VALVE

EX. FIRE HYDRANT FLOW- 1000GPM STATIC- 68 PSI RESIDUAL- 52PSI

3" DOM. WATER METER IN VAULT METER AS PER LANDSCAPING PLAN

300 KVA ELECTRIC TRANSFORMER (TYP) 4" CONC. PAD

FIRE DEPT. CONNECTION

PERGOLA

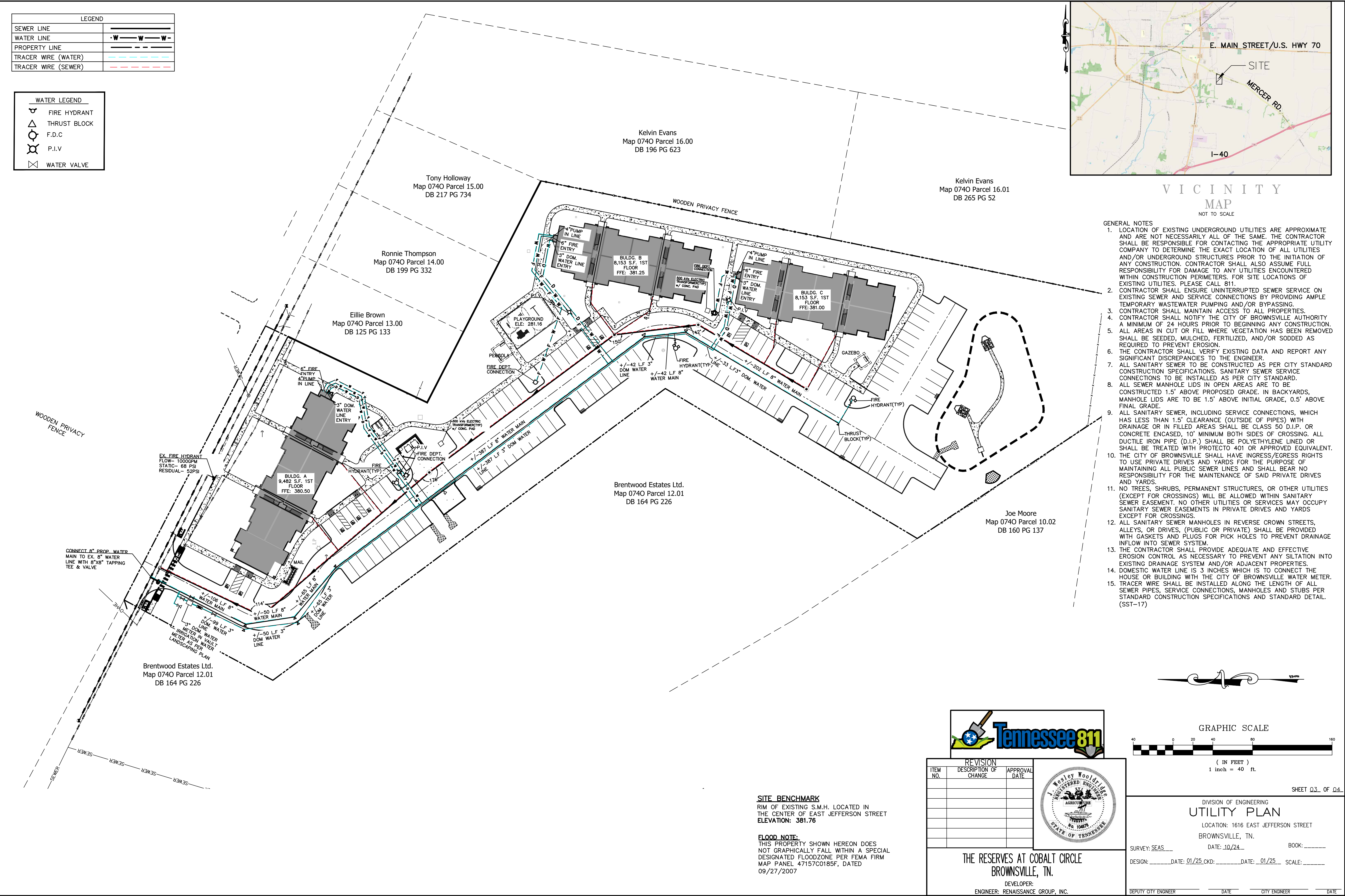
FIRE DEPT. CONNECTION

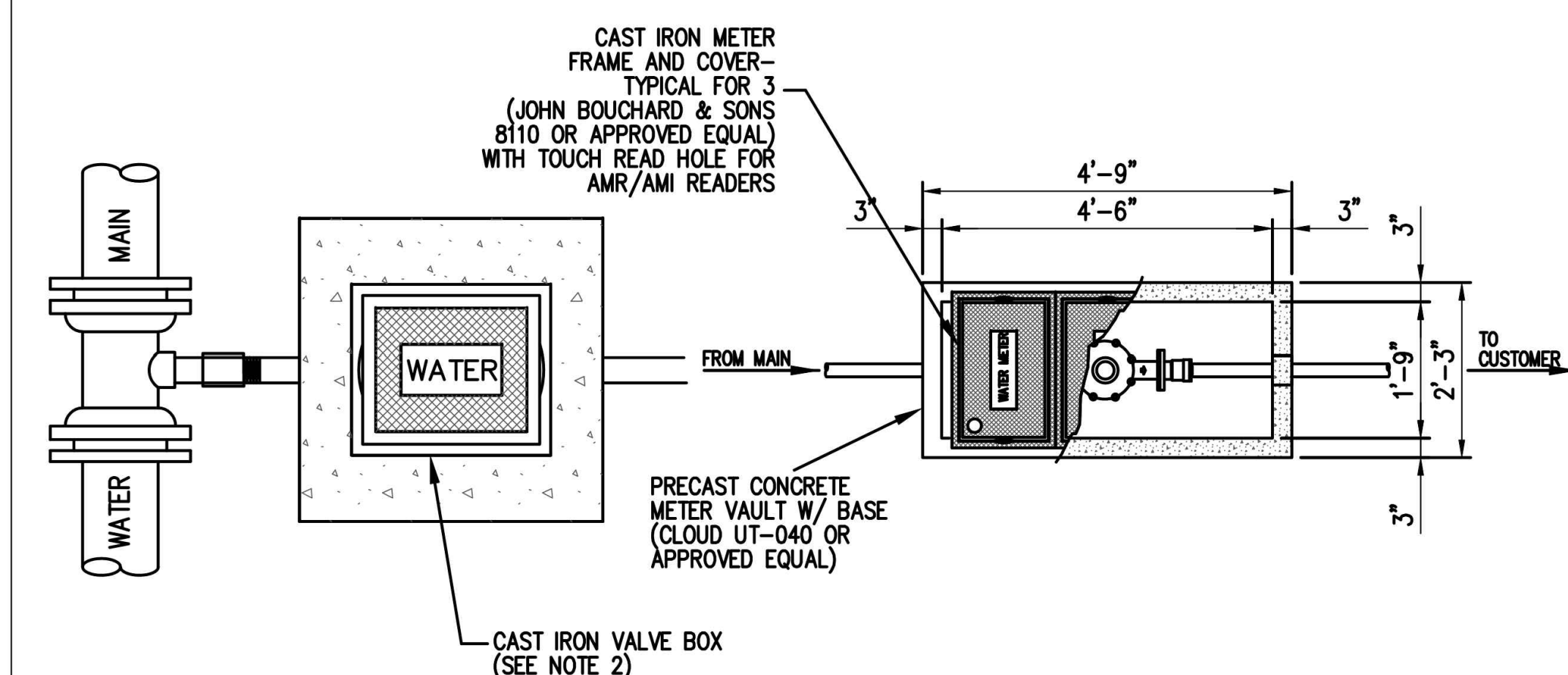
PLAYGROUND ELE: 281.16

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

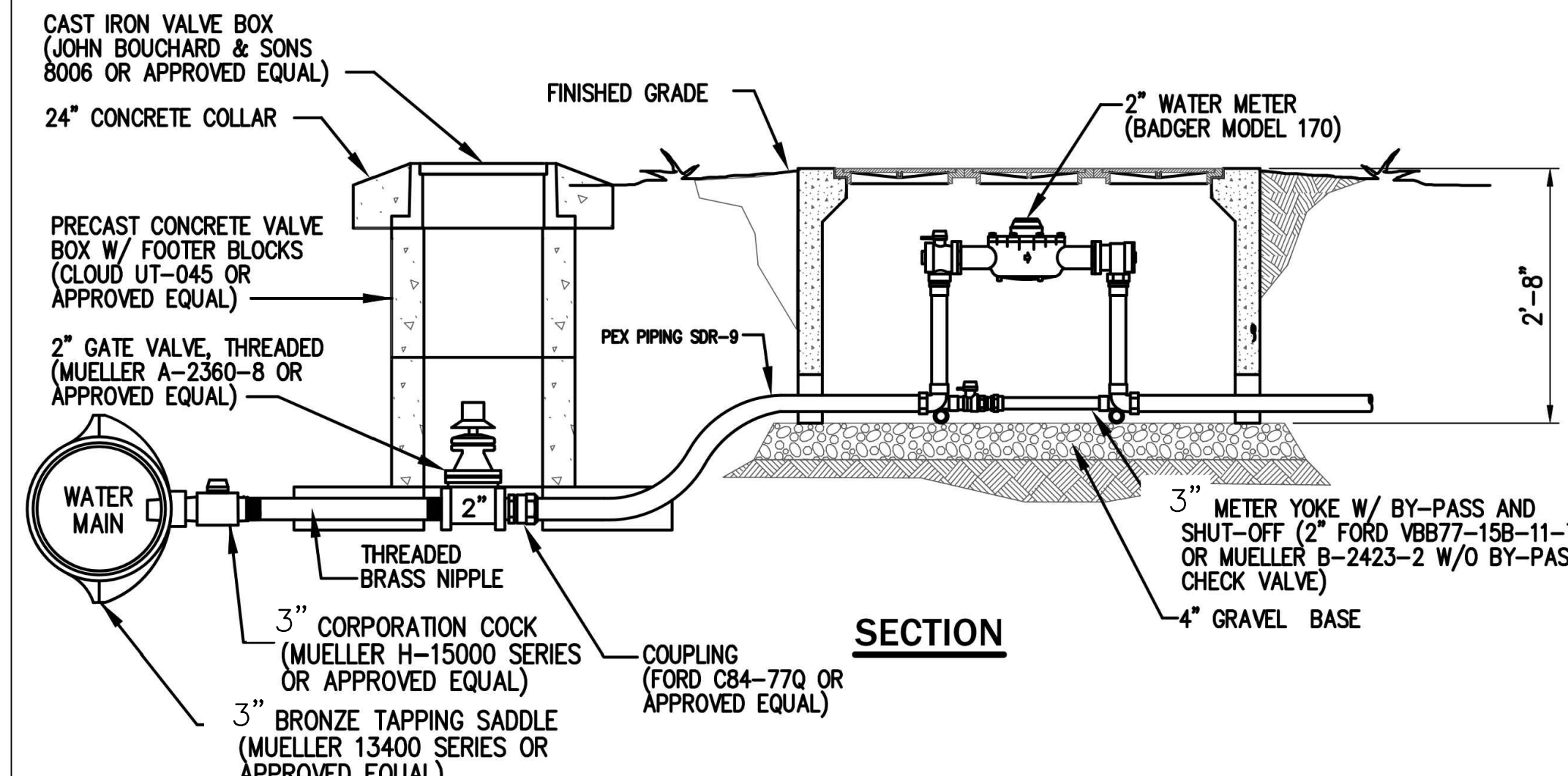
BULDG. C 8,153 S.F. 1ST FLOOR FFE: 381.00

BULDG. A 9,482 S.F. 1ST FLOOR FFE: 380.50





PLAN



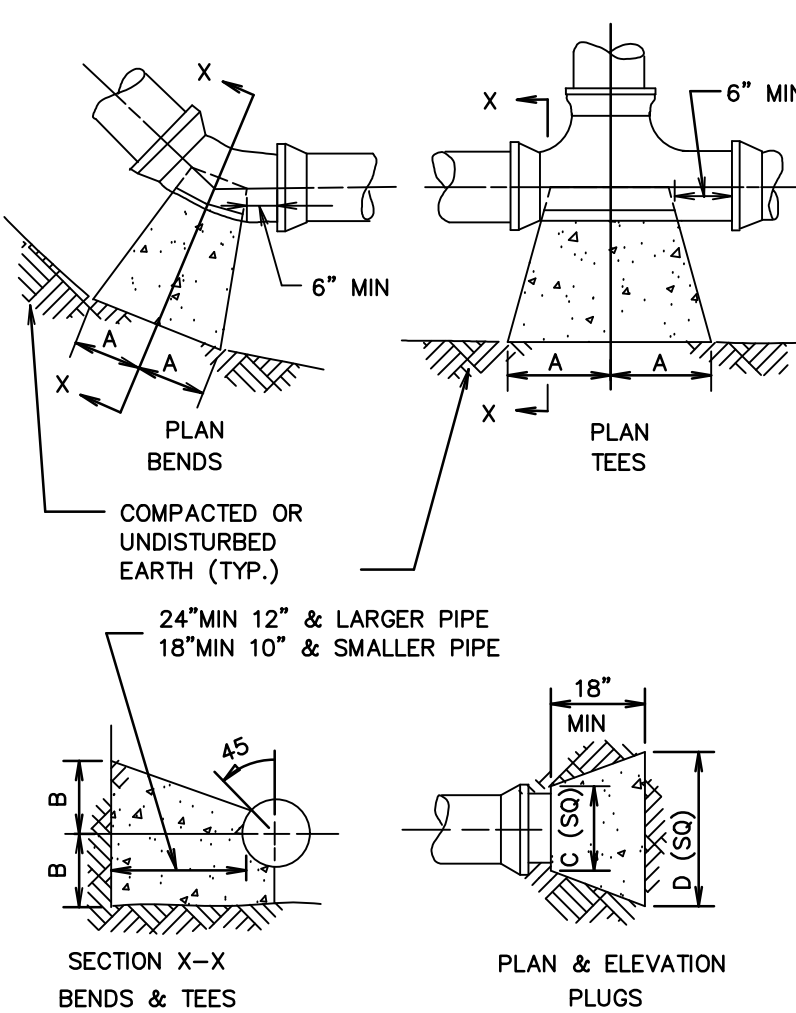
SECTION

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

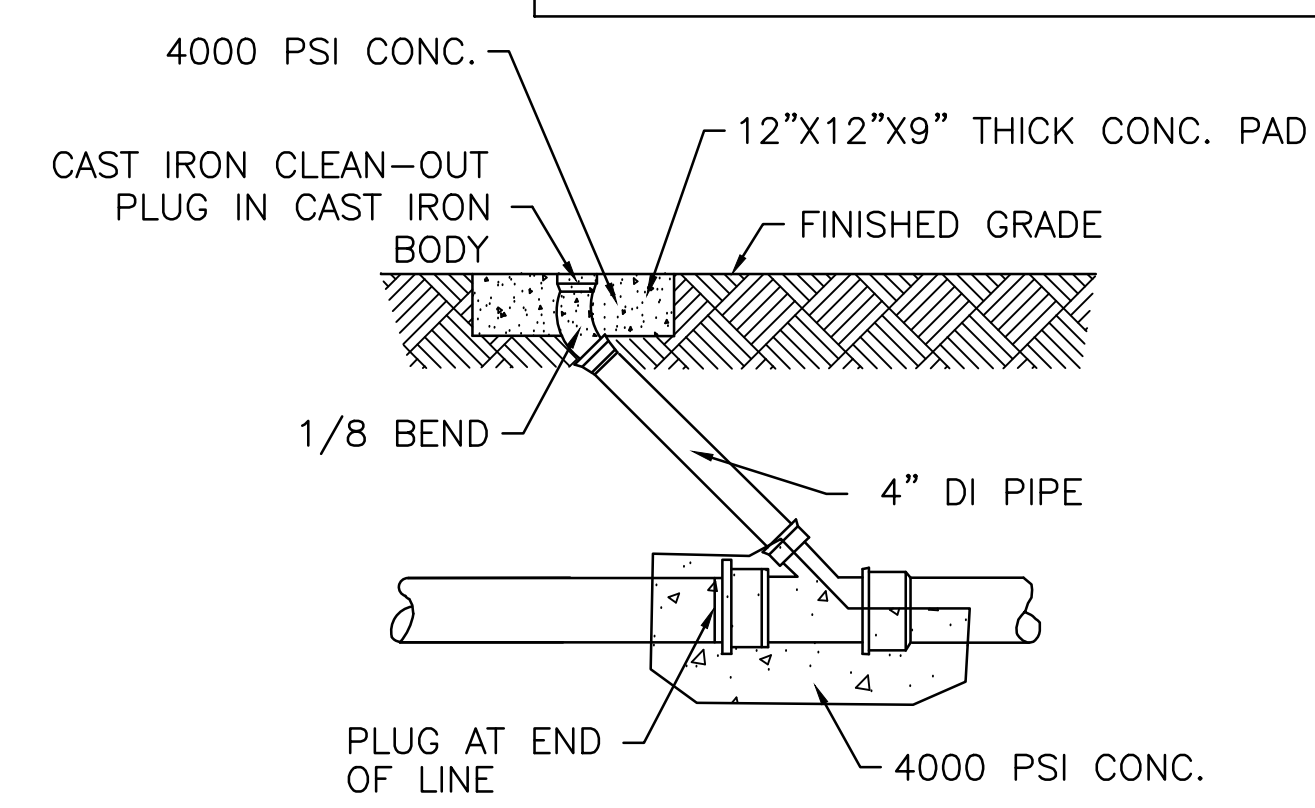
N.T.S.

W-7.5C



SIZE	1/4 BENDS			1/8 BENDS			1/16 BENDS			TEES			PLUGS		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
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.

REVISIONS			
NO.	DATE	BY	REMARKS

CONVERSIONS	
ENGLISH	METRIC

MH COATING NOTE:
OUTSIDE COATING OF MANHOLE SHALL BE WITH ASPHALTIC BLACK, AS AVAILABLE AT UNITED PAINT COMPANY. METHOD OF APPLICATION SHALL BE PERFORMED BY BRUSH OR BY LOW PRESSURE SPRAYER.

JOINT SEALANT: CONCRETE MORTAR SHALL BE USED TO SEAL JOINTS AFTER THE INSTALLATION OF AN APPROVED GASKET MATERIAL BETWEEN ALL PRECAST MANHOLE SECTIONS.

BASE SECTIONS: MANHOLE BOTTOM SHALL NOT BE POURED UNTIL PRECAST BASE SECTION OF MANHOLE AND PIPE STUBS OUT 8 IN ARE IN PLACE. PIPE STUBS OUTSIDE OF MANHOLE SHALL HAVE A MINIMUM LENGTH OF 12" AND A MAXIMUM LENGTH OF 15" FROM OUTSIDE OF MANHOLE TO THE FIRST JOINT OF PIPE. CONCRETE USED TO FORM BASES AND INVERTS SHALL BE 3,000 p.s.i.

SUBSTITUTES: POURED-IN-PLACE MANHOLES MAY BE SUBSTITUTED FOR PRECAST MANHOLES, PROVIDED A FORMAL WRITTEN REQUEST HAS BEEN SUBMITTED TO & APPROVED BY THE ENGINEER OF DESIGN. ALL POURED-IN-PLACE MANHOLES SHALL CONFORM TO CITY OF MEMPHIS STANDARD DRAWINGS NO. SST-6 AND SST-7.

MANHOLE STEPS: THE FOLLOWING MANHOLE STEPS HAVE BEEN APPROVED FOR USE:
 1. TOWER GROVE MH STEP NO. 8-1096 BY TOWER GROVE FOUNDRY CO.
 2. M.A. MANHOLE STEPS BY M.A. INDUSTRIES, INC., EAST POINT, GA.
 3. WEDGE-LOK SAFETY STEP BY DELTA PIPE PRODUCTS, INC., ATLANTA, GA.

CITY OF MEMPHIS
DIVISION OF PUBLIC WORKS

DESIGN STANDARD
FOR
PRECAST SANITARY MANHOLE

Principal Civil Engr. *[Signature]* DATE *1-25-80*
 Deputy Dir./Civil Engr. *[Signature]* DATE *1-25-80*

DWS. NO. SST-1

REVISIONS			
NO.	DATE	BY	REMARKS
1	1-17-92	J.W.	ADD NOTE

NOTES:
 1. BACKFILL & COMPACTION PER CITY SPEC.
 2. REQUIRED BEDDING - CLASS B.2
 3. MATERIAL: STANDARD-PVC CL SDR 26, IN FILL SECTION USE-DIP CL 50

* USE THE CONTROLLING OF THE TWO DIMENSIONS.

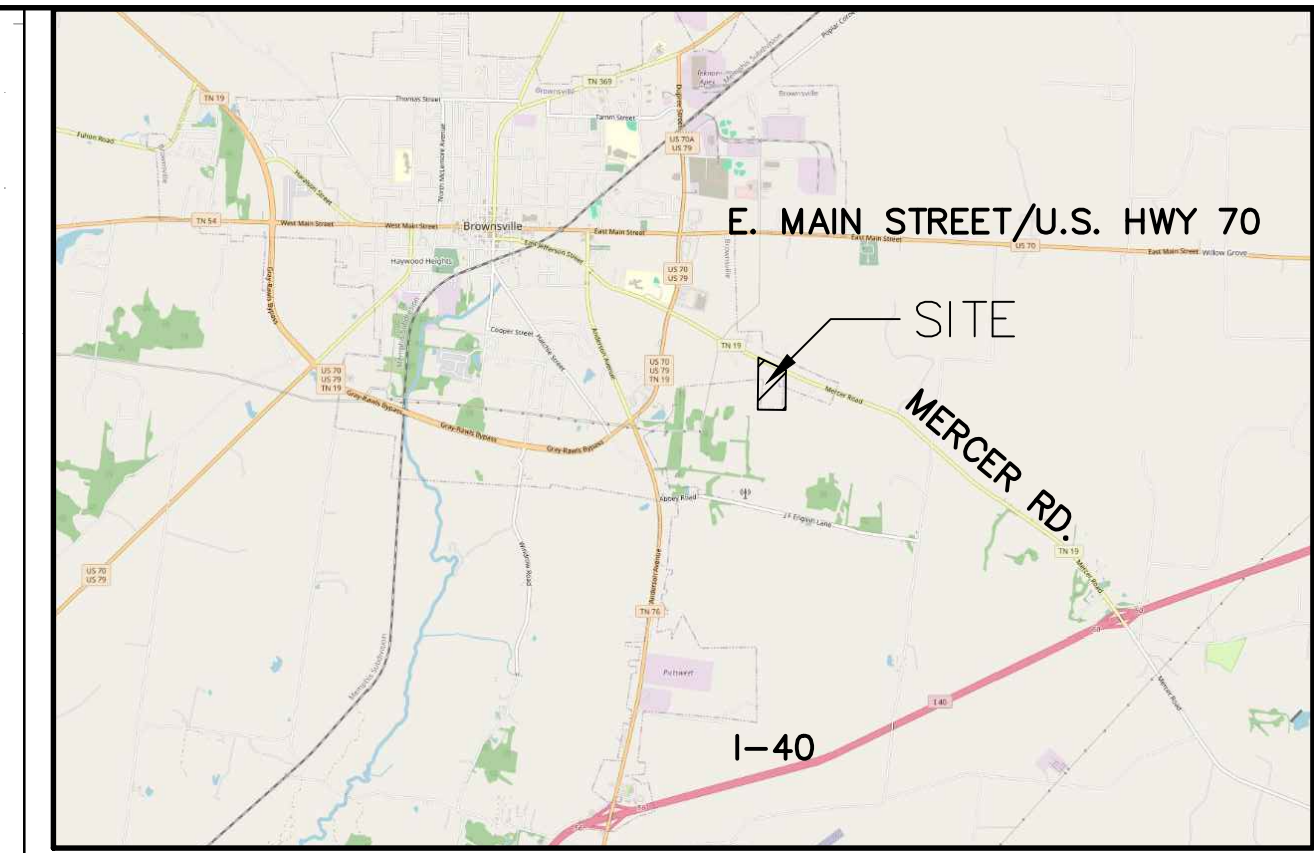
CITY OF MEMPHIS
DIVISION OF ENGINEERING

DESIGN STANDARD
FOR
SERVICE CONNECTION

SEWER DESIGN

Drawn: J.L.W. DATE: 4/81 SCALE: N.T.S.
 Design Engineer: *[Signature]* DATE: *10/24/81*
 City Engineer: *[Signature]* DATE: *10/24/81*

DWS. NO. SST-16



VICINITY
MAP
NOT TO SCALE

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE

THE RESERVES AT COBALT CIRCLE
BROOKVILLE, TN.

DEVELOPER:
ENGINEER: RENAISSANCE GROUP, INC.

DIVISION OF ENGINEERING

UTILITY DETAILS

LOCATION: 1616 EAST JEFFERSON STREET
BROOKVILLE, TN.

SURVEY: SEAS

DESIGN: _____ DATE: 01/25/80

BOOK: _____

DEPUTY CITY ENGINEER _____

CITY ENGINEER _____

LEGEND

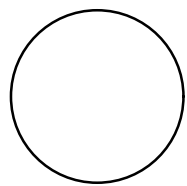
- TEMPORARY TRAFFIC CONTROL SIGN

XXXX - MUTCD SIGN DESIGNATION
SIGN DIMENSIONS - XX x XX - TEMPORARY TRAFFIC CONTROL SIGN LOCATION



- 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



- FLEXIBLE DRUM



W20-1
48"X48"

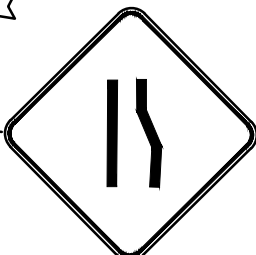


G20-2
36"X 18"

CROFTON ST

E. Jefferson Street

BRENTWOOD DR



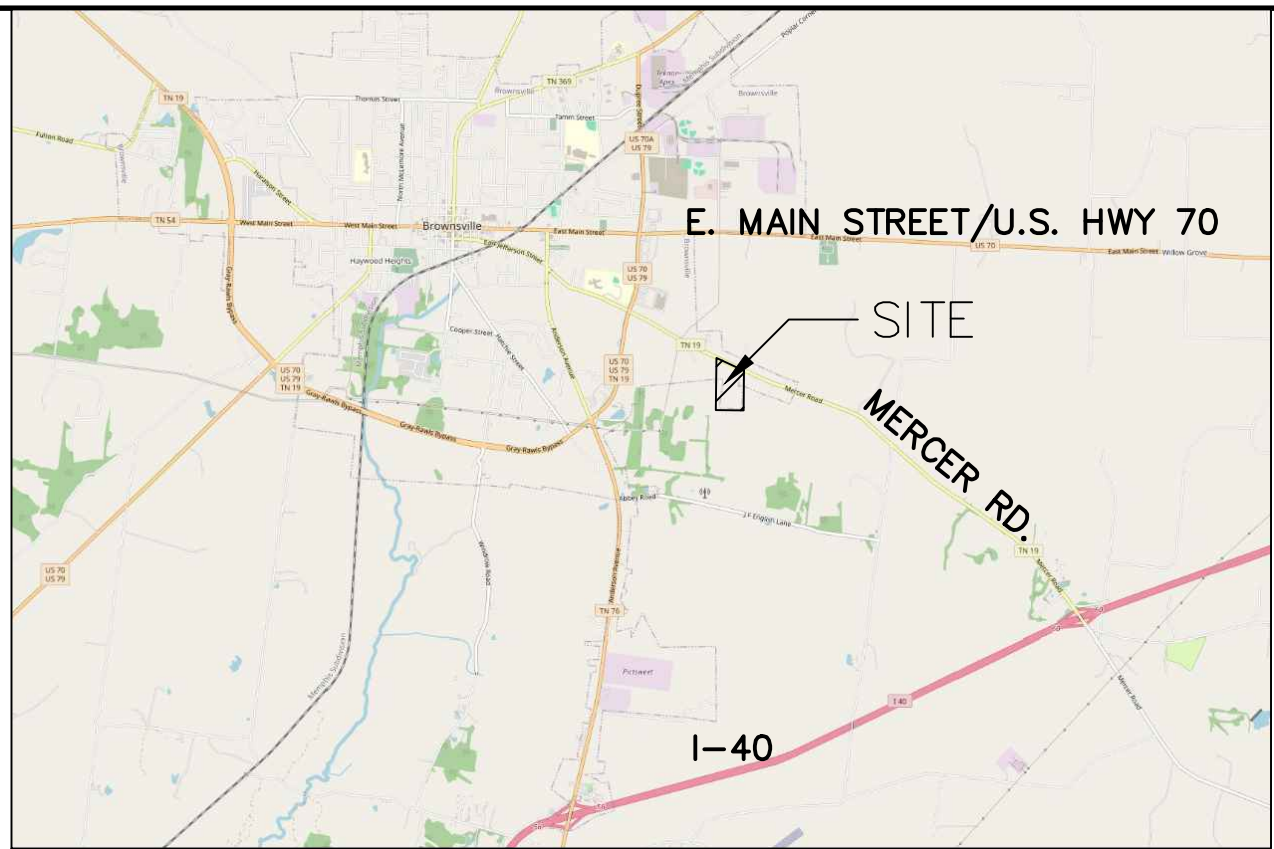
W4-2R
48"X 48"



W20-5R
48"X48"



W20-1
48"X48"



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.



GRAPHIC SCALE



(IN FEET)
1 inch = 50 ft.

SHEET 01 OF 01

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



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: 10/25/24
BOOK: _____

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

DEPUTY CITY ENGINEER _____ DATE _____ CITY ENGINEER _____ DATE _____