

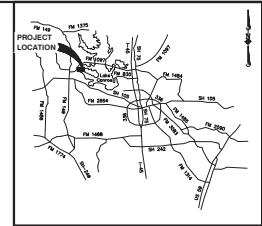
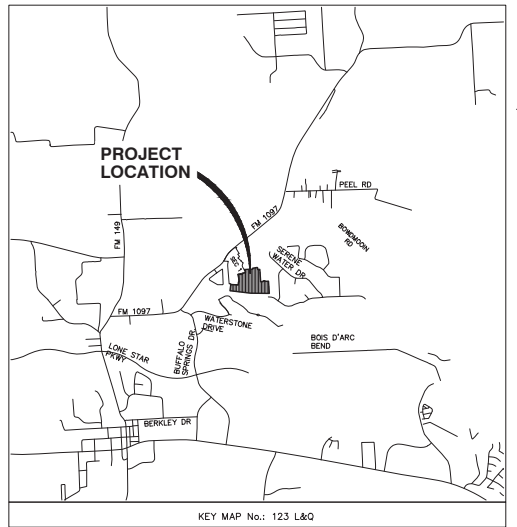
DEVELOPER:  
 PULTE HOMES OF TEXAS  
 1311 BROADFIELD BLVD, SUITE 100  
 HOUSTON, TEXAS 77064  
 (281) 749-8000

# CONSTRUCTION OF WATER, SANITARY, DRAINAGE AND PAVING FACILITIES FOR MONTGOMERY BEND SEC 2

DEVELOPMENT No. 2203  
 MONTGOMERY COUNTY MUNICIPAL UTILITY DISTRICT NO. 224  
 CITY OF MONTGOMERY  
 MONTGOMERY COUNTY, TX  
 610.126.006.00

## SHEET LIST TABLE

SHEET No.	SHEET TITLE
1	COVER SHEET
2	GENERAL NOTES
3	PROJECT OVERALL
4	WATER & SANITARY LAYOUT
5	DRAINAGE LAYOUT
6	DRAINAGE CALCULATIONS
7	GRADING LAYOUT
8	STORM WATER POLLUTION PREVENTION LAYOUT
9	TRAFFIC SIGNAGE & PAVEMENT MARKINGS LAYOUT
10	LONGHORN RUN DRIVE (STA 1+50 TO 10+50)
11	LONGHORN RUN DRIVE & LOST WAGON DRIVE
12	BLUEBONNET BEND DRIVE
13	HIGH MESA LANE
14	SILVER BUCKLE LANE
15	OUTFALL
16	WATER DETAILS
17	SANITARY SEWER DETAILS
18	STORM SEWER DETAILS
19	PAVING DETAILS
20	MISCELLANEOUS DETAILS
21	LANDSCAPE PLAN



MONTGOMERY COUNTY AREA VICINITY MAP  
 N.T.S.

**BENCHMARK:**  
 SOURCE BENCHMARK:  
 ELEVATIONS SHOWN HEREON ARE BASED ON NATIONAL  
 GEODETIC SURVEY MONUMENT DESIGNATION HOCSD 81, PID No.  
 A56425  
 HAVING PUBLISHED INFORMATION AS FOLLOWS:  
 LATITUDE : 30° 21' 12.45392" NORTH  
 LONGITUDE : 095° 34' 45.02914" WEST  
 ORTHO HEIGHT : 212.4 FT. (64.74 METERS)  
 HORIZONTAL DATUM : NAD83 (2011)  
 VERTICAL DATUM : NAVD83

**FLOODPLAIN INFORMATION:**  
 ACCORDING TO MAP No. 483360200G OF THE FEDERAL  
 EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE  
 MAPS FOR MONTGOMERY COUNTY, DATED AUGUST 18, 2014,  
 THE SUBJECT TRACT IS SITUATED WITHIN UNSHADED ZONE  
 "X", DEEMED AS AREAS DETERMINED TO BE OUTSIDE THE  
 100-YEAR FLOOD PLAIN.

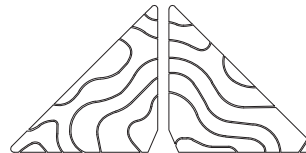
THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE  
 PROPERTY OR STRUCTURES THEREON WILL BE FREE FROM  
 FLOODING OR FLOOD DAMAGE. ON RARE OCCASIONS FLOODS  
 CAN AND WILL OCCUR AND FLOOD HEIGHTS MAY BE  
 INCREASED BY MAN-MADE OR NATURAL CAUSES. THIS FLOOD  
 STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF  
 THE SURVEYOR.

ONE-CALL NOTIFICATION SYSTEM  
**CALL BEFORE YOU DIG!!!**  
 (713) 223-4567 (In Houston)  
 (New Statewide Number Outside Houston)  
 1-800-344-8317

**48 HOUR NOTICE:**

CONTRACTOR SHALL NOTIFY CHRIS ROZNOVSKY  
 THE CITY OF MONTGOMERY ENGINEER AND  
 OPERATOR AT 713-789-1900 BEFORE  
 STARTING WORK ON THIS PROJECT.

ELEVATION LAND SOLUTIONS IS NOT RESPONSIBLE FOR THE SAFETY OF ANY PARTY AT OR ON THE  
 CONSTRUCTION SITE. SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND ANY OTHER  
 PERSON OR ENTITY PERFORMING WORK OR SERVICES. NEITHER THE OWNER NOR ENGINEER ASSUMES  
 ANY RESPONSIBILITY FOR THE JOB SITE SAFETY OF PERSONS ENGAGED IN THE WORK OR THE MEANS  
 OR METHODS OF CONSTRUCTION.



**ELEVATION**  
 land solutions  
 TBPE REGISTRATION NUMBER F-22671

DATE	REVISION	APP.

GARRET J. DUHON  
 2445 TECHNOLOGY FOREST  
 BLD. SUITE 200  
 THE WOODLANDS, TX 77381  
 (832) 823-2200  
 Garret J. Duhon  
 TBPE No. F-22671  
 07/29/2023

CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY CITY ENGINEER  
 SIGNATURE VALID FOR ONE (1) YEAR

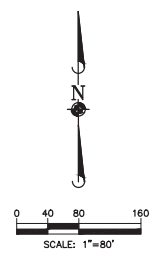
SHEET 1 OF 21

PM:GJD DFT: MAQ  
 DSN:STM DATE: JULY 2023

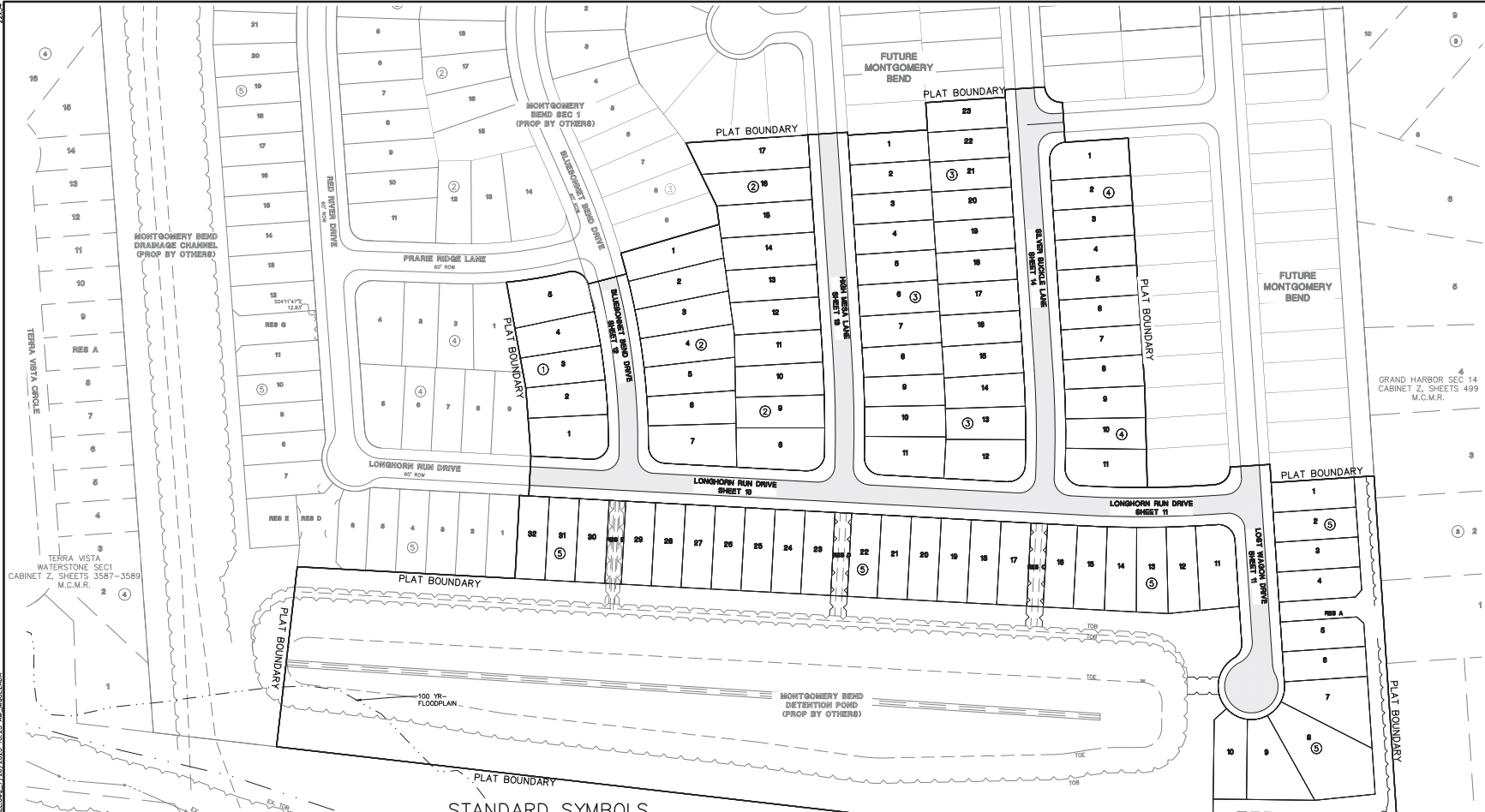
2203-4 M&P and Engineer: Tracy Voss, Sec. 2, 03/23/2023, 10:24 AM PROJECT NOTES: 03/23/2023, 10:24 AM

ELEVATION LAND SOLUTIONS - MONTGOMERY BEND SEC 2 - PROJECT NO. 610.126.006.00





GRAND HARBOR SEC 14  
CABINET Z, SHEETS 499  
M.C.M.R.



**BENCHMARK:**  
SOURCE BENCHMARK:  
ELEVATIONS SHOWN HEREON ARE BASED ON NATIONAL  
GEODETIC SURVEY MONUMENT DESIGNATION HCSSD 81, PID NO.  
A36462  
HAVING PUBLISHED INFORMATION AS FOLLOWS:  
LATITUDE : 30° 21' 12.45392" NORTH  
LONGITUDE : 090° 34' 45.02014" WEST  
ORTHO HEIGHT : 212.4 FT. (64.74 METERS)  
HORIZONTAL DATUM : NAD83 (2011)  
VERTICAL DATUM : NAVD83

**FLOODPLAIN INFORMATION:**  
ACCORDING TO MAP NO. 483300000 OF THE FEDERAL  
EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE  
MAPS FOR MONTGOMERY COUNTY, DATED AUGUST 18, 2014,  
THE SUBJECT TRACT IS SITUATED WITHIN UNSHADED ZONE "X"  
DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 100-YEAR  
FLOOD PLAIN.

THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE PROPERTY  
OR STRUCTURES THEREON WILL BE FREE FROM FLOODING OR  
FLOOD DAMAGE. ON RARE OCCASIONS FLOODS CAN AND WILL  
OCCUR AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE  
OR NATURAL CAUSES. THIS FLOOD STATEMENT SHALL NOT  
CREATE LIABILITY ON THE PART OF THE SURVEYOR.

DATE	REVISION	APP.

GARRET J. DUJON  
9709 LAKESIDE BLVD.  
SUITE 200  
THE WOODLANDS, TX 77381  
(832) 823-2200  
Garret J. Dujon  
Professional Engineer  
130733  
07/26/2023  
TPE NO. F-22671  
CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY CITY ENGINEER DATE  
SIGNATURE VALID FOR ONE (1) YEAR

**PROJECT OVERALL**

**SHEET 3 OF 21**

**STANDARD SYMBOLS**

EXISTING	PROPOSED

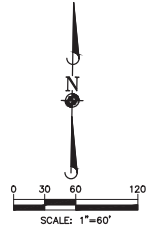
WATERSTONE ON LAKE CONROE  
SECTION TWO  
CABINET Z, SHEETS 3577  
M.C.M.R.

**ABBREVIATIONS**

ADJ	ADJACENT	PVC	POINT OF VERTICAL CURVATURE
B-B	BACK TO BACK	PVI	POINT OF VERTICAL INTERSECTION
B-C	BACK OF CURB	PVT	POINT OF VERTICAL TANGENCY
C	CENTERLINE	PWT	PAVEMENT
CL	CLEARANCE	PAE	PUBLIC ACCESS EASEMENT
CONC	CONCRETE	PUE	PUBLIC UTILITY EASEMENT
CY	CUBIC YARD	R	RADIUS
DE	DRAINAGE EASEMENT	ROW	RIGHT-OF-WAY
E-E	EDGE TO EDGE	RCP	REINFORCED CONCRETE PIPE
ELEV	ELEVATION	RT	RIGHT
ESMT	EASEMENT	SAN	SANITARY
EX	EXISTING	SF	SQUARE FEET
FL	FLOW LINE	STA	STATION
FM	FORCE MAIN	STM	STORM
FLV	FLUSH VALVE	SY	SQUARE YARDS
GV	GATE VALVE	TEMP	TEMPORARY
LF	LINEAR FEET	TC	TOP OF CURB
LT	LEFT	TYP	TYPICAL
MAX	MAXIMUM	UE	UTILITY EASEMENT
MA	MANHOLE	WL	WATERLINE
MIN	MINIMUM	WLE	WATERLINE EASEMENT
PC	POINT OF CURVATURE	WSE	WATER SURFACE ELEVATION
PCC	POINT OF COMPOUND CURVE		
PIC	POINT OF INTERSECTION		
PROP	PROPOSED		
RT	POINT OF TANGENCY		

P:\A10128\_Metry and Coulter\_Traffic\Sec 2\A10128\_Sec 2\Drawings\PROJECT OVERALL.dwg - 7/26/2023 10:25:25 AM MJE/EAJ

ELEVATION LAND SOLUTIONS - MONTGOMERY BEND SEC 2 - PROJECT NO. 610126-006-00




**SERVICE LEAD NOTE:**  
WATER: ALL SERVICE LEADS ARE 1" DIAMETER.  
SEWER: WATER LINE-SANITARY CROSSING NOTE:  
POSITION ONE FULL SECTION OF RESTRAINED JOINT WATERLINE AND SANITARY SEWER PIPE CENTERED AT CROSSING. INSERT SANITARY SEWER PIPE WITH CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS ONE FOOT BEYOND THE JOINTS ON EACH END. FOR CROSSINGS WHERE PROPOSED WATERLINE IS UNDER PROPOSED SANITARY SEWER, PUT RESTRAINED JOINT DUCTILE IRON PIPE WATERLINE (FOR DIAMETERS LESS THAN 24 INCHES) AND RESTRAINED JOINT CLEARANCE. NO SEPARATE PAY.  
**BENCHMARK:**  
SOURCE BENCHMARK: ELEVATIONS SHOWN HEREON ARE BASED ON NATIONAL GEODETIC SURVEY MONUMENT DESIGNATION RHDSD 81, PID No. A36402.  
HAVING PUBLISHED INFORMATION AS FOLLOWS:  
LATITUDE : 30° 21' 12.45392" NORTH  
LONGITUDE : 090° 34' 45.02514" WEST  
ORTHO HEIGHT : 212.4 FT. (64.74 METERS)  
HORIZONTAL DATUM : NAD83 (2011)  
VERTICAL DATUM : NAVD83

**FLOODPLAIN INFORMATION:**  
ACCORDING TO MAP NO. 485330006 OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAPS FOR MONTGOMERY COUNTY, DATED AUGUST 18, 2014, THE SUBJECT TRACT IS SITUATED WITHIN UNSHADED ZONE "X" DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 100-YEAR FLOOD PLAIN.  
THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE PROPERTY OR STRUCTURES THEREON WILL BE FREE FROM FLOODING OR FLOOD DAMAGE. ON RARE OCCASIONS FLOODS CAN AND WILL OCCUR AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE OR NATURAL CAUSES. THIS FLOOD STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF THE SURVEYOR.

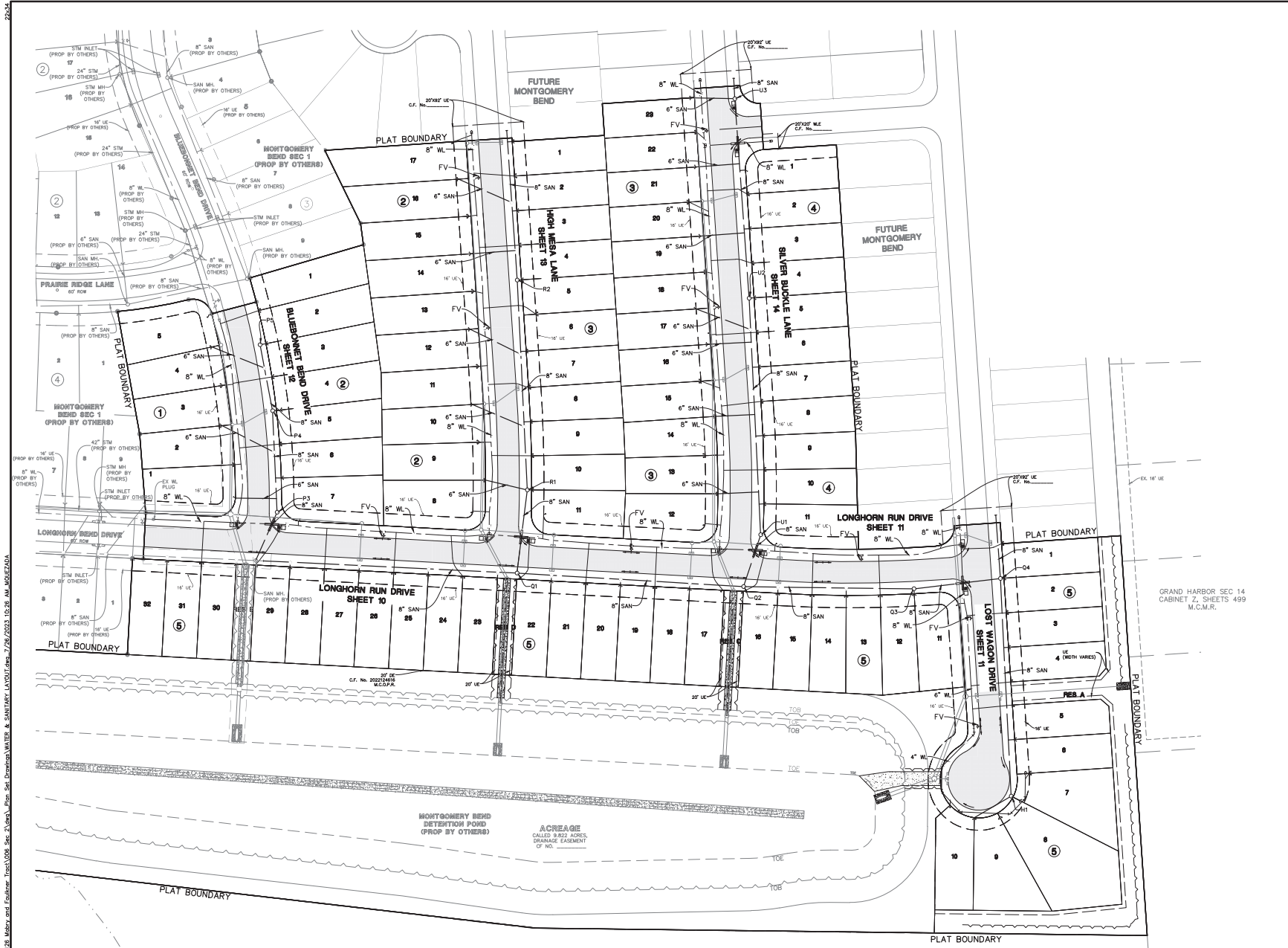
DATE	REVISION	APP.

GARRET J. DUHON  
9709 LAKESIDE BLVD.  
SUITE 200  
THE WOODLANDS, TX 77381  
(832) 823-2200  
*Garret J. Duhon*  
TPPE NO. F-22671  
07/26/2023



CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK  
CITY OF MONTGOMERY CITY ENGINEER DATE  
SIGNATURE VALID FOR ONE (1) YEAR

**WATER & SANITARY LAYOUT**



P:\AUD126\_Metry and Engineer\Invt\008\_Sec 2\0083\_Sanitary Layout\0083\_Sanitary Layout.dwg 7/26/2023 10:26 AM A.M. MOJAZZADA

ELEVATION LAND SOLUTIONS - MONTGOMERY BEND SEC 2 - PROJECT NO. 610126-006-00





Project: Montgomery Bend Section 2  
 Job Number: 610.126.006.00  
 Design By: Salvador Talavera  
 Jurisdiction: Montgomery County Outside Houston ETJ  
 Storm Year 1: 5-yr  
 Storm Year 2: 100-yr  
 Storm Year 3:

	Flowline	5-yr HGL	100-yr HGL
Outfall_1	220.47	226.00	228.05
Outfall_2	220.85	226.00	228.05
Outfall_3	221.14	226	228.05
Outfall_4	221.54	226	228.05

$$Intensity(I) = \frac{b}{(a + T_c)^b} + C_f$$

$$Upstream T_c = 15 + 10 * (A_c)^{0.171}$$

Intensity Coefficients for: Montgomery County Outside Houston ETJ

5-yr	100-yr
b = 54	b = 57
a = 8.84	a = 4.46
e = 0.7051	e = 0.5857
Cf = 1	Cf = 1.25

Alignment/Road	Pipe and Road Properties										Drainage Areas				Intensity & Flow				TOC		5-yr Hydraulic Grade Line					100-yr Hydraulic Grade Line					TP 101 - Method 1														
	Node Upstream	Node Downstream	Pipe Length (ft)	Pipe Diameter or Box Span (in)	Slope	Mannings "n"	Design Capacity (cfs)	Design Velocity (ft/sec)	Fall (ft)	Top of Curb Upstream (ft)	Gutter Elevation Upstream (ft)	Gutter Elevation at Downstream High Point (ft)	Node Drop Downstream (ft)	Flowline Elevation Upstream (ft)	Flowline Elevation Downstream (ft)	Drainage Area (ac)	Contributing Area (ac)	Total Area (ac)	Runoff Coefficient	Weighted C	Sum of C/A	5-yr Intensity (in/hr)	5-yr Flow (cfs)	100-yr Intensity (in/hr)	100-yr Flow (cfs)	Time of Concentration (mins)	Change in Time of Concentration (mins)	Total TOC (mins)	Actual Velocity (ft/sec)	Hydraulic Gradient (%)	Change in Head (ft)	Elevation of Hyd. Grad. Upstream (ft)	Elevation of Hyd. Grad. Downstream (ft)	Upstream HGL Below Gutter (Pass/Fail)	Actual Velocity (ft/sec)	Hydraulic Gradient (%)	Change in Head (ft)	Elevation of Hyd. Grad. Upstream (ft)	Elevation of Hyd. Grad. Downstream (ft)	Upstream HGL Below Gutter (Pass/Fail)	Max Pooling Elevation Upstream (ft)	Max Pooling Elevation Downstream (ft)	Upstream HGL Below Gutter (Pass/Fail)	Max Pooling Elevation Upstream (ft)	Max Pooling Elevation Downstream (ft)
Longhorn Run Drive	22	2	171	24	0.5	0.013	16.00	5.09	0.86	238.26	238.76			4.06	230.91	230.05	13	1.17	0.00	1.17	0.55	0.55	0.64	4.54	2.92	9.71	6.25	25.28	0.56	25.84	0.91	0.02	0.03	232.91	232.05	PASS	1.99	0.08	0.13	232.91	232.05	PASS	240.26	240.26	PASS
Brairie Ridge Lane	21	7	34	24	0.2	0.013	10.12	3.22	0.07						1.80	0.00	1.80	0.55	0.55	0.99	4.46	4.42	9.56	9.47	26.09	0.18	26.27	1.4	0.04	0.01	236.17	236.10		3.01	0.18	0.06	236.17	236.10							
Bluebonnet Bend (Prop by Others)	20	19	115	24	0.18	0.013	9.60	3.06	0.21						2.09	0.00	2.09	0.00	0.00	0.00	4.43	0.00	9.51	0.00	26.39	0.63	27.01	0.00	0.00	0.00	243.67	243.46		0.00	0.00	0.00	243.67	243.46							
Red River Drive (Prop by Others)	13	12	112	24	1.20	0.013	24.78	7.89	1.35						2.96	0.00	2.96	0.55	0.55	1.63	4.37	7.31	9.38	17.27	27.11	0.24	27.34	2.26	0.10	0.11	244.36	243.01		4.86	0.46	0.51	244.36	243.01							
High Mesa Lane	205	205	13	24	0.35	0.013	13.88	4.26	0.05						1.45	0.00	1.45	0.55	0.55	1.11	4.45	4.83	9.58	10.36	26.26	0.05	26.31	1.54	0.05	0.01	240.09	240.04	PASS	3.80	0.21	0.03	240.09	240.04	PASS	248.30	248.30	PASS			
Silver Buckle Lane	305	305	157	24	0.45	0.013	15.18	4.83	0.70						2.64	0.00	2.64	0.55	0.55	1.37	4.39	6.43	9.42	13.80	26.86	0.04	27.40	2.05	0.08	0.13	239.92	239.22	PASS	4.39	0.37	0.58	239.92	239.22	PASS	248.90	248.90	PASS			
Future Pipe	411	410	106	24	0.55	0.013	16.78	5.34	0.58						2.79	0.00	2.79	0.55	0.55	1.5	4.38	6.78	9.40	14.55	26.98	0.33	27.31	2.14	0.09	0.10	237.08	236.50		4.63	0.41	0.44	246.47	245.03							
Lost Wagon Drive	403	403	209	36	0.55	0.013	16.78	5.34	1.19						2.79	0.00	2.79	0.55	0.55	1.5	4.38	6.78	9.40	14.55	26.98	0.33	27.31	2.14	0.09	0.10	237.08	236.50		4.63	0.41	0.44	246.47	245.03							

DATE	REVISION	APP.

GARRET J. DUHON  
 9709 LAKESIDE BLD.  
 SUITE 200  
 THE WOODLANDS, TX 77381  
 (832) 823-2200

Garrett J. Duhon  
 PROFESSIONAL ENGINEER  
 No. 130733  
 State of Texas  
 07/26/2023

TPBE No. F-22671  
 CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

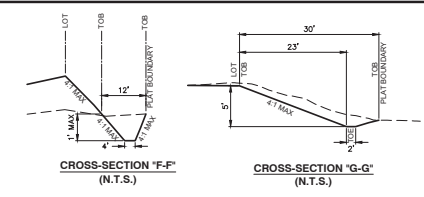
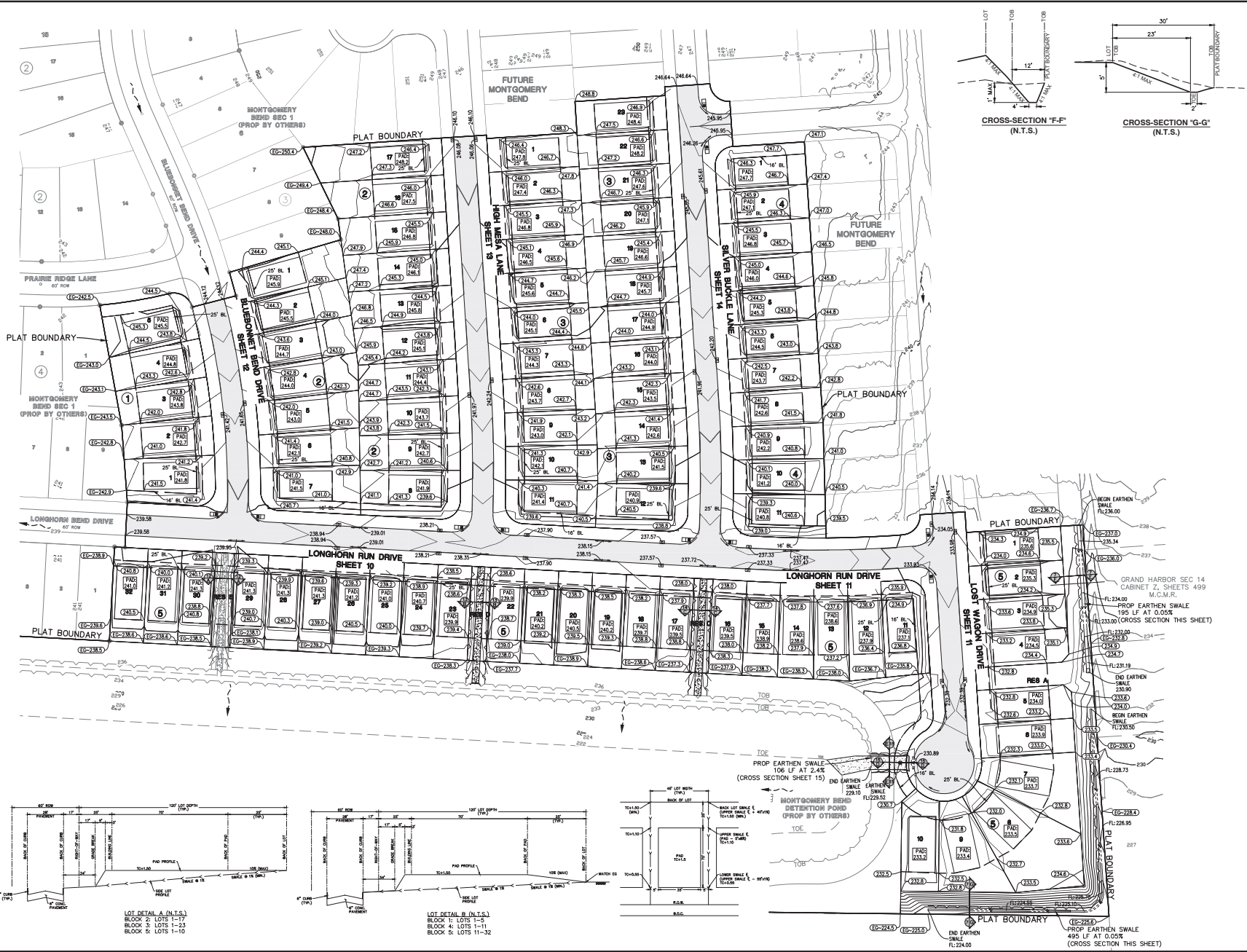
CITY OF MONTGOMERY CITY ENGINEER DATE  
 SIGNATURE VALID FOR ONE (1) YEAR

DRAINAGE CALCULATIONS

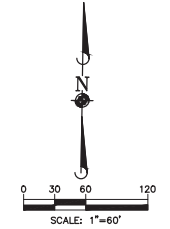
P:\A10126\_Metry and Engineer\Iron\008\_Sec 2\A\3\Prop\_Sec\_Drainage\WMAUSE\_CALCULATIONS.dwg 7/26/2023 10:27 AM A027524

ELEVATION LAND SOLUTIONS - MONTGOMERY BEND SEC 2 - PROJECT NO. 610.126.006.00

P:\A\10128\_McIntyre and Coulter\Trop\1008\_Sec 2\Plan\_Sht\_Dimensions\GRADING\_LAYOUT\Sec 2\26-0023\_10-28-AM\_MONTZARA



**ELEVATION**  
land solutions  
TPBE REGISTRATION NUMBER F-22671  
9709 LAKESIDE BOULEVARD, SUITE 200  
THE WOODLANDS, TX 77381 832-823-2200



**LEGEND**

- EC-245.0 MATCH EXISTING GROUND ELEV.
- 55.0 LOT GRADE ELEVATION
- 55.55 TOP OF CURB ELEVATION
- PAC 242.0 PAD ELEVATION
- PROPOSED GRADE BREAK
- OFFSITE DRAINAGE FLOW

**BENCHMARK:**  
SOURCE BENCHMARK: ELEVATIONS SHOWN HEREON ARE BASED ON NATIONAL GEODETIC SURVEY MONUMENT DESIGNATION HIGGS 81, PID NO. A36402.  
HAVING PUBLISHED INFORMATION AS FOLLOWS:  
LATITUDE : 30° 21' 12.45392" NORTH  
LONGITUDE : 095° 34' 45.02514" WEST  
ORTHO HEIGHT : 212.4 FT. (64.74 METERS)  
HORIZONTAL DATUM : NAD83 (2011)  
VERTICAL DATUM : NAVD83

**FLOODPLAIN INFORMATION:**  
ACCORDING TO MAP NO. 4833300003 OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAPS FOR MONTGOMERY COUNTY, DATED AUGUST 18, 2014, THE SUBJECT TRACT IS SITUATED WITHIN UNSHADED ZONE "X" DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 100-YEAR FLOOD PLAIN.

THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE PROPERTY OR STRUCTURES HEREON WILL BE FREE FROM FLOODING OR FLOOD DAMAGE, OR RARE OCCASIONS FLOODING CAN AND WILL OCCUR AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE OR NATURAL CAUSES. THIS FLOOD STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF THE SURVEYOR.

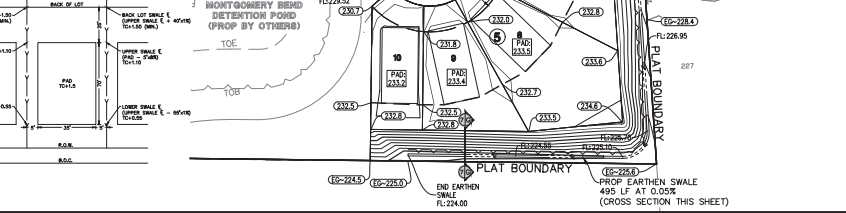
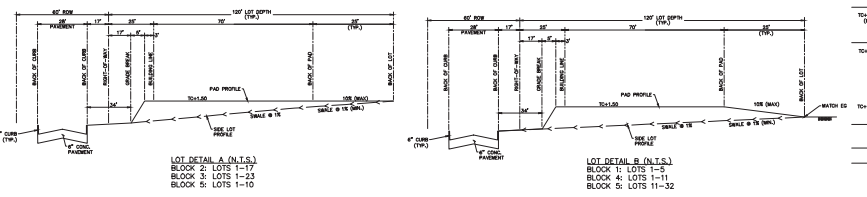
DATE	REVISION	APP.

GARRET J. DUHON  
9709 LAKESIDE BLVD.  
SUITE 200  
THE WOODLANDS, TX 77381  
(832) 823-2200  
Garrett J. Duhon  
Professional Engineer  
No. 130733  
07/26/2023

TPBE NO. F-22671  
CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

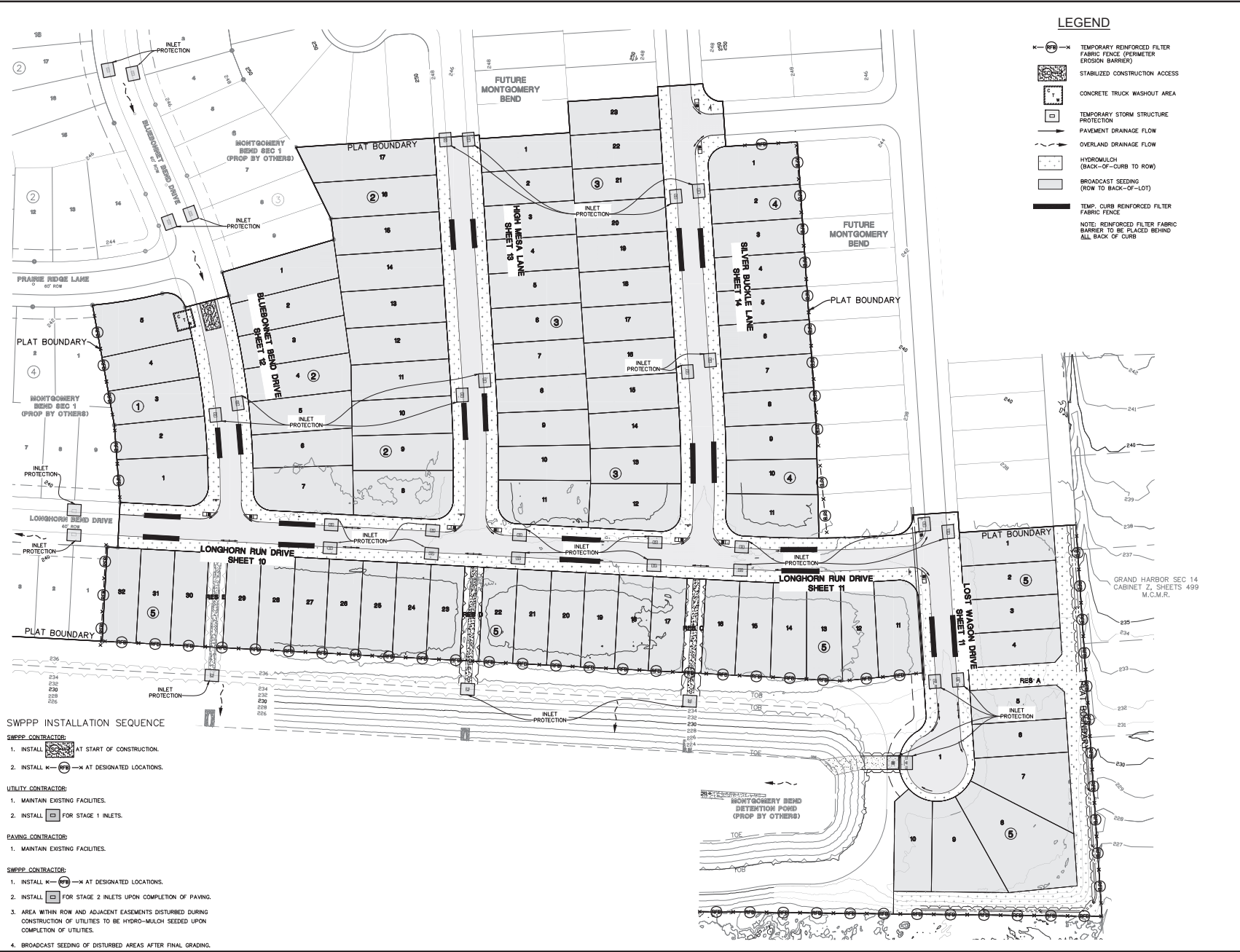
CITY OF MONTGOMERY CITY ENGINEER DATE  
SIGNATURE VALID FOR ONE (1) YEAR

**GRADING LAYOUT**  
**SHEET 7 OF 21**



ELEVATION LAND SOLUTIONS - MONTGOMERY BEND SEC 2 - PROJECT NO. 610126-006-00

P:\AUG126\_Metry and Coulter\_Traffic\_Sol\_Drawing\STORM\_WATER\_POLLUTION\_PREVENTION\_PLANS\SES 772672523\_10-28-AM\_MSD\22674

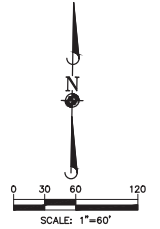


**LEGEND**

- TEMPORARY REINFORCED FILTER FABRIC FENCE (PERIMETER EROSION BARRIER)
- STABILIZED CONSTRUCTION ACCESS
- CONCRETE TRUCK WASHOUT AREA
- TEMPORARY STORM STRUCTURE PROTECTION
- PAVEMENT DRAINAGE FLOW
- OVERLAND DRAINAGE FLOW
- HYDROMULCH (BACK-OF-CURB TO ROW)
- BROADCAST SEEDING (ROW TO BACK-OF-LOT)
- TEMP. CURB REINFORCED FILTER FABRIC FENCE

NOTE: REINFORCED FILTER FABRIC BARRIER TO BE PLACED BEHIND ALL BACK OF CURB

  
**ELEVATION**  
 land solutions  
 TPPE REGISTRATION NUMBER F-22671  
 9709 LAKESIDE BOULEVARD, SUITE 200  
 THE WOODLANDS, TX 77381 832-823-2200



**BENCHMARK:**

SOURCE BENCHMARK:  
 ELEVATIONS SHOWN HEREON ARE BASED ON NATIONAL GEODETIC SURVEY MONUMENT DESIGNATION HCSSD 81, PID NO. A36402  
 HAVING PUBLISHED INFORMATION AS FOLLOWS:  
 LATITUDE : 30° 21' 12.45392" NORTH  
 LONGITUDE : 090° 34' 45.02514" WEST  
 ORTHO HEIGHT : 2124.4 FT. (64.74 METERS)  
 HORIZONTAL DATUM : NAD83 (2011)  
 VERTICAL DATUM : NAVD83

**FLOODPLAIN INFORMATION:**


ACCORDING TO MAP NO. 485300006 OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAPS FOR MONTGOMERY COUNTY, DATED AUGUST 18, 2014, THE SUBJECT TRACT IS SITUATED WITHIN UNSHADED ZONE "X" DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 100-YEAR FLOOD PLAIN.

THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE PROPERTY OR STRUCTURES HEREON WILL BE FREE FROM FLOODING OR FLOOD DAMAGE. ON RARE OCCASIONS FLOODS CAN AND WILL OCCUR AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE OR NATURAL CAUSES. THIS FLOOD STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF THE SURVEYOR.

DATE	REVISION	APP.

**SWPPP INSTALLATION SEQUENCE**

- SWPPP CONTRACTOR:**
1. INSTALL AT START OF CONSTRUCTION.
  2. INSTALL AT DESIGNATED LOCATIONS.
- UTILITY CONTRACTOR:**
1. MAINTAIN EXISTING FACILITIES.
  2. INSTALL FOR STAGE 1 INLETS.
- PAVING CONTRACTOR:**
1. MAINTAIN EXISTING FACILITIES.
- SWPPP CONTRACTOR:**
1. INSTALL AT DESIGNATED LOCATIONS.
  2. INSTALL FOR STAGE 2 INLETS UPON COMPLETION OF PAVING.
  3. AREA WITHIN ROW AND ADJACENT EASEMENTS DISTURBED DURING CONSTRUCTION OF UTILITIES TO BE HYDRO-MULCH SEEDING UPON COMPLETION OF UTILITIES.
  4. BROADCAST SEEDING OF DISTURBED AREAS AFTER FINAL GRADING.

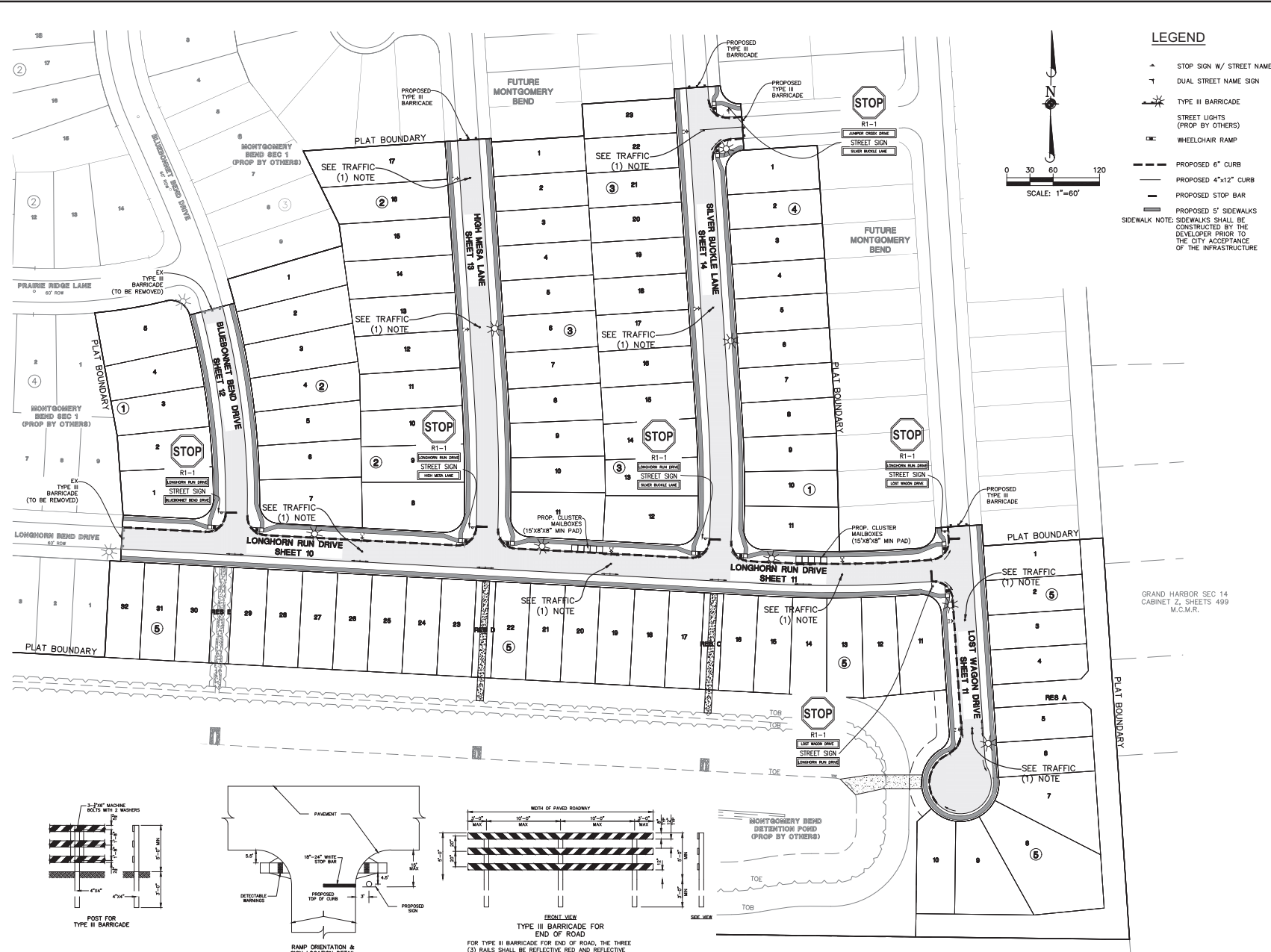
GARRET J. DUHON  
 9709 LAKESIDE BLD.  
 SUITE 200  
 THE WOODLANDS, TX 77381  
 (832) 823-2200  
  
 TPPE NO. F-22671  
 CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK  
 DATE 07/26/2023

CITY OF MONTGOMERY CITY ENGINEER SIGNATURE VALID FOR ONE (1) YEAR  
 DATE  
 STORM WATER POLLUTION PREVENTION LAYOUT

ELEVATION LAND SOLUTIONS - MONTGOMERY BEND SEC 2 - PROJECT NO. 610126-006-00



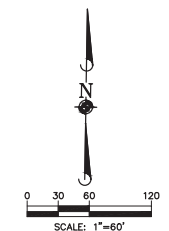
22-24  
 P:\A\10128\_Metry and Engineer\_Traffic\008\_Sig 2\008\_Sig 2\Drawings\TRAFFIC\_SIGNAGE & PAVEMENT MARKINGS\_LAYOUT\008\_Sig 2\008\_Sig 2.dwg 7/26/2023 10:29 AM GDUHON



**LEGEND**

- ▲ STOP SIGN W/ STREET NAME
- ◆ DUAL STREET NAME SIGN
- ✦ TYPE III BARRICADE
- ☼ STREET LIGHTS (PROP BY OTHERS)
- ▬ WHEELCHAIR RAMP
- PROPOSED 6" CURB
- PROPOSED 4"x12" CURB
- PROPOSED STOP BAR
- ▬ PROPOSED 5' SIDEWALKS

SIDEWALK NOTE: SIDEWALKS SHALL BE CONSTRUCTED BY THE DEVELOPER PRIOR TO THE CITY ACCEPTANCE OF THE INFRASTRUCTURE.



**ELEVATION**  
land solutions

TPPE REGISTRATION NUMBER F-22671  
9709 LAKESIDE BOULEVARD, SUITE 200  
THE WOODLANDS, TX 77381 832-823-2200

- STREET LIGHTS:**
- POLES MUST BE A MINIMUM OF 3FT. OF BACK OF CURB.
  - IF THE ELECTRICAL UTILITY PROVIDER STANDARDS CONFLICT WITH THE APPROVED LAYOUT BY THE CITY AND/OR CITY STANDARDS, A VARIANCE MUST BE RECEIVED FROM CITY COUNCIL.
- TRAFFIC BUTTONS & MEDIAN NOSES:**
- PAUSE BLUE TRAFFIC BUTTONS 6" OFF THE CENTERLINE OF THE ROADWAY TOWARDS THE RELATED FLUSH VALVE.
  - ALL MEDIAN NOSES SHALL BE PAINTED YELLOW.
- STREET SIGN NOTES:**
- CONTRACTOR TO VERIFY ALL STREET SIGNS WITH THE RECORDED PLAT PRIOR TO ORDERING THE SIGNS.
  - ALL R-1 STOP SIGNS SHALL BE 30" X 30" DIAMOND GRADE SHEETING.
  - PLACE STREET NAME SIGNS 3" ABOVE STOP SIGNS.
  - ALL STREET NAME SIGNS SHALL BE 9" BLADE.
  - CONTRACTOR TO COORDINATE STREET SIGN COLOR AND TEXT STYLE WITH THE ENGINEER PRIOR TO ORDERING STREET SIGNS.
  - ALL COMBINATION STREET AND REGULATORY SIGNS SHALL BE LOCATED AT CURB RETURNS UNLESS OTHERWISE NOTED.

**BENCHMARK:**

SOURCE BENCHMARK: ELEVATIONS SHOWN HEREON ARE BASED ON NATIONAL GEODETIC SURVEY MONUMENT DESIGNATION H0550 81, PID No. A36402

HAVING PUBLISHED INFORMATION AS FOLLOWS:  
 LATITUDE : 30° 21' 12.45392" NORTH  
 LONGITUDE : 095° 34' 45.02544" WEST  
 ORTHO HEIGHT : 2124.4 FT. (64.74 METERS)  
 HORIZONTAL DATUM : NAD83 (2011)  
 VERTICAL DATUM : NAVD83

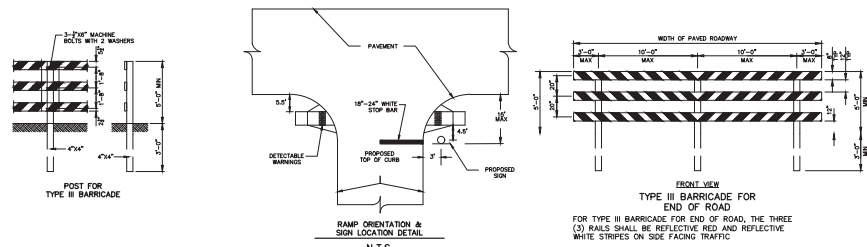
**FLOODPLAIN INFORMATION:**

ACCORDING TO MAP NO. 4853300006 OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAPS FOR MONTGOMERY COUNTY, DATED AUGUST 18, 2014, THE SUBJECT TRACT IS SITUATED WITHIN UNSHADED ZONE "X", DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 100-YEAR FLOOD PLAIN.

THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE PROPERTY OR STRUCTURES HEREON WILL BE FREE FROM FLOODING OR FLOOD DAMAGE, OR RARE OCCASIONS FLOODS CAN AND WILL OCCUR AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE OR NATURAL CAUSES. THIS FLOOD STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF THE SURVEYOR.

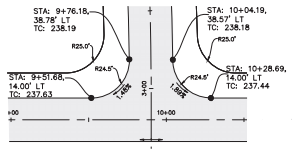
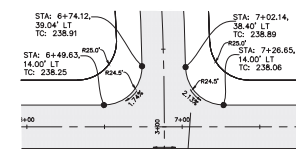
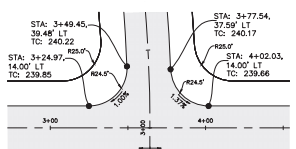
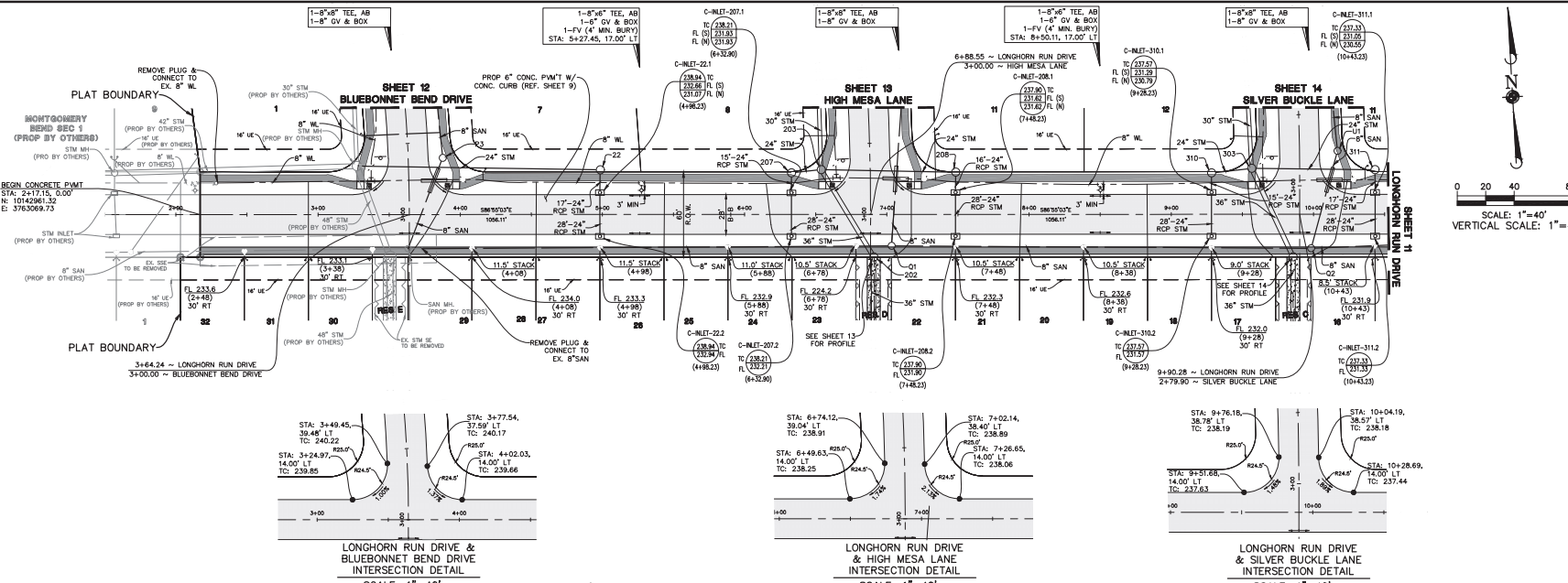
DATE	REVISION	APP.

GARRET J. DUHON  
 9709 LAKESIDE BLVD.  
 SUITE 200  
 THE WOODLANDS, TX 77381  
 (832) 823-2200  
 Garrett J. Duhon  
 LICENSED PROFESSIONAL ENGINEER  
 130733  
 07/26/2023  
 TPPE No. F-22671  
 CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK  
 CITY OF MONTGOMERY CITY ENGINEER DATE  
 SIGNATURE VALID FOR ONE (1) YEAR

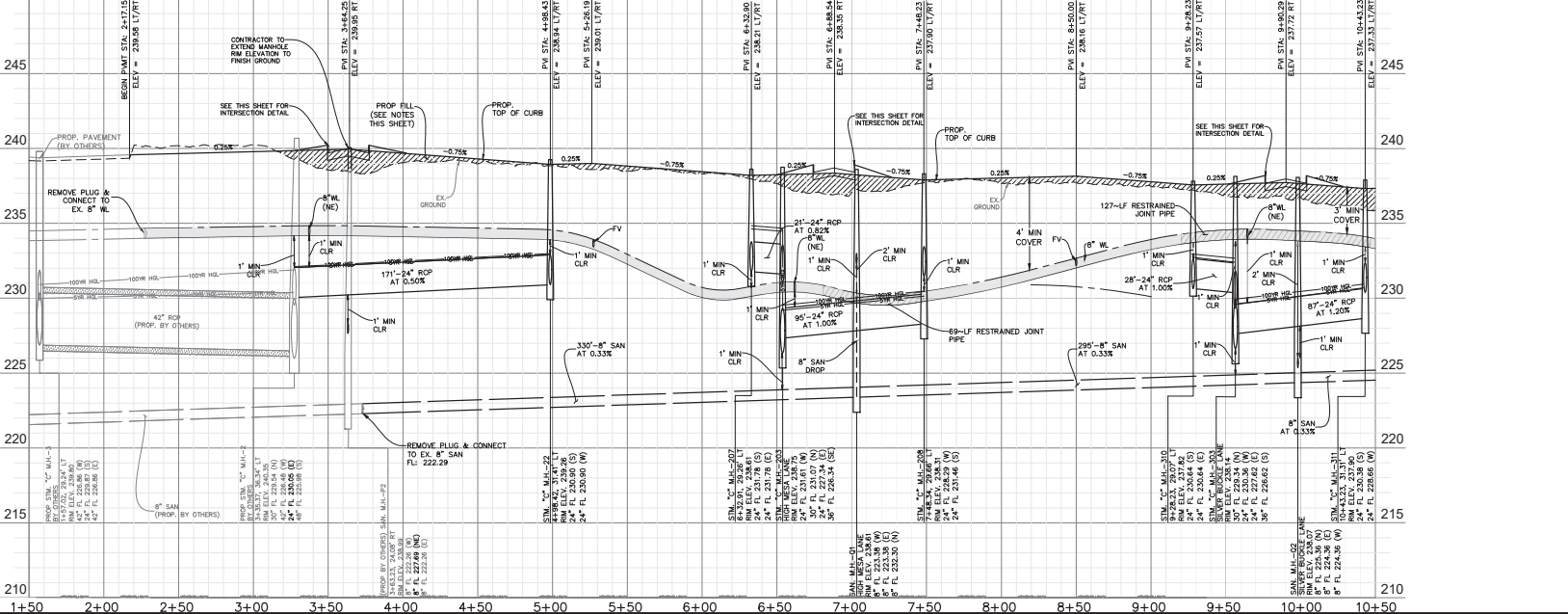


ELEVATION LAND SOLUTIONS - MONTGOMERY BEND SEC 2 - PROJECT NO. 6101726-006-00

P:\AUD128\_Metry and Customer\_Traffic\08\_Sec\_2\Drawn\LONGHORN RUN DRIVE STA 1+50 TO 10+50.MXD 7/29/2023 10:50 AM STALANRAMEA



**LONGHORN RUN DRIVE**



**ELEVATION**  
land solutions

TPRE REGISTRATION NUMBER F-22671

9709 LAKESIDE BOULEVARD, SUITE 200  
THE WOODLANDS, TX 77381 832-823-2200

**KEY MAP**

**+** WATER LINE-SANITARY SEWER CROSSING NOTE:

POSITION ONE FULL SECTION OF RESTRAINED JOINT WATERLINE AND SANITARY SEWER PIPE CENTERED AT CROSSING. INSERT SANITARY SEWER PIPE WITH CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS ONE FOOT BEYOND THE JOINTS ON EACH END. FOR CROSSINGS WHERE PROPOSED WATERLINE IS UNDER PROPOSED SANITARY SEWER, PUT RESTRAINED JOINT DUCTILE IRON PIPE WATERLINE FOR DIAMETERS LESS THAN 24 INCHES AND RESTRAINED JOINT PRESSURE RATED (MIN 150 PSI) SANITARY 24" MIN CLEARANCE. NO SEPARATE PAY.

- FILL NOTES:**
- EXISTING DRAINAGE SWALES: ALL EXISTING DRAINAGE SWALES SHALL BE FILLED AS SHOWN WITH MATERIAL FROM EXISTING ADJACENT SPILL BANKS IN MAXIMUM 8' FOOT LIFTS AND COMPACTED TO 95% PROCTOR DENSITY AS PER AASHTO METHOD T-99.
  - EXISTING DRAINAGE SWALES: ALL EXISTING DRAINAGE SWALES UNDER PROPOSED CONCRETE PAVEMENT SHALL BE CLEANED, MUCKED OUT AND SCARIFIED TO A MINIMUM DEPTH OF 6" AND FILLED AS SPECIFIED ABOVE IN FILL NOTE NO. 1. NO SEPARATE PAY.
  - ROADWAY EMBANKMENTS: STRIP 3" OF VEGETATION FROM AREA TO BE FILLED AND RE-COMPACT SOIL TO 95% PROCTOR DENSITY. PLACE FILL MATERIAL AS SPECIFIED IN FILL NOTE NO. 1.

**BENCHMARK:**

SOURCE BENCHMARK: ELEVATIONS SHOWN HEREON ARE BASED ON NATIONAL GEODETIC SURVEY MONUMENT DESIGNATION 81D, PID NO. A36402.

HAVING PUBLISHED INFORMATION AS FOLLOWS:  
 LATITUDE : 30° 21' 12.45392" NORTH  
 LONGITUDE : 090° 34' 45.02644" WEST  
 ORTHO HEIGHT : 212.4 FT. (64.74 METERS)  
 HORIZONTAL DATUM : NAD83 (2011)  
 VERTICAL DATUM : NAVD83

**FLOODPLAIN INFORMATION:**

ACCORDING TO MAP NO. 485300008 OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAPS FOR MONTGOMERY COUNTY, DATED AUGUST 18, 2014, THE SUBJECT TRACT IS SITUATED WITHIN UNSHADED ZONE "X," DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 100-YEAR FLOOD PLAIN.

THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE PROPERTY OR STRUCTURES THEREON WILL BE FREE FROM FLOODING OR FLOOD DAMAGE, OR RARE OCCASIONS FLOODS CAN AND WILL OCCUR AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE OR NATURAL CAUSES. THIS FLOOD STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF THE SURVEYOR.

DATE	REVISION	APP.

GARRET J. DUHON  
 SUITE 200  
 THE WOODLANDS, TX 77381  
 (832) 823-2200

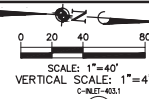
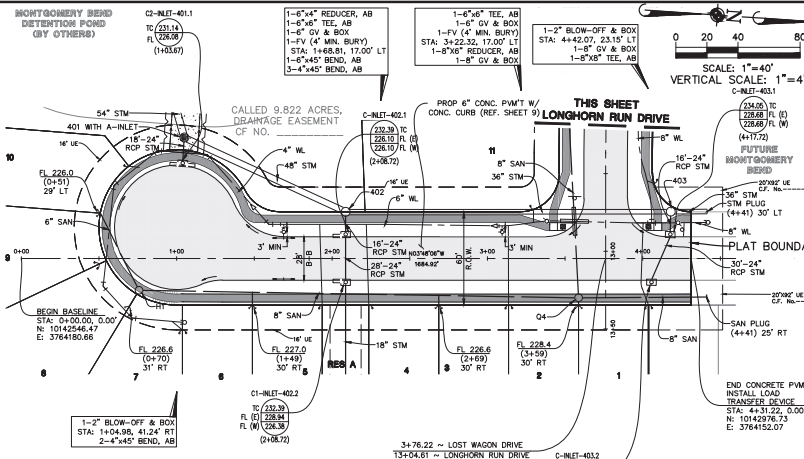
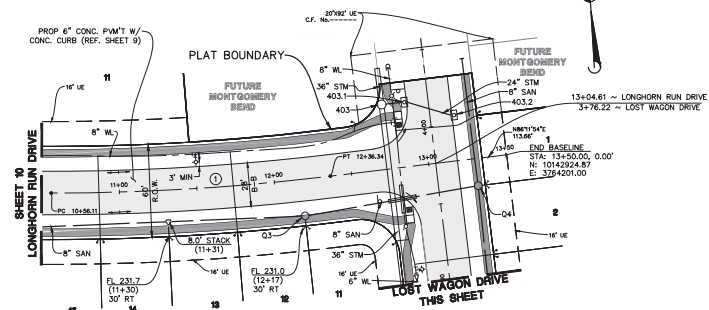
TPBE NO. F-22671  
 CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK  
 CITY OF MONTGOMERY CITY ENGINEER DATE  
 SIGNATURE VALID FOR ONE (1) YEAR

**LONGHORN RUN DRIVE**  
**(STA 1+50 TO 10+50)**  
**SHEET 10 OF 21**

ELEVATION LAND SOLUTIONS - MONTGOMERY BEND SEC 2 - PROJECT NO. 610-126-006-00

1-8"Ø TEE, AB  
1-8" ØV & BOX  
1-FV (4" MIN. BURY)  
STA: 11+50.38, 17.00' LT

1"Ø CURVE DATA  
STA=10+56.11' TO  
STA=12+36.34'  
R=1009.73'  
L=180.33'  
T=1500.00'  
T=90.22'



**ELEVATION**  
land solutions

TPRE REGISTRATION NUMBER F-22671

3708 LAKEVIEW BOULEVARD, SUITE 200  
THE WOODLANDS, TX 77381 832-823-2200

**KEY MAP**

**WATER LINE-SANITARY SEWER CROSSING NOTE:**  
POSITION ONE FULL SECTION OF RESTRAINED JOINT WATERLINE AND SANITARY SEWER PIPE CENTERED AT CROSSING. INSERT SANITARY SEWER PIPE WITH CENTER STABILIZED SAND FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS ONE FOOT BEYOND THE JOINTS ON EACH END. FOR CROSSINGS WHERE PROPOSED WATERLINE IS UNDER PROPOSED SANITARY SEWER, PUT RESTRAINED JOINT DUCTILE IRON PIPE WATERLINE (FOR DIAMETERS LESS THAN 24 INCHES) AND RESTRAINED JOINT PRESSURE RATED (MIN 150 PSI) SANITARY 24" MIN CLEARANCE. NO SEPARATE PAY.

**FILL NOTES:**  
1) EXISTING DRAINAGE SWALES: ALL EXISTING DRAINAGE SWALES SHALL BE FILLED AS SHOWN WITH MATERIAL FROM EXISTING ADJACENT SPOIL BANKS IN MAXIMUM 8" LOOSE LIFTS AND COMPACTED TO 95% PROCTOR DENSITY AS PER AASHTO TEST METHOD T-99.  
2) EXISTING DRAINAGE SWALES: ALL EXISTING DRAINAGE SWALES UNDER PROPOSED CONCRETE PAVEMENT SHALL BE CLEANED, MUCKED OUT AND SCARIFIED TO A MINIMUM DEPTH OF 6" AND FILLED AS SPECIFIED ABOVE IN FILL NOTE NO. 1 IN SEPARATE PAY.  
3) ROADWAY EMBANKMENT: STRIP 3" OF VEGETATION FROM AREA TO BE FILLED AND RE-COMPACT SOIL TO 95% PROCTOR DENSITY. PLACE FILL MATERIAL AS SPECIFIED IN FILL NOTE NO. 1.

**BENCHMARK:**  
ELEVATIONS SHOWN HEREON ARE BASED ON NATIONAL GEODETIC SURVEY MONUMENT DESIGNATION HRS82 81, PID NO. A36402.  
HAVING PUBLISHED INFORMATION AS FOLLOWS:  
LATITUDE : 30° 21' 12.45392" NORTH  
LONGITUDE : 090° 34' 40.60244" WEST  
ORTHO HEIGHT : 212.4 FT. (64.74 METERS)  
HORIZONTAL DATUM : NAD83 (2011)  
VERTICAL DATUM : NAVD83

**FLOODPLAIN INFORMATION:**  
ACCORDING TO MAP NO. 883300000 OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAPS FOR MONTGOMERY COUNTY, DATED AUGUST 18, 2014, THE SUBJECT TRACT IS SITUATED WITHIN UNSHADED ZONE "X" DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 100-YEAR FLOOD PLAIN.  
THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE PROPERTY OR STRUCTURES THEREON WILL BE FREE FROM FLOODING OR FLOOD DAMAGE ON RARE OCCASIONS FLOODS CAN AND WILL OCCUR AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE OR NATURAL CAUSES. THIS FLOOD STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF THE SURVEYOR.

DATE	REVISION	APP.

GARRET J. DUHON  
STATE OF TEXAS  
REGISTERED PROFESSIONAL ENGINEER  
130733  
07/26/2023

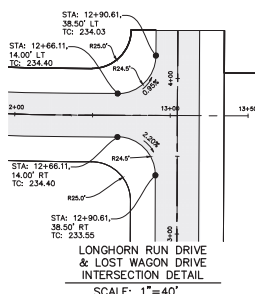
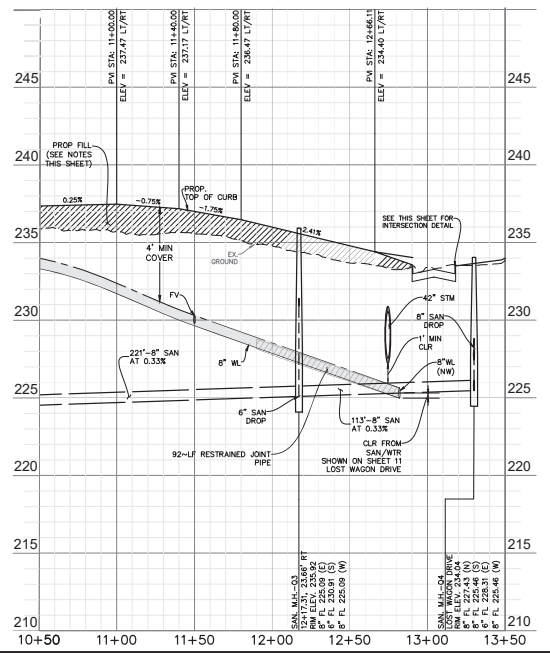
TPRE NO. F-22671  
CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY CITY ENGINEER  
SIGNATURE VALID FOR ONE (1) YEAR

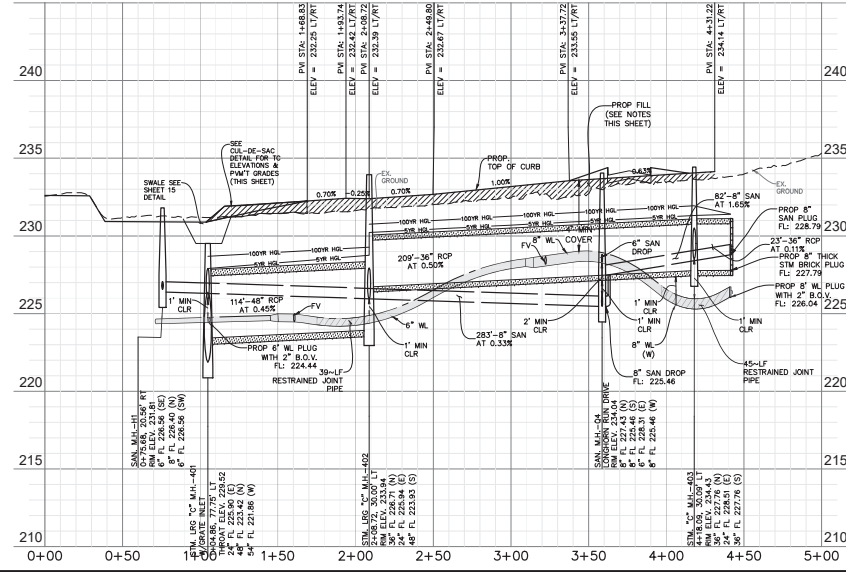
**LONGHORN RUN DRIVE & LOST WAGON DRIVE**

**SHEET 11 OF 21**

**LONGHORN RUN DRIVE**



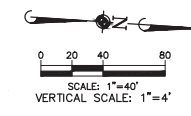
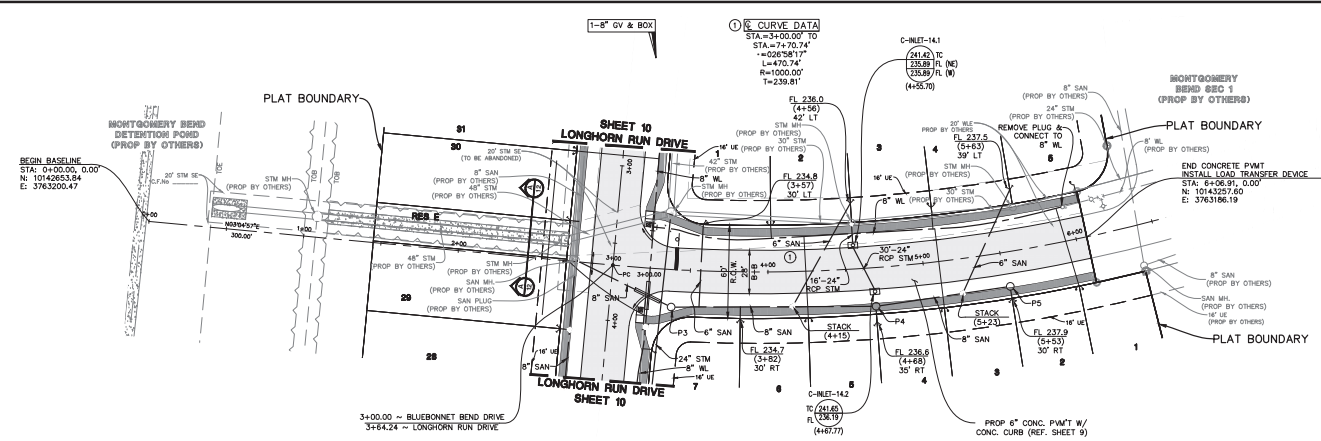
**LOST WAGON DRIVE**



P:\A101292\_Metery and Engineer\Inspec\088\_Sec 2\Job3\_Plan\_Sect\_Dimensions\LONGHORN RUN DRIVE & LOST WAGON DRIVE.dwg 7/26/2023 10:32 AM GDUHON

ELEVATION LAND SOLUTIONS - MONTGOMERY BEND SEC 2 - PROJECT NO. 610126-006-00

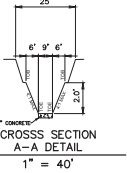
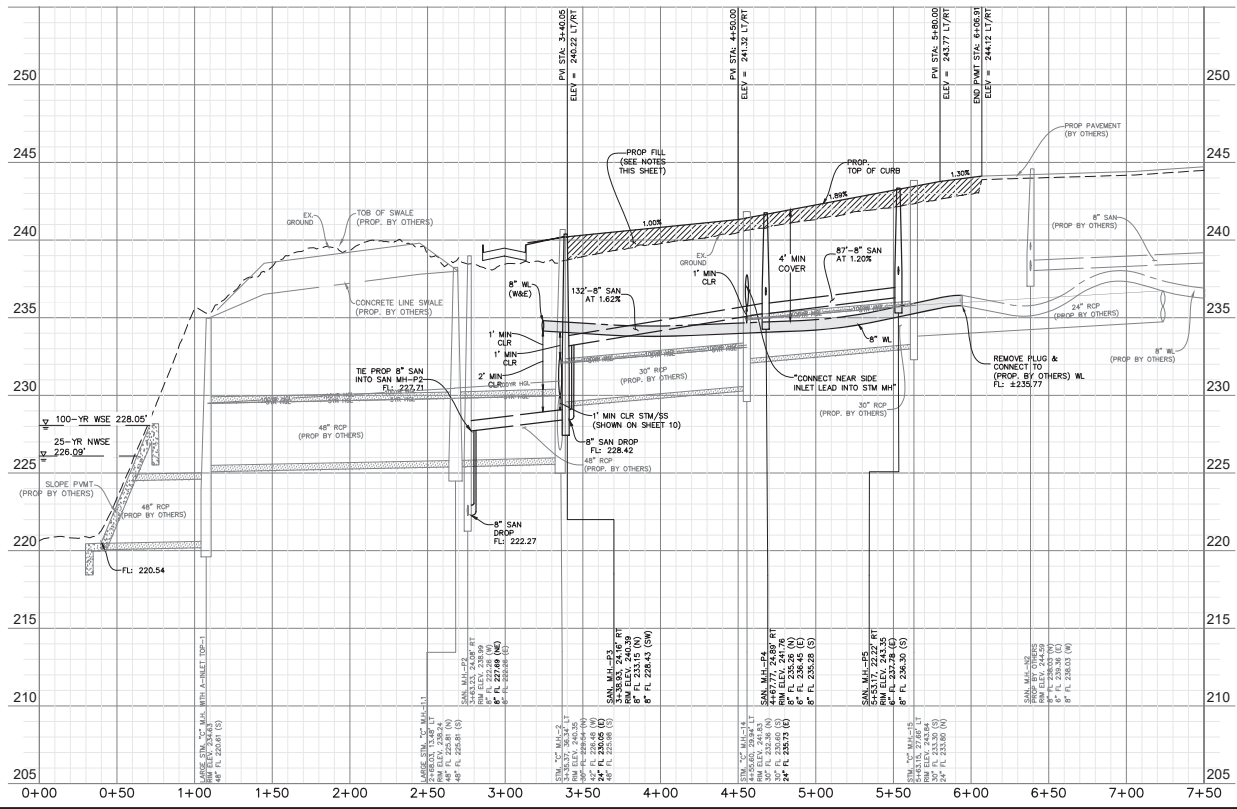
P:\A10\126\_Military and Customer\_Traffic\008\_Sec 2\Job\Plan Set\Drawings\BLUEBONNET\_BEND.dwg, Date: 7/26/2023, 10:33 AM, AHDJZ7242A



**ELEVATION**  
land solutions  
TPBE REGISTRATION NUMBER F-22671  
9709 LAKESIDE BOULEVARD, SUITE 200  
THE WOODLANDS, TX 77381 832-823-2200

**KEY MAP**

### BLUEBONNET BEND DRIVE



**CROSS SECTION A-A DETAIL**  
1" = 40"

**SWALE CAPACITY CALCULATION**  
 $Q = 1.49 \cdot A \cdot R^{2/3} \cdot S^{1/2}$

CHANNELS	SLOPE	DEPTH	FREE BOARD	WIDTH	TOP WIDTH	CROSS AREA	WATERWAY	VELOCITY
FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	SQ. FT.	CU. FT.	FEET PER SECOND
0.013	1.30%	2.0'	1.20'	9'	25'	60.48	44.21	6.20

**WATER LINE-SANITARY SEWER CROSSING NOTE:**  
POSITION ONE FULL SECTION OF RESTRAINED JOINT WATERLINE AND SANITARY SEWER PIPE CENTERED AT CROSSING. INSERT SANITARY SEWER PIPE WITH CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS ONE FOOT BEYOND THE JOINTS ON EACH END. FOR CROSSINGS WHERE PROPOSED WATERLINE IS UNDER PROPOSED SANITARY SEWER, PUT RESTRAINED JOINT DUCTILE IRON PIPE WATERLINE (FOR DIAMETERS LESS THAN 24 INCHES) AND RESTRAINED JOINT PRESSURE RATED (MIN 150 PSI) SANITARY 24" MIN CLEARANCE. NO SEPARATE PAY.

- FILL NOTES:**
- EXISTING DRAINAGE SWALES: ALL EXISTING DRAINAGE SWALES SHALL BE FILLED AS SHOWN WITH MATERIAL FROM EXISTING ADJACENT SPOT BANC IN MAXIMUM 8" LOOSE LIFTS AND COMPACTED TO 95% PROCTOR DENSITY AS PER AASHTO TEST METHOD T-99.
  - EXISTING DRAINAGE SWALES: ALL EXISTING DRAINAGE SWALES UNDER PROPOSED CONCRETE PAVEMENT SHALL BE CLEANED, MUCKED OUT AND SCARIFIED TO A MINIMUM DEPTH OF 6" AND FILLED AS SPECIFIED ABOVE IN FILL NOTE NO. 1, NO SEPARATE PAY.
  - ROADWAY EMBANKMENT: STRIP 3" OF VEGETATION FROM AREA TO BE FILLED AND RE-COMPACT SOIL TO 95% PROCTOR DENSITY. PLACE FILL MATERIAL AS SPECIFIED IN FILL NOTE NO. 1.

**BENCHMARK:**  
SOURCE BENCHMARK: HEREON ARE BASED ON NATIONAL GEODETIC SURVEY MONUMENT DESIGNATION 81, PID NO. A36402  
HAVING PUBLISHED INFORMATION AS FOLLOWS:  
LATITUDE : 30° 21' 12.45392"-NORTH  
LONGITUDE : 090° 34' 45.02044"-WEST  
ORTHO HEIGHT : 212.4 FT. (64.74 METERS)  
HORIZONTAL DATUM : NAD83 (2011)  
VERTICAL DATUM : NAVD83

**FLOODPLAIN INFORMATION:**  
ACCORDING TO MAP NO. 483500088 OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAPS FOR MONTGOMERY COUNTY, DATED AUGUST 18, 2014, THE SUBJECT TRACT IS SITUATED WITHIN UNSHADED ZONE "X" DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 100-YEAR FLOOD PLAIN.  
THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE PROPERTY OR STRUCTURES THEREON WILL BE FREE FROM FLOODING OR FLOOD DAMAGE ON RARE OCCASIONS FLOOD CAN AND WILL OCCUR AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE OR NATURAL CAUSES. THIS FLOOD STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF THE SURVEYOR.

DATE	REVISION	APP.

**GARRET J. DUHON**  
9709 LAKESIDE BLVD.  
SUITE 200  
THE WOODLANDS, TX 77381  
(832) 823-2200  
*Garret J. Duhon*  
Professional Engineer  
130733  
07/26/2023  
TPBE NO. F-22671  
CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

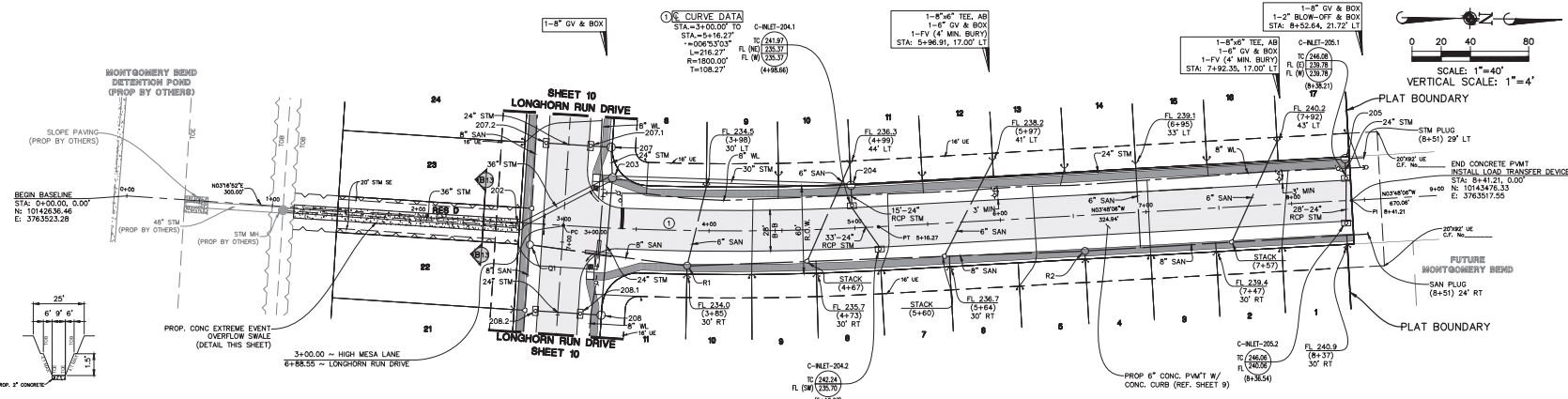
CITY OF MONTGOMERY CITY ENGINEER  
SIGNATURE VALID FOR ONE (1) YEAR

**BLUEBONNET BEND DRIVE**

**SHEET 12 OF 21**

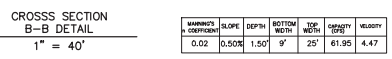
ELEVATION LAND SOLUTIONS - MONTGOMERY BEND SEC 2 - PROJECT NO. 6101.026.006.00

P:\MID128\_Midway and Coulter\_Traffic\008\_Sect 2\008\_Sect 2\Drawings\MCH MESA LANE.dwg 7/26/2023 10:34 AM M0274204

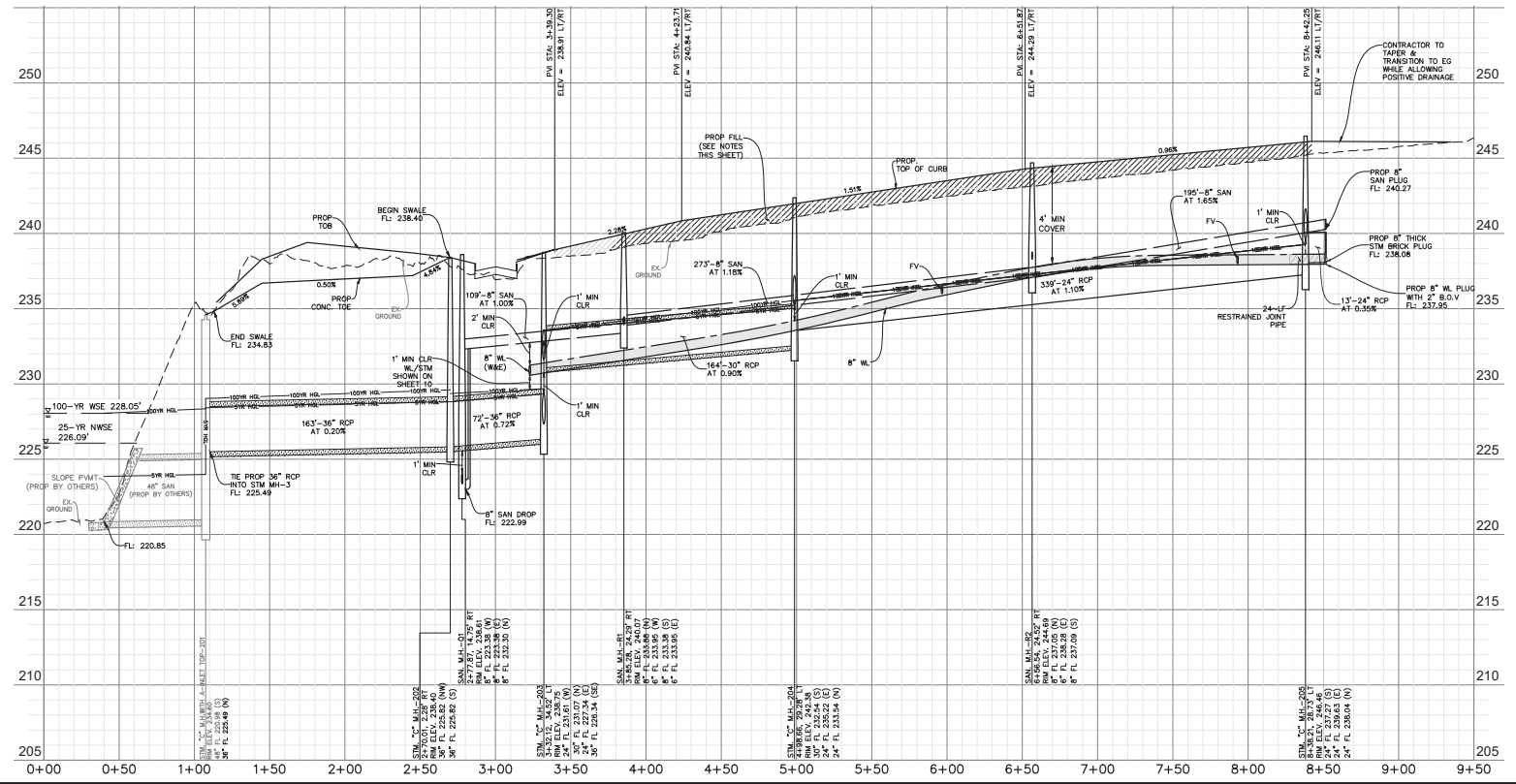


**ELEVATION**  
land solutions  
TPBE REGISTRATION NUMBER F-22671  
9709 LAKESIDE BOULEVARD, SUITE 200  
THE WOODLANDS, TX 77381 832-823-2200

**KEY MAP**



### HIGH MESA LANE



**WATER LINE-SANITARY SEWER CROSSING NOTE:**  
FOR THE FULL SECTION OF RESTRAINED JOINT WATERLINE AND SANITARY SEWER PIPE CENTERED AT CROSSING, INSERT SANITARY SEWER PIPE WITH CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS ONE FOOT BEYOND THE JOINTS ON EACH END. FOR CROSSINGS WHERE PROPOSED WATERLINE IS UNDER PROPOSED SANITARY SEWER, PUT RESTRAINED JOINT DUCTILE IRON PIPE WATERLINE (FOR DIAMETERS LESS THAN 24 INCHES) AND RESTRAINED JOINT PRESSURE RAIN (MIN 150 PSI) SANITARY 24\"/>

**FILL NOTES:**  
1) EXISTING GRADE SWALES: ALL EXISTING DRAINAGE SWALES SHALL BE FILLED AS SHOWN WITH MATERIAL FROM EXISTING ADJACENT SPOIL BANKS IN MAXIMUM 8\"/>

**BENCHMARK:**  
ELEVATIONS SHOWN HEREON ARE BASED ON NATIONAL GEODETIC SURVEY MONUMENT DESIGNATION H0520 81, PID No. A36420.  
HAVING PUBLISHED INFORMATION AS FOLLOWS:  
LATITUDE : 30° 21' 12.45392-NORTH  
LONGITUDE : 090° 34' 45.02514-WEST  
ORTHO HEIGHT : 2124.4 FT. (64.7 METERS)  
HORIZONTAL DATUM : NAD83 (2011)  
VERTICAL DATUM : NAVD83

**FLOODPLAIN INFORMATION:**  
ACCORDING TO MAP NO. 483300000 OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAPS FOR MONTGOMERY COUNTY, DATED AUGUST 18, 2014, THE SUBJECT TRACT IS SITUATED WITHIN UNSHADED ZONE "X" DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 100-YEAR FLOOD PLAIN.  
THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE PROPERTY OR STRUCTURES THEREON WILL BE FREE FROM FLOODING OR FLOOD DAMAGE, ON RARE OCCASIONS FLOODS CAN AND WILL OCCUR AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE OR NATURAL CAUSES. THIS FLOOD STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF THE SURVEYOR.

DATE	REVISION	APP.

**GARRET J. DUHON**  
9709 LAKESIDE BLVD.  
SUITE 200  
THE WOODLANDS, TX 77381  
(832) 823-2200

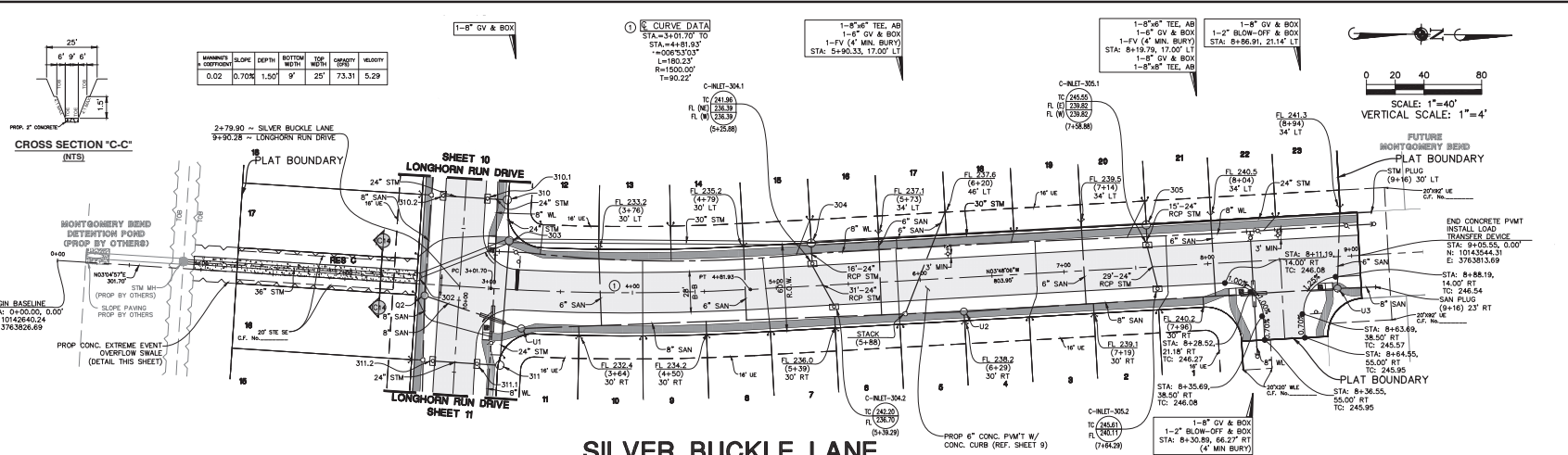
TPBE No. F-22671  
CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK


CITY OF MONTGOMERY CITY ENGINEER DATE  
SIGNATURE VALID FOR ONE (1) YEAR

### HIGH MESA LANE

ELEVATION LAND SOLUTIONS - MONTGOMERY BEND SEC 2 - PROJECT NO. 610126-006.00

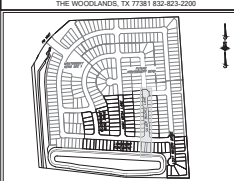
P:\A\10128\_Matery and Engineer\Invt\A\008\_Sec 2\A\008\_Sec 2\Drawings\SILVER BUCKLE LANE.dwg 7/26/2023 10:35 AM A01027420





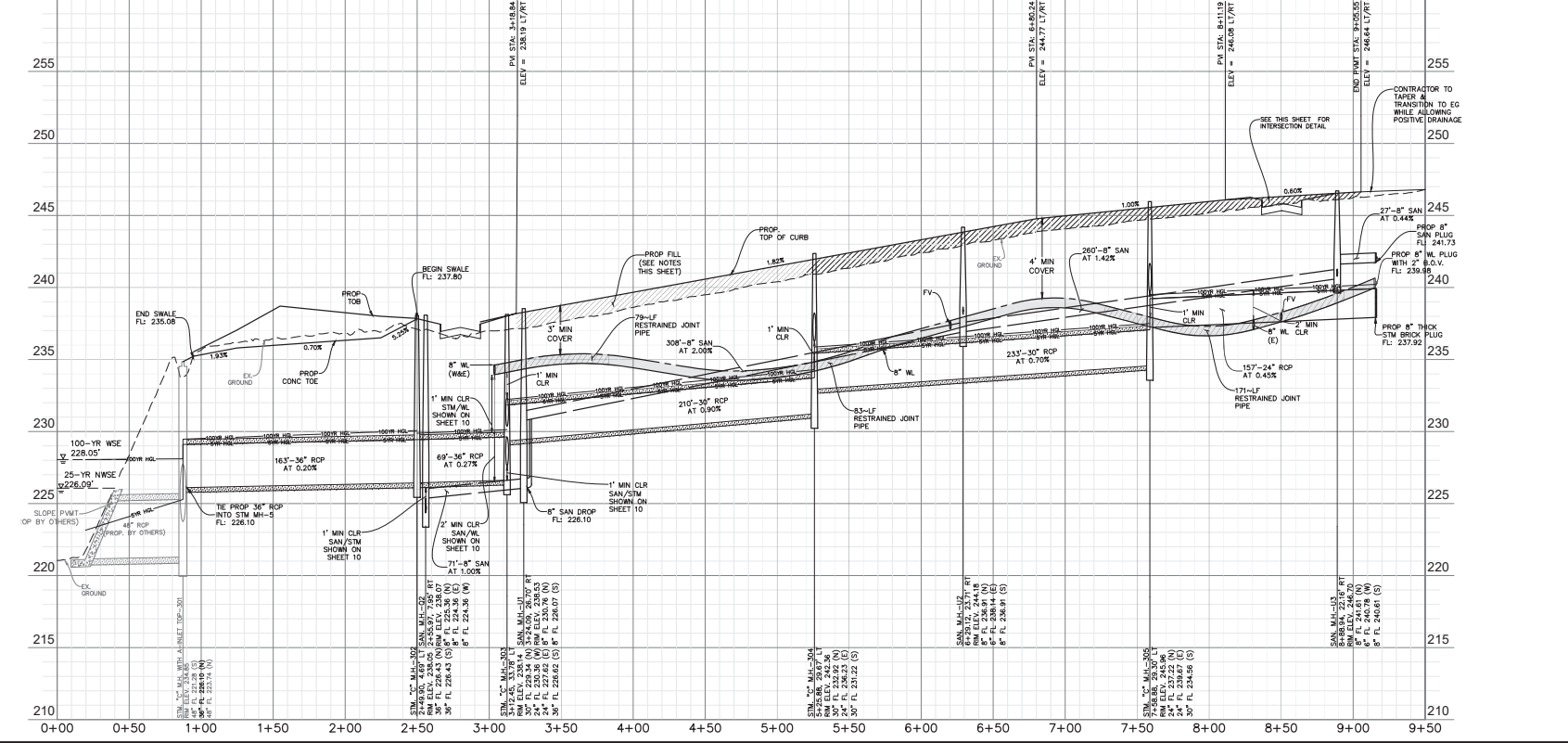
**ELEVATION**  
land solutions

TPBE REGISTRATION NUMBER F-22671  
9709 LAKESIDE BLVD., SUITE 200  
THE WOODLANDS, TX 77381 832-823-2200



**KEY MAP**

## SILVER BUCKLE LANE



**WATER LINE-SANITARY SEWER CROSSING NOTE:**  
FROM THE FULL SECTION OF RESTRAINED JOINT WATERLINE AND SANITARY SEWER PIPE CENTERED AT CROSSING, INSERT SANITARY SEWER PIPE WITH CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS ONE FOOT BEYOND THE JOINTS ON EACH END. FOR CROSSINGS WHERE PROPOSED WATERLINE IS UNDER PROPOSED SANITARY SEWER, PUT RESTRAINED JOINT DUCTILE IRON PIPE WATERLINE (FOR DIAMETERS LESS THAN 24 INCHES) AND RESTRAINED JOINT PRESSURE RATED (MIN 150 PSI) SANITARY 24" MIN CLEARANCE, NO SEPARATE PAY.

- FILL NOTES:**
- EXISTING GRAVITY SWALES: ALL EXISTING DRAINAGE SWALES SHALL BE FILLED AS SHOWN WITH MATERIAL FROM EXISTING ADJACENT SPOIL BANKS IN MAXIMUM 8" LOOSE LIFTS AND COMPACTED TO 95% PROCTOR DENSITY AS PER AASHTO TEST METHOD T-99.
  - EXISTING DRAINAGE SWALES: ALL EXISTING DRAINAGE SWALES UNDER PROPOSED CONCRETE PAVEMENT SHALL BE CLEANED, MUCKED OUT AND SCARIFIED TO A MINIMUM DEPTH OF 4" AND FILLED AS SPECIFIED ABOVE IN FILL NOTE NO. 1 NO SEPARATE PAY.
  - ROADWAY EMBANKMENT: STRIP 1" OF VEGETATION FROM AREA TO BE FILLED AND RE-COMPACT SOIL TO 95% PROCTOR DENSITY. PLACE FILL MATERIAL AS SPECIFIED IN FILL NOTE NO. 1.

**BENCHMARK:**  
SOURCE BENCHMARK: ELEVATIONS SHOWN HEREON ARE BASED ON NATIONAL GEODETIC SURVEY MONUMENT DESIGNATION H2502 81, PID NO. A36402 HAVING PUBLISHED INFORMATION AS FOLLOWS:  
LATITUDE : 30° 21' 12.45392"-NORTH  
LONGITUDE : 090° 34' 45.02514"-WEST  
ORTHO HEIGHT : 212.4 FT. (64.7 METERS)  
HORIZONTAL DATUM : NAD83 (2011)  
VERTICAL DATUM : NAVD83

**FLOODPLAIN INFORMATION:**  
ACCORDING TO MAP NO. 485330000 OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAPS FOR MONTGOMERY COUNTY, DATED AUGUST 18, 2014, THE SUBJECT TRACT IS SITUATED WITHIN UNSHADED ZONE "X" DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 100-YEAR FLOOD PLAIN.

THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE PROPERTY OR STRUCTURES THEREON WILL BE FREE FROM FLOODING OR FLOOD DAMAGE, OR RARE OCCASIONS FLOOD CAN AND WILL OCCUR AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE OR NATURAL CAUSES. THIS FLOOD STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF THE SURVEYOR.

DATE	REVISION	APP.

GARRET J. DUHON  
9709 LAKESIDE BLVD.  
SUITE 200  
THE WOODLANDS, TX 77381  
(832) 823-2200

*Garrett J. Duhon*  
Professional Engineer  
130733  
07/26/2023

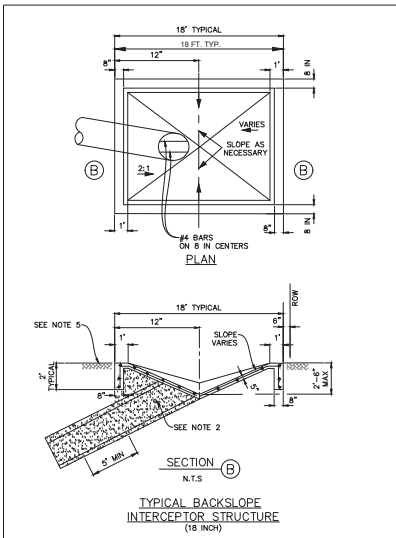
TPBE No. F-22671  
CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY CITY ENGINEER  
SIGNATURE VALID FOR ONE (1) YEAR

DATE

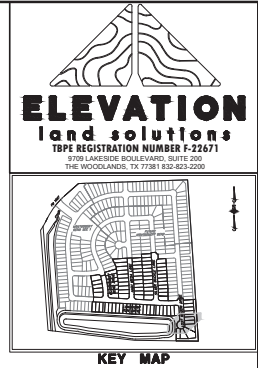
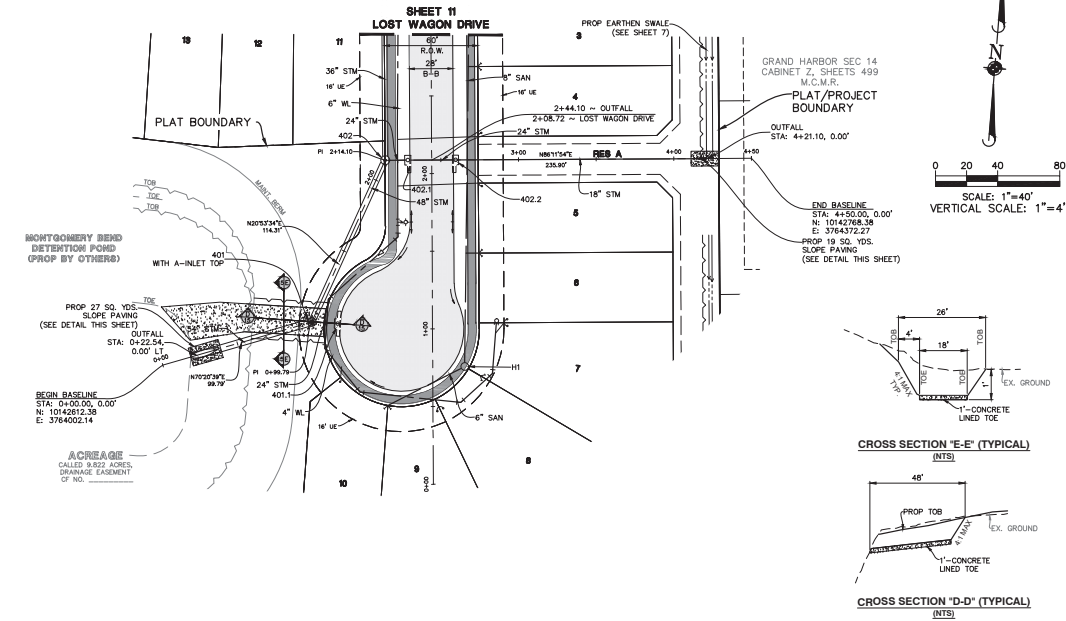
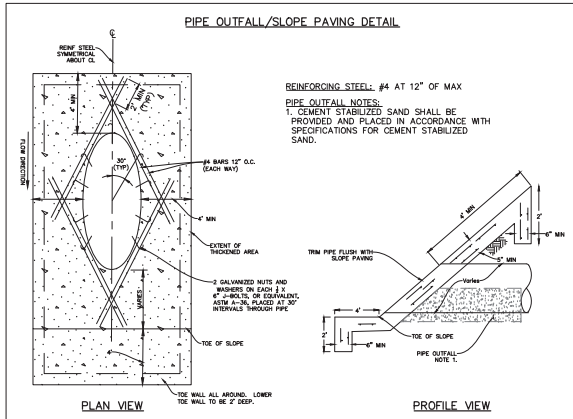
ELEVATION LAND SOLUTIONS - MONTGOMERY BEND SEC 2 - PROJECT NO. 610126-006-00

22-014  
 P:\A10128\_Metry and Coulter\_Traffic\008\_Sec 2\0103\_Plan\_Sht\_Dimmed\OUTFALL\_Sht\_27/29/2023\_10:36:36\_AM\_MJULIFADA



**NOTES**

1. BACKSLOPE INTERCEPTOR STRUCTURE PIPES SHALL BE RCP PIPE IN ACCORDANCE WITH SPECIFICATION SECTION 0211 - REINFORCED CONCRETE PIPE. PROVIDE AND PLACE CEMENT STABILIZED SAND IN ACCORDANCE WITH SPECIFICATION SECTION 0231 - CEMENT STABILIZED SAND AND SECTION 0216 - STRUCTURAL EXCAVATING.
  2. EXCAVATION, FILL AND BACKFILL FOR INTERCEPTOR OUTFALLS SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 0236 - EXCAVATION AND BACKFILL FOR STRUCTURES.
  3. CONCRETE SHALL BE STRUCTURAL CONCRETE IN ACCORDANCE WITH SPECIFICATION SECTION 0215 - CONCRETE FOR UTILITY CONSTRUCTION.
  4. INTERCEPTOR STRUCTURES:
    - 5.1. ADJUST LENGTH AND WIDTH IN FIELD AS NECESSARY.
    - 5.2. 2-FEET DEEP X 8-INCH WIDE TOE ALL AROUND THE STRUCTURE.
    - 5.3. STEEL REINFORCING #4 BARS (GRADE 60) AT 12 INCHES ON CENTER EACH WAY.
    - 5.4. ANY INTERCEPTOR OUTFALL PIPE LARGER THAN MAXIMUM SIZE INDICATED REQUIRES A SEPARATE DETAIL.
    - 5.5. INDICATED REQUIRES A SEPARATE DETAIL.
    - 5.6. MATCH TOP OF CONCRETE WITH NATURAL GROUND.
- BACKSLOPE AND INTERCEPTOR STRUCTURE ELEVATIONS AND LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE. FINAL ELEVATIONS AND LOCATIONS SHALL BE FIELD VERIFIED BY THE ENGINEER PRIOR TO INSTALLATION.
- STRUCTURAL CONCRETE WITH #4 BARS (GRADE 60) 12 INCH O.C. EACH WAY, 3 ROWS MIN. EACH WAY. - FOR COLLARS ONLY. WAIT A MINIMUM OF 24 HOURS AFTER PLACING CONCRETE TO BACKFILL.



**WATER LINE-SANITARY SEWER CROSSING NOTE:**

POSITION ONE FULL SECTION OF RESTRAINED JOINT WATERLINE AND SANITARY SEWER PIPE CENTERED AT CROSSING. INSERT SANITARY SEWER PIPE WITH CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF ONE PIPE SEMENT PLUS ONE FOOT BEYOND THE JOINTS ON EACH END. FOR CROSSINGS WHERE PROPOSED WATERLINE IS UNDER PROPOSED SANITARY SEWER, PUT RESTRAINED JOINT DUCTILE IRON PIPE WATERLINE (FOR DIAMETERS LESS THAN 24 INCHES) AND RESTRAINED JOINT PRESSURE RATED (MIN 150 PSI) SANITARY 24" MIN CLEARANCE. NO SEPARATE PAY.

- FILL NOTES:**
- 1) EXISTING DRAINAGE SWALES: ALL EXISTING DRAINAGE SWALES SHALL BE FILLED AS SHOWN WITH MATERIAL FROM EXISTING ADJACENT SPOT BANKS IN MAXIMUM 6" LOOSE LIFTS AND COMPACTED TO 95% PROCTOR DENSITY AS PER ASTM D 1557 METHOD T-99.
  - 2) EXISTING DRAINAGE SWALES: ALL EXISTING DRAINAGE SWALES UNDER PROPOSED CONCRETE PAVEMENT SHALL BE CLEANED, MUCKED OUT AND SCARIFIED TO A MINIMUM DEPTH OF 6" AND FILLED AS SPECIFIED ABOVE IN FILL NOTE NO. 1. NO SEPARATE PAY.
  - 3) ROADWAY EMBANKMENT: STRIP 3" OF VEGETATION FROM AREA TO BE FILLED AND RE-COMPACT SOIL TO 95% PROCTOR DENSITY. PLACE FILL MATERIAL AS SPECIFIED IN FILL NOTE NO. 1.

**BENCHMARK:**  
 SOURCE BENCHMARK:  
 ELEVATIONS SHOWN HEREON ARE BASED ON NATIONAL GEODETIC SURVEY MONUMENT DESIGNATION RATED 81, PID NO. A36402  
 HAVING PUBLISHED INFORMATION AS FOLLOWS:  
 LATITUDE : 30° 21' 12.45392"-NORTH  
 LONGITUDE : 095° 34' 45.00344"-WEST  
 ORTHO HEIGHT : 212.4 FT. (64.74 METERS)  
 HORIZONTAL DATUM : NAD83 (2011)  
 VERTICAL DATUM : NAVD83

**FLOODPLAIN INFORMATION:**  
 ACCORDING TO MAP NO. 485300008 OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAPS FOR MONTGOMERY COUNTY, DATED AUGUST 18, 2014, THE SUBJECT TRACT IS SITUATED WITHIN UNSHADED ZONE "X" DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 100-YEAR FLOOD PLAIN.

THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE PROPERTY OR STRUCTURES THEREON WILL BE FREE FROM FLOODING OR FLOOD DAMAGE. ON RARE OCCASIONS FLOODS CAN AND WILL OCCUR AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE OR NATURAL CAUSES. THIS FLOOD STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF THE SURVEYOR.

DATE	REVISION	APP.

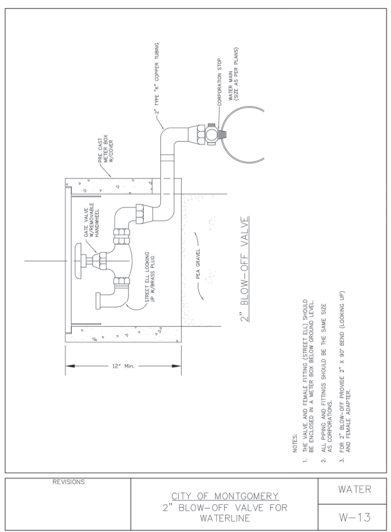
GARRET J. DUHON  
 9709 LAKESIDE BLVD.  
 SUITE 200  
 THE WOODLANDS, TX 77381  
 (832) 823-2200  
 Garrett J. Duhon  
 PROFESSIONAL ENGINEER  
 130733  
 07/29/2023  
 TYPE NO. F-22671  
 CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY CITY ENGINEER DATE SIGNATURE VALID FOR ONE (1) YEAR

**OUTFALL**

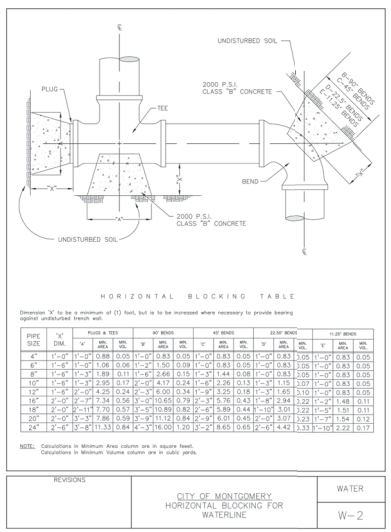
ELEVATION LAND SOLUTIONS - MONTGOMERY BEND SEC 2 - PROJECT NO. 610126-006-00

22-34  
 P:\A010128\_Military and Engineer\_Traffic\08\_Sec 2\Army\_Plan\_Sect\_Drainage\MONTGOMERY 2/7/02/203\_10-36\_AW\_AJUD\22-34



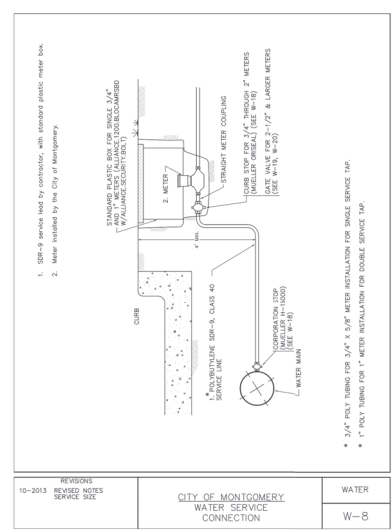
REVISIONS

CITY OF MONTGOMERY	WATER
2\"/>	
W-13	



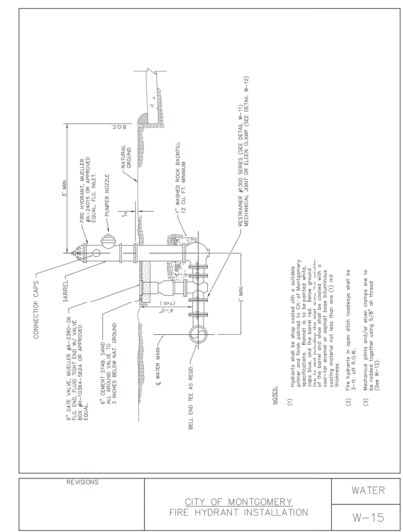
REVISIONS

CITY OF MONTGOMERY	WATER
HORIZONTAL BLOCKING FOR WATERLINE	
W-2	



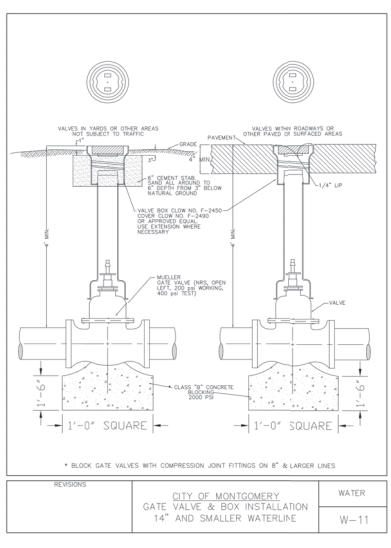
REVISIONS

CITY OF MONTGOMERY	WATER
WATER SERVICE CONNECTION	
W-8	



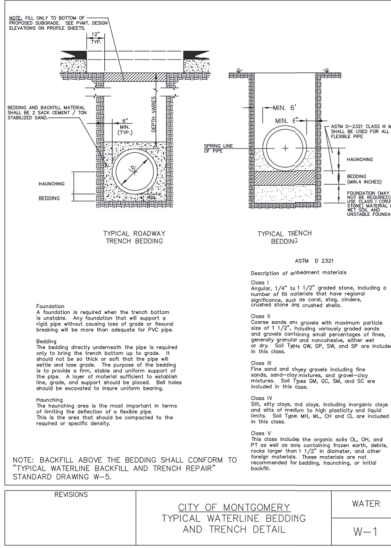
REVISIONS

CITY OF MONTGOMERY	WATER
FIRE HYDRANT INSTALLATION	
W-15	



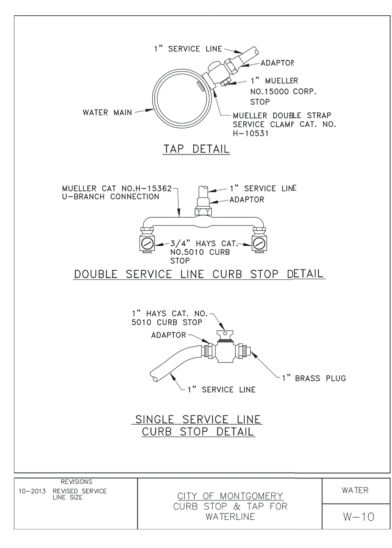
REVISIONS

CITY OF MONTGOMERY	WATER
GATE VALVE & BOX INSTALLATION 14\"/>	
W-11	



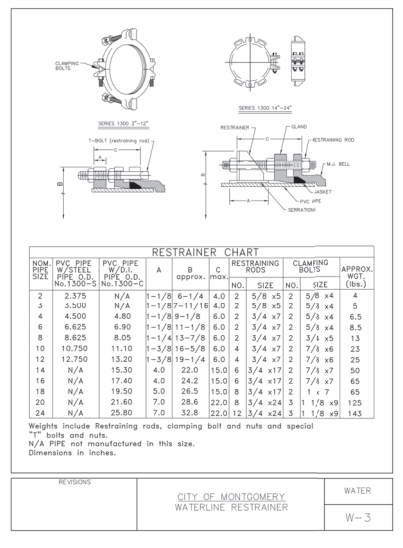
REVISIONS

CITY OF MONTGOMERY	WATER
TYPICAL WATERLINE BEDDING AND TRENCH DETAIL	
W-1	



REVISIONS

CITY OF MONTGOMERY	WATER
CURB STOP & TAP FOR WATERLINE	
W-10	



REVISIONS

CITY OF MONTGOMERY	WATER
WATERLINE RESTRAINER	
W-3	



DATE	REVISION	APP.

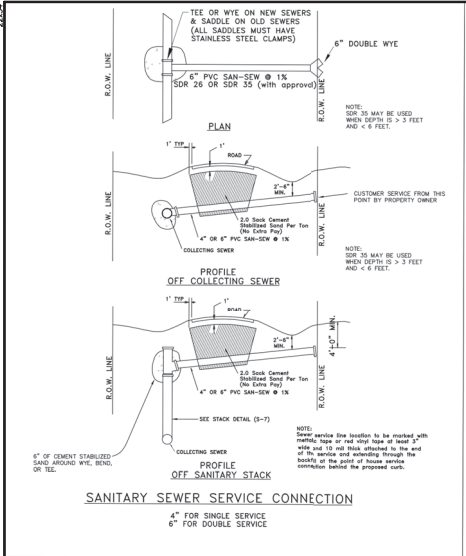
GARRET J. DUHON  
 9709 LAKESIDE BLVD.  
 SUITE 200  
 THE WOODLANDS, TX 77381  
 (832) 823-2200  
 Garret J. Duhon  
 STATE OF TEXAS  
 PROFESSIONAL ENGINEER  
 130733  
 07/26/2023

TBPE NO. F-22671  
 CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

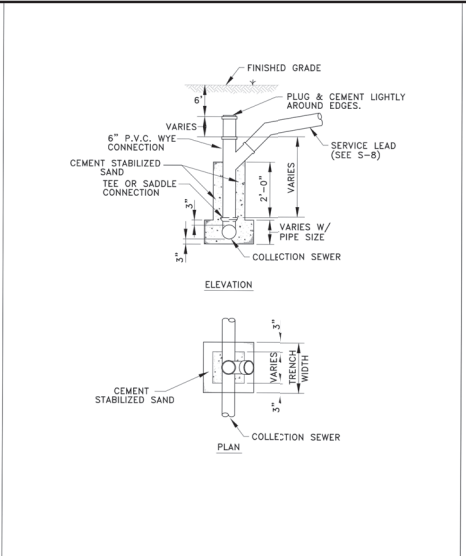
CITY OF MONTGOMERY CITY ENGINEER DATE  
 SIGNATURE VALID FOR ONE (1) YEAR

ELEVATION LAND SOLUTIONS - MONTGOMERY BEND SEC 2 - PROJECT NO. 610.126.006.00

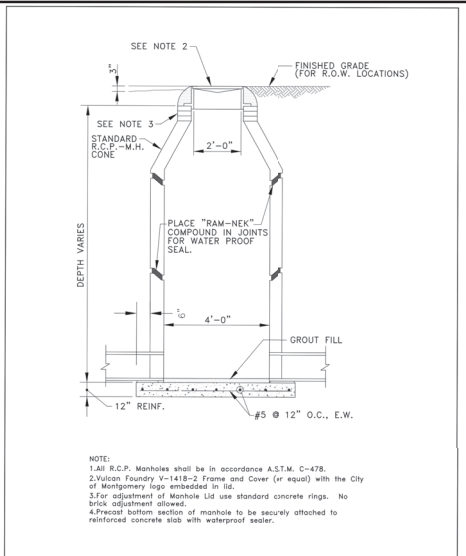




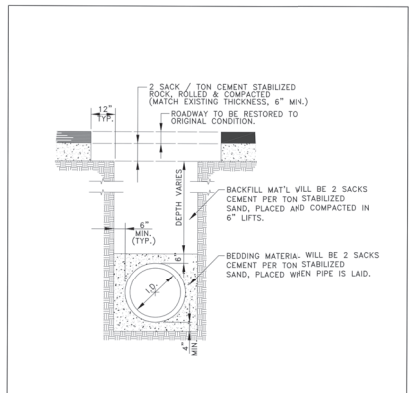
REVISIONS	CITY OF MONTGOMERY RESIDENTIAL SANITARY SEWER SERVICE CONNECTION	SEWER
10-2013	REVISED SERVICE GRADE & NOTES	S-8



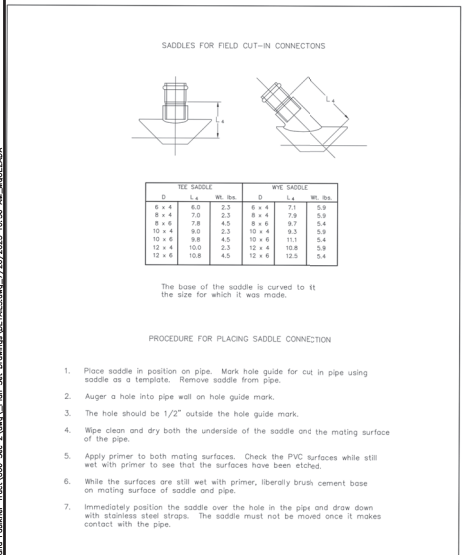
REVISIONS	CITY OF MONTGOMERY SANITARY SEWER STACK DETAIL	SEWER
10-2013	REVISED NOTES	S-7



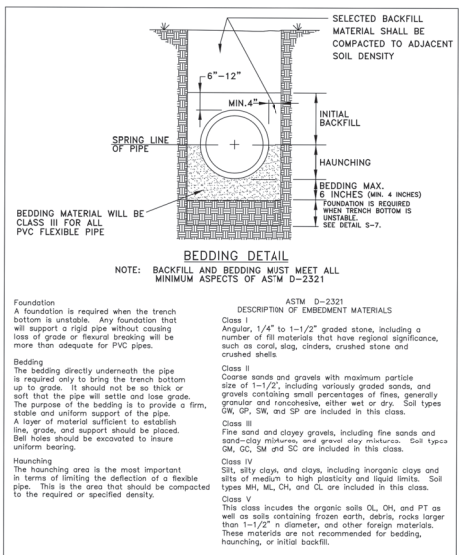
REVISIONS	CITY OF MONTGOMERY STANDARD PRECAST MANHOLE	SEWER
		S-4



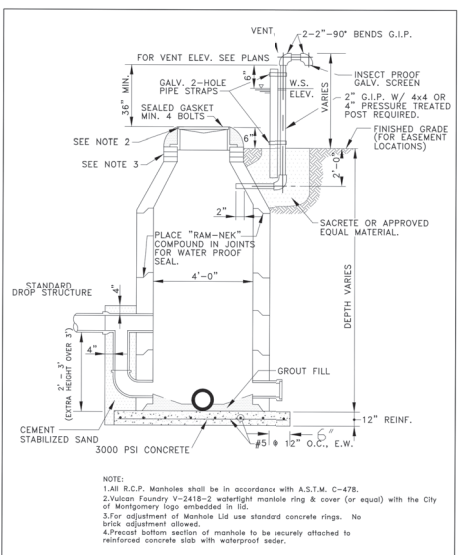
REVISIONS	CITY OF MONTGOMERY TYPICAL ROADWAY TRENCH BEDDING AND BACKFILL DETAIL	SEWER
		S-2



REVISIONS	CITY OF MONTGOMERY TEE & WYE SADDLES FOR PVC PIPE	SEWER
		S-11



REVISIONS	CITY OF MONTGOMERY TYPICAL SANITARY SEWER BEDDING AND TRENCH DETAIL	SEWER
		S-1



REVISIONS	CITY OF MONTGOMERY STANDARD PRECAST MANHOLE W/ DROP CONNECTION & VENT	SEWER
		S-5

DATE	REVISION	APP.

GARRET J. DUHON  
9709 LAKESIDE BLVD.  
SUITE 200  
THE WOODLANDS, TX 77381  
(832) 823-2200  
Garrett J. Duhon  
Professional Engineer  
130733  
07/26/2023

TPBE NO. F-22671  
CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY CITY ENGINEER  
SIGNATURE VALID FOR ONE (1) YEAR

DATE

P: A10.128; M: City and Engineer; T: 08/08; S: 0/0/0; P: 01/01/2023; 10:36 AM; A: 01/01/2023

ELEVATION LAND SOLUTIONS - MONTGOMERY BEND SEC 2 - PROJECT NO. 610.126.006.00

**02632-09**

**02632-10**

CONCRETE PAVING OUT BENCH, MIN. WIDTH TO BE POINTED END OF BOX

STORM SEWER TYPE "M" INLET  
NITS

STORM SEWER TYPE "M" INLET ON CURB  
INDICATING CONC. SURFACE OF BOX OR BENCH  
NITS

CITY OF HOUSTON  
ENGINEER'S SEAL  
STORM SEWER  
02632-09  
AND 02632-10

**02632-06**

STORM SEWER TYPE "M-1", "M-2" AND "M-3C" INLET  
NITS

CITY OF HOUSTON  
ENGINEER'S SEAL  
STORM SEWER  
02632-06 THROUGH 08

**02632-07**

**02632-08**

STORM SEWER TYPE "M-1" INLET  
NITS

STORM SEWER TYPE "M-1" INLET  
NITS

CITY OF HOUSTON  
ENGINEER'S SEAL  
STORM SEWER  
02632-06 THROUGH 08

**02317-03**

SANITARY OR STORM SEWER BYPASS AND BACKFILL  
FOR SET TABLE TRENCH  
NITS

NOTES:

1. THIS DETAIL MAY BE USED ONLY FOR SET TABLE TRENCHES. IT IS NOT TO BE USED FOR OTHER TYPES OF TRENCHES.
2. THE BYPASS SHALL BE CONSTRUCTED OF 12" DIA. 150# REINFORCED CONCRETE PIPE WITH 1/2" DIA. 150# REINFORCED CONCRETE MANHOLE RINGS.
3. THE BYPASS SHALL BE INSTALLED WITH A MINIMUM OF 12" COVER OVER THE TOP OF THE BYPASS.
4. THE BYPASS SHALL BE INSTALLED WITH A MINIMUM OF 12" COVER OVER THE TOP OF THE BYPASS.

**02317-05**

PRECAST CONCRETE BOX STORM SEWER BYPASS AND BACKFILL FOR SET TABLE TRENCH  
NITS

NOTES:

1. THIS DETAIL MAY BE USED ONLY FOR SET TABLE TRENCHES. IT IS NOT TO BE USED FOR OTHER TYPES OF TRENCHES.
2. THE BYPASS SHALL BE CONSTRUCTED OF 12" DIA. 150# REINFORCED CONCRETE PIPE WITH 1/2" DIA. 150# REINFORCED CONCRETE MANHOLE RINGS.
3. THE BYPASS SHALL BE INSTALLED WITH A MINIMUM OF 12" COVER OVER THE TOP OF THE BYPASS.
4. THE BYPASS SHALL BE INSTALLED WITH A MINIMUM OF 12" COVER OVER THE TOP OF THE BYPASS.

**02317-06**

PRECAST CONCRETE BOX STORM SEWER BYPASS AND BACKFILL FOR SET TABLE TRENCH  
NITS

NOTES:

1. THIS DETAIL MAY BE USED ONLY FOR SET TABLE TRENCHES. IT IS NOT TO BE USED FOR OTHER TYPES OF TRENCHES.
2. THE BYPASS SHALL BE CONSTRUCTED OF 12" DIA. 150# REINFORCED CONCRETE PIPE WITH 1/2" DIA. 150# REINFORCED CONCRETE MANHOLE RINGS.
3. THE BYPASS SHALL BE INSTALLED WITH A MINIMUM OF 12" COVER OVER THE TOP OF THE BYPASS.
4. THE BYPASS SHALL BE INSTALLED WITH A MINIMUM OF 12" COVER OVER THE TOP OF THE BYPASS.

TABLE 1	TABLE 2
4" DIA. MANHOLE	4" DIA. MANHOLE
6" DIA. MANHOLE	6" DIA. MANHOLE
8" DIA. MANHOLE	8" DIA. MANHOLE
10" DIA. MANHOLE	10" DIA. MANHOLE
12" DIA. MANHOLE	12" DIA. MANHOLE
15" DIA. MANHOLE	15" DIA. MANHOLE
18" DIA. MANHOLE	18" DIA. MANHOLE
21" DIA. MANHOLE	21" DIA. MANHOLE
24" DIA. MANHOLE	24" DIA. MANHOLE
30" DIA. MANHOLE	30" DIA. MANHOLE
36" DIA. MANHOLE	36" DIA. MANHOLE
42" DIA. MANHOLE	42" DIA. MANHOLE
48" DIA. MANHOLE	48" DIA. MANHOLE
54" DIA. MANHOLE	54" DIA. MANHOLE
60" DIA. MANHOLE	60" DIA. MANHOLE
72" DIA. MANHOLE	72" DIA. MANHOLE
84" DIA. MANHOLE	84" DIA. MANHOLE
96" DIA. MANHOLE	96" DIA. MANHOLE
108" DIA. MANHOLE	108" DIA. MANHOLE
120" DIA. MANHOLE	120" DIA. MANHOLE

**02317-07**

PRECAST CONCRETE BOX STORM SEWER BYPASS AND BACKFILL FOR SET TABLE TRENCH  
NITS

NOTES:

1. THIS DETAIL MAY BE USED ONLY FOR SET TABLE TRENCHES. IT IS NOT TO BE USED FOR OTHER TYPES OF TRENCHES.
2. THE BYPASS SHALL BE CONSTRUCTED OF 12" DIA. 150# REINFORCED CONCRETE PIPE WITH 1/2" DIA. 150# REINFORCED CONCRETE MANHOLE RINGS.
3. THE BYPASS SHALL BE INSTALLED WITH A MINIMUM OF 12" COVER OVER THE TOP OF THE BYPASS.
4. THE BYPASS SHALL BE INSTALLED WITH A MINIMUM OF 12" COVER OVER THE TOP OF THE BYPASS.

4-FT DIA. MANHOLE

5-FT & 6-FT DIA. MANHOLE

5-FT & 6-FT DIA. MANHOLE

CITY OF HOUSTON  
ENGINEER'S SEAL  
STORM SEWER TYPE "C"  
PRECAST ROUND MANHOLE  
NITS TO SCALE

TABLE 1

TABLE 1	TABLE 2
4" DIA. MANHOLE	4" DIA. MANHOLE
6" DIA. MANHOLE	6" DIA. MANHOLE
8" DIA. MANHOLE	8" DIA. MANHOLE
10" DIA. MANHOLE	10" DIA. MANHOLE
12" DIA. MANHOLE	12" DIA. MANHOLE
15" DIA. MANHOLE	15" DIA. MANHOLE
18" DIA. MANHOLE	18" DIA. MANHOLE
21" DIA. MANHOLE	21" DIA. MANHOLE
24" DIA. MANHOLE	24" DIA. MANHOLE
30" DIA. MANHOLE	30" DIA. MANHOLE
36" DIA. MANHOLE	36" DIA. MANHOLE
42" DIA. MANHOLE	42" DIA. MANHOLE
48" DIA. MANHOLE	48" DIA. MANHOLE
54" DIA. MANHOLE	54" DIA. MANHOLE
60" DIA. MANHOLE	60" DIA. MANHOLE
72" DIA. MANHOLE	72" DIA. MANHOLE
84" DIA. MANHOLE	84" DIA. MANHOLE
96" DIA. MANHOLE	96" DIA. MANHOLE
108" DIA. MANHOLE	108" DIA. MANHOLE
120" DIA. MANHOLE	120" DIA. MANHOLE

DATE	REVISION	APP.

GARRET J. DUHON  
9709 LAKESIDE BLVD.  
SUITE 200  
THE WOODLANDS, TX 77381  
(832) 823-2200

*Garret J. Duhon*

TBPB NO. F-22671  
CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF HOUSTON  
ENGINEER'S SEAL  
STORM SEWER TYPE "C"  
PRECAST ROUND MANHOLE  
NITS TO SCALE

APPROVED BY:  
*Garret J. Duhon*  
CITY ENGINEER  
CITY OF HOUSTON  
OFF. NO. 101-111-2202 (TMS) REG. NO. 02002-12

CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

DATE

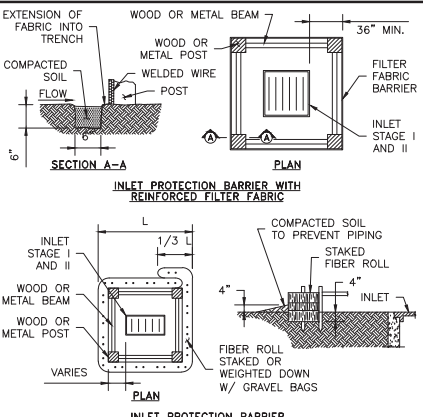
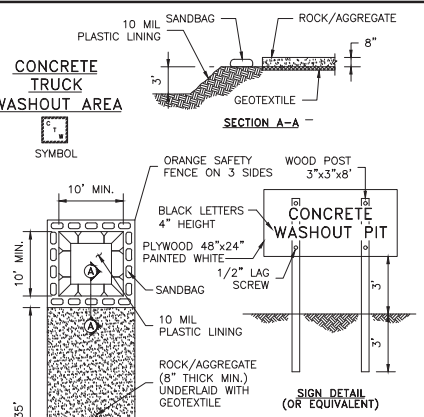
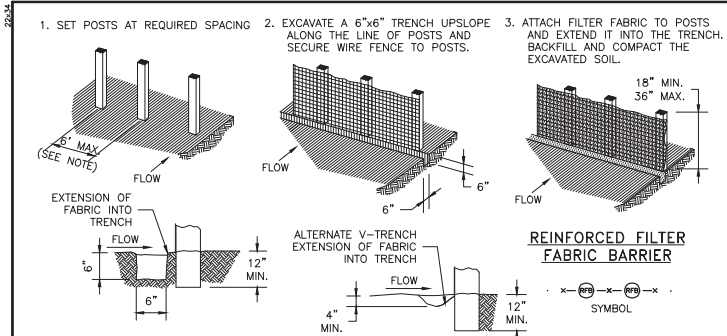
**STORM SEWER  
DETAILS**

**SHEET 18 OF 21**

P:\AUG128\_Metry and Customer\_Trojan\008\_Sec 2\0083\_Sec 2\Drawings\DETAILS.dwg 7/26/2023 10:36 AM ARJUZADAN

ELEVATION LAND SOLUTIONS - MONTGOMERY BEND SEC 2 - PROJECT NO. 610.126.006.00





**GENERAL NOTES:**

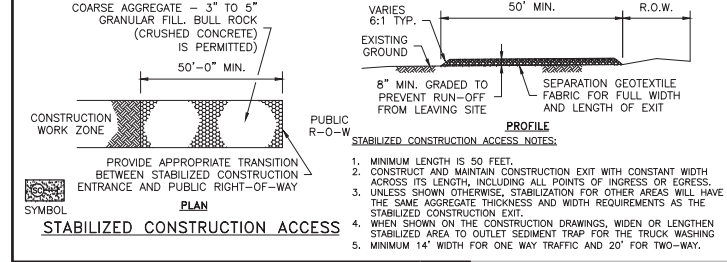
1. SECURELY FASTEN MESH FENCING TO POSTS WITH STAPLES OR TIE WIRES.
2. SECURELY FASTEN FILTER FABRIC TO MESH FENCING.
3. WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER, OVERLAP 6 INCHES AT A POST, FOLD TOGETHER, AND ATTACH TO A POST.
4. REMOVE SEDIMENT DEPOSITS WHEN SILT REACHES ONE-THIRD OF THE HEIGHT OF THE FENCE IN DEPTH.

**CONCRETE TRUCK WASHOUT AREA NOTES:**

1. POST A SIGN READING "CONCRETE WASHOUT PIT" NEXT TO THE PIT.
2. VERBALLY INSTRUCT THE CONCRETE TRUCK DRIVERS WHERE THE PIT IS AND TO WASHOUT THEIR TRUCKS IN THE PIT AND NOWHERE ELSE.
3. UPON THE CONCRETE SETTING UP (CURING, DRYING OUT), THE CONCRETE WASTE SHALL BE REMOVED FROM THE PROJECT SITE AND DISPOSED OF PROPERLY BY THE CONTRACTOR. AFTER REMOVAL OF THE CONCRETE WASTE, THE WASHOUT PIT SHALL BE FILLED WITH CLEAN FILL MATERIAL AND COMPACTED TO IN-SITU CONDITIONS, OR AS DIRECTED BY THE ENGINEER.
4. CONCRETE WASHOUT PITS SHALL NOT BE LOCATED DIRECTLY ADJACENT TO, NOR AT ANY TIME DRAIN INTO THE STORM SEWER SYSTEM OR ANY OTHER SWALE, DITCH, OR WATERWAY.
5. CONSTRUCT ENTRY ROAD AND BOTTOM OF WASHOUT AREA TO SUPPORT EXPECTED LOADINGS FROM TRUCKS EQUIPMENT.

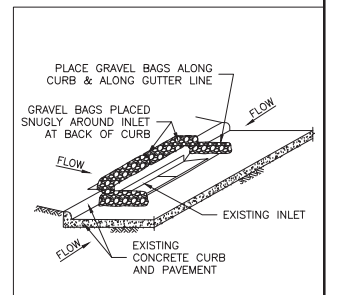
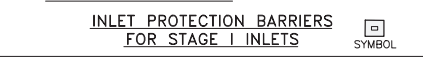
**GENERAL NOTES:**

1. FILTER ROLLS WILL BE UTILIZED ONLY WHEN SITE CONDITIONS DO NOT PERMIT THE USE OF FILTER FABRIC BARRIER, AND AS APPROVED BY THE ENGINEER.



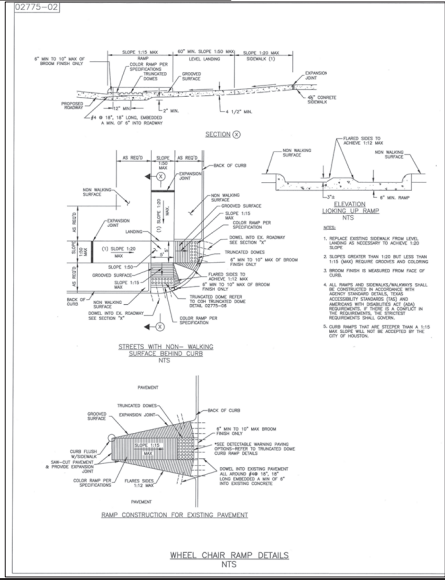
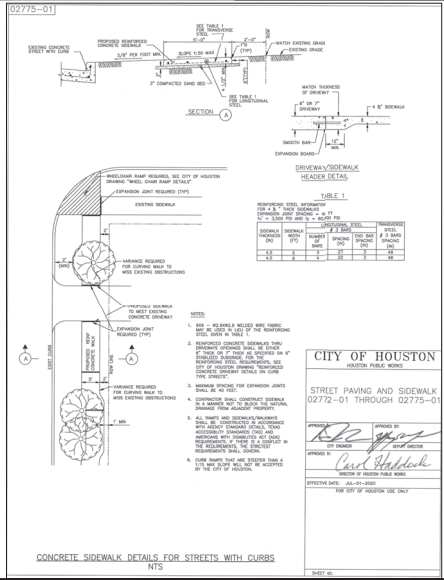
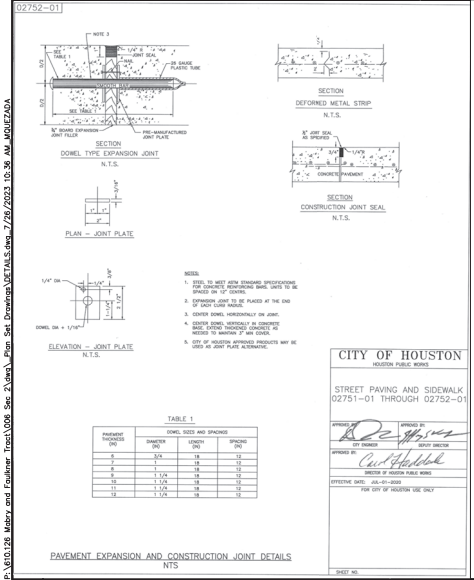
**STABILIZED CONSTRUCTION ACCESS NOTES:**

1. MINIMUM LENGTH IS 50 FEET.
2. CONSTRUCT AND MAINTAIN CONSTRUCTION EXIT WITH CONSTANT WIDTH ACROSS ITS LENGTH, INCLUDING ALL POINTS OF INGRESS OR EGRESS.
3. UNLESS SHOWN OTHERWISE, STABILIZATION FOR OTHER AREAS WILL HAVE THE SAME AGGREGATE THICKNESS AND WIDTH REQUIREMENTS AS THE STABILIZED CONSTRUCTION EXIT.
4. WHEN SHOWN ON THE CONSTRUCTION DRAWINGS, WIDER OR LENGTHEN STABILIZED AREA TO OUTLET SEDIMENT TRAP FOR THE TRUCK WASHING.
5. MINIMUM 14' WIDTH FOR ONE WAY TRAFFIC AND 20' FOR TWO-WAY.



**GENERAL NOTES:**

1. REMOVE SEDIMENT DEPOSIT WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-THIRD THE HEIGHT OF THE BARRIER.
2. GRAVEL BAGS SHALL NOT BLOCK THROAT OF INLET UNLESS DIRECTED BY ENGINEER.



**REVISIONS**

DATE	REVISION	APP.

**APPROVED:** GARRET J. DUHON, CITY ENGINEER, CITY OF MONTGOMERY

**DESIGNED BY:** [Signature]

**CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK**

**MISCELLANEOUS DETAILS**

**SHEET 20 OF 21**

# Montgomery Bend

## Landscape Concept Plan

March 2023



### REQUIREMENTS

309 LOTS WITHIN DEVELOPMENT  
2 TREES MINIMUM PER LOT REQUIRED

Per Section 78-167  
20% OF GROSS PROPERTY AREA OF RESERVES (RI ZONING)

GROSS PROPERTY AREA OF RESERVES=1.57 Acres  
20% OF RESERVE AREA=3,678 square feet

16 PARKING SPACES (1 TREE REQUIRED)

### PROPOSED

618 TREES PROVIDED IN LOTS (2 PER LOT)  
104 TREES WITHIN DEVELOPMENT

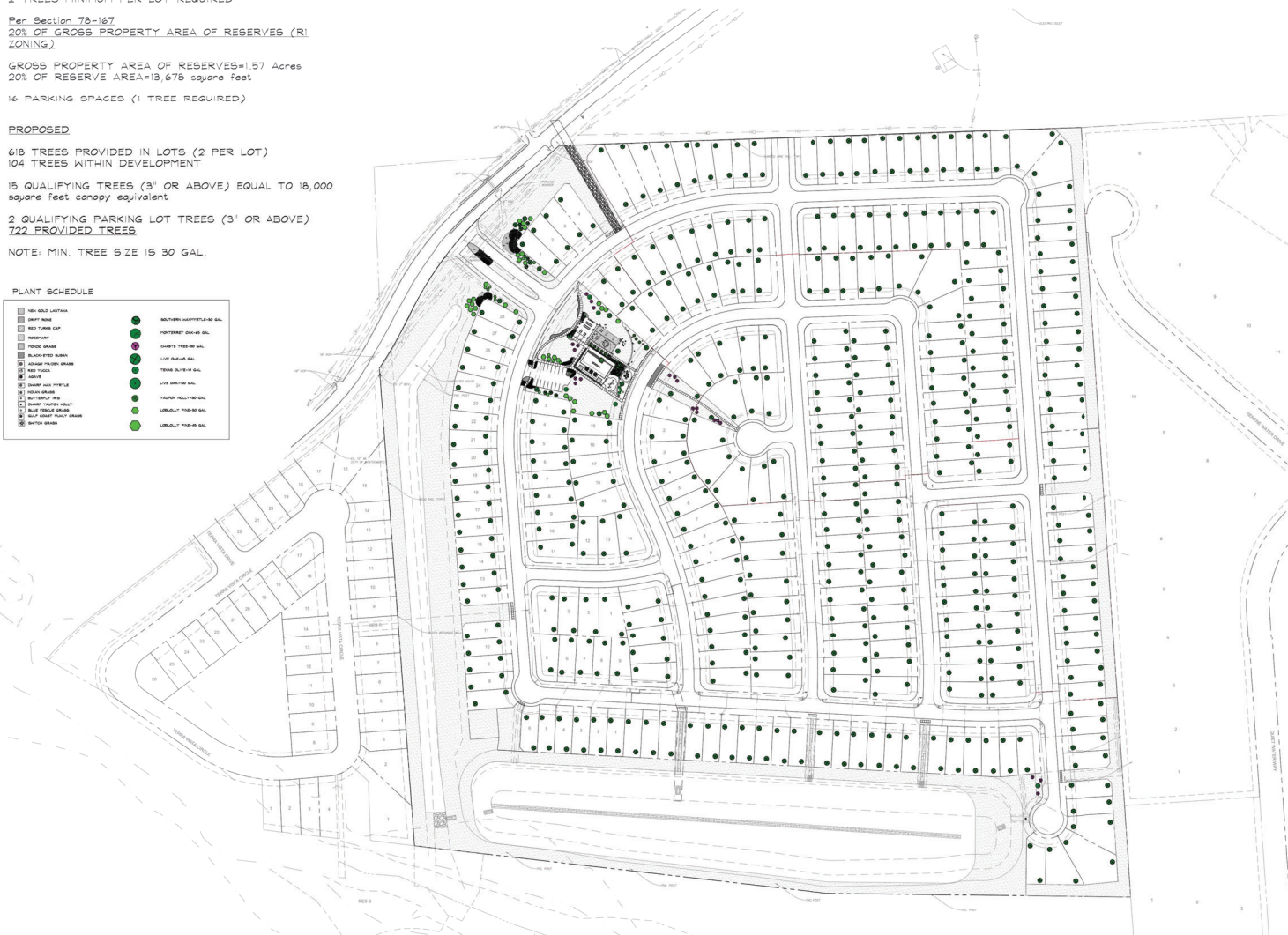
15 QUALIFYING TREES (3' OR ABOVE) EQUAL TO 18,000 square feet canopy equivalent

2 QUALIFYING PARKING LOT TREES (3' OR ABOVE)  
722 PROVIDED TREES

NOTE: MIN. TREE SIZE IS 30 GAL.

### PLANT SCHEDULE

███ RED BIRD LANTANA	●●● EASTWIND LANTANA 30 GAL
███ BERRY TREE	●●● MONSIEUR COUSIN 30 GAL
███ RED TUBE GAP	●●● CHERRY TREE 30 GAL
███ BURNING BUSH	●●● LIVE OAK 30 GAL
███ BLACK-STRIPED BURNING	●●● TRUMPET OAK 30 GAL
███ ARJUN PALM TREE 30 GAL	●●● LIVE OAK 30 GAL
███ RED TUBE	●●● LIVE OAK 30 GAL
███ JASMINE	●●● LIVE OAK 30 GAL
███ SHARP JADE FERTILE	●●● LIVE OAK 30 GAL
███ RED BIRD	●●● TOWNSEND HOLLAND 30 GAL
███ BUTTERNUT 30 GAL	●●● LAUREL 30 GAL
███ BLUE PRINCE BRASS	●●● LAUREL 30 GAL
███ BLUE GAZER TREE 30 GAL	●●● LAUREL 30 GAL
███ BERRY TREE	●●● LAUREL 30 GAL



Scale 1"=100'-0"

**L&A D FOREST DESIGN, LLC**  
LANDSCAPE ARCHITECTURE  
2505 W. WOODLANDS BOULEVARD, SUITE 100  
THE WOODLANDS, TEXAS 77381

DATE	REVISION	APP.

GARRET J. DUHON  
9709 LAKESIDE BLVD.  
SUITE 200  
THE WOODLANDS, TX 77381  
(832) 823-2200

Garret J. Duhon  
CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY CITY ENGINEER DATE  
SIGNATURE VALID FOR ONE (1) YEAR

LANDSCAPE PLAN

SHEET 21 OF 21

P:\010128\_Metry and Engineer\_Trest\008\_Sec 2\0083\_Plan\_Sch\_Drawing\MONTG.BEND 2/26/2023 10:36 AM.MD\LIZAZDA

ELEVATION LAND SOLUTIONS - MONTGOMERY BEND SEC 2 - PROJECT NO. 610.126.006.00