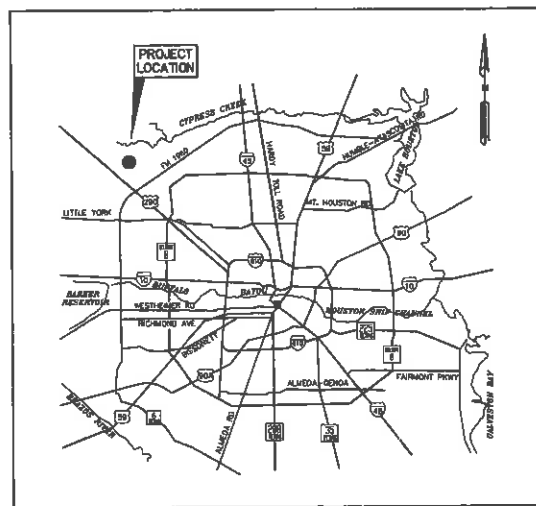


CONSTRUCTION PLANS FOR **HARDSCAPE** TO SERVE **HCMUD 248 WHITE OAK SPRINGS & WHITE OAK FALLS TRAILS**

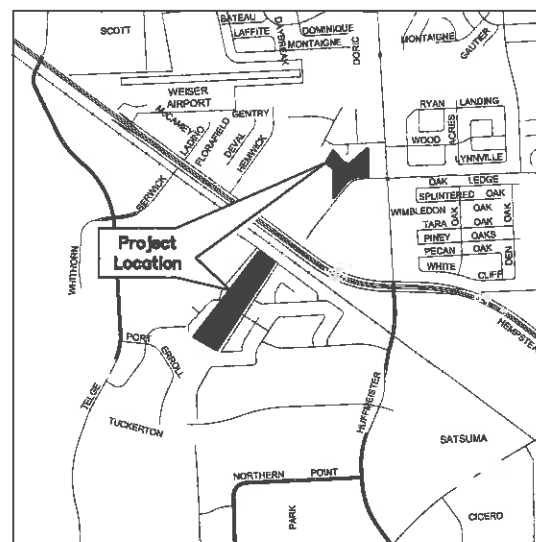
**MUNICIPAL UTILITY DISTRICT NO. 248
CITY OF HOUSTON ETJ, HARRIS COUNTY, TEXAS**

JOB NO. 0460-4898

DATE: August, 2019



LOCATION MAP



VICINITY MAP

INDEX OF DRAWINGS

H-0.0	EXPRESS SHEET
H-0.1	GENERAL NOTES
H-0.2	SWPP PLAN
H-0.3	SWPP PLAN
H-0.4	SWPP DETAILS
H-0.5	TRAFFIC CONTROL PLAN
H-1.0A	OVERALL SITE PLAN
H-1.0B	OVERALL SITE PLAN
H-1.1	HARDSCAPE LAYOUT
H-1.2	HARDSCAPE LAYOUT
H-1.3	HARDSCAPE LAYOUT
H-1.4	HARDSCAPE LAYOUT
H-1.5	HARDSCAPE LAYOUT
H-1.6	HARDSCAPE LAYOUT
H-1.7	HARDSCAPE LAYOUT
H-1.8	HARDSCAPE LAYOUT
H-1.9	HARDSCAPE LAYOUT
H-2.1	HARDSCAPE DETAILS
H-2.2	HARDSCAPE DETAILS
H-2.3	HARDSCAPE DETAILS

ONE-CALL NOTIFICATION SYSTEM
CALL BEFORE YOU DIG!!
(713) 223-4567 (IN HOUSTON)
(NEW STATEWIDE NUMBER OUTSIDE HOUSTON)
1-800-545-8005

[illegible]

- A. The contractor shall refer to local prevailing codes and standards where applicable.
- B. The contractor shall be responsible for tree protection. Maintain existing grade within drip line of all existing trees. The contractor shall notify the Landscape Architect before commencing work where grading conditions dictate more than 2" of fill within the drip line.
- C. The contractor is responsible for the replacement of any existing materials that are damaged during construction, as determined by the Owner's authorized representative.
- D. Contractor shall be responsible for verifying locations of all underground utilities, pipes and structures prior to any grading activities. Contractor shall take sole responsibility for any cost incurred due to damage of mentioned utilities.
- E. Contractor shall not willfully proceed with construction as designed when it is obvious that unknown obstructions and/or grade differences exist that may not have been known during preparation of construction documents. Such conditions shall immediately be brought to the attention of the Owner. The contractor shall assume full responsibility for all necessary revisions due to failure to give such notification.
- F. No change in contract price will be allowed for any actual or claimed discrepancy between existing grades and those shown on plans after contractor has accepted existing grades and begun work on the site.
- G. Contractor shall be responsible for any coordination with subcontractors as required to accomplish grading operations.
- H. The location of features to be constructed and not specifically dimensioned may be determined by scale. If conflicts arise in the field, notify the Landscape Architect for resolution.
- I. In the field if scaled dimensions conflict with noted grades, and/or elevations, notify the Landscape Architect to resolve discrepancies.
- J. Fill and grade smooth all holes, depressions, and ruts that are a result of work performed under this contract. All areas are to be graded so as to provide positive drainage and outfall.
- K. Finished grade shall be 1" below adjacent curbs, pavement, and walks.

- A. Contractor shall act in accordance with applicable local codes, ordinances and standards enforced at the time of construction.
- B. Contractor shall be responsible for verifying the accurate locations of property lines, rights of way and future construction easements and shall notify the Landscape Architect of any discrepancies prior to construction.
- C. Contractor is responsible for verifying all utility locations and shall notify the Landscape Architect of any discrepancies prior to construction.
- D. Contractor shall not willfully proceed with construction as designed when it is obvious that unknown obstructions and/or grade differences exist that may not have been known during preparation of construction documents. Such conditions shall immediately be brought to the attention of the Owner. The contractor shall assume full responsibility for all necessary revisions due to failure to give such notification.
- E. Contractor shall stake locations of all proposed hardscape elements for approval by the Landscape Architect prior to construction.
- F. Contractor shall layout curvilinear sidewalks and paths so as to make smooth and continuous transitions.
- G. Sidewalks to cross slope 0.5% min, 2% max. 5% max. slope on sidewalks.
- H. Dimensions taken from road edge are typically from Back of Curb (B.O.C.) unless otherwise noted on the plan. All dimensions taken from curbs, building face, or other hardscape features are taken perpendicular unless otherwise noted on plans.
- I. All landscape element dimensions are to centerline of the element unless otherwise noted on the plans.
- J. The elevations of all proposed hardscape elements shall be verified in the field and approved by Landscape Architect.
- K. Contractor is responsible for replacement of any existing materials that are damaged during construction, as determined by the Landscape Architect or Owner's authorized representative.
- L. Contractor shall be responsible for existing tree protection.



THE CITY OF HOUSTON ETJ,
HARRIS COUNTY, TEXAS

[illegible]

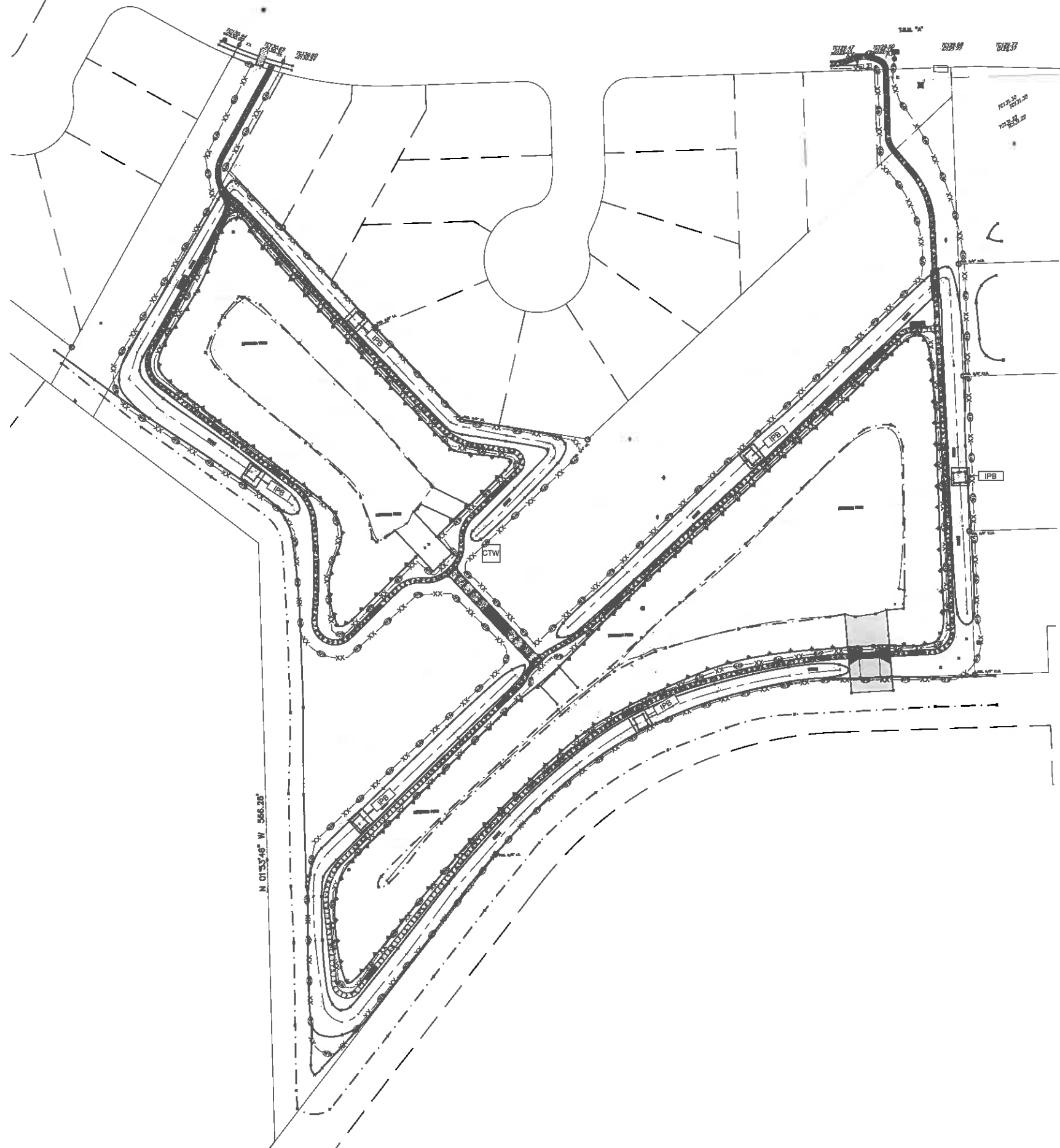
Drawn	LK	
Checked	JC, JH	

Date: August 21, 2019

[illegible]

Sheet Number

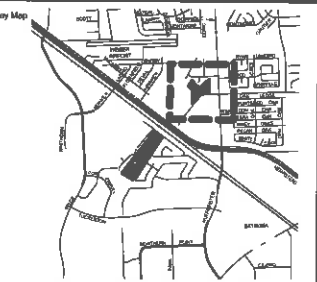
Sheet Number
H-0.1



SWPPP LEGEND

- XX REINFORCED FILTER FABRIC FENCE (SEE DETAIL, SHEET XX)
MIN 2' FROM B.O.C.
- CTW CONCRETE TRUCK WASHOUT
- IPB INLET PROTECTION BARRIER (SEE DETAIL, SHEET XX)
- STABILIZED CONSTRUCTION EXIT

Planning & Landscape Architecture
Sustainable Design
Community Planning
Urban Design
Landscape Architecture
LJA Engineering, Inc.
2929 Briarpark Drive Suite 600
Houston, Texas 77042-3709
713.953.8200 • 1.713.953.5028
P&L-1386



**HCMUD 248
WHITE OAK
SPRINGS &
WHITE OAK
FALLS
TRAILS**

HARDSCAPE DRAWINGS

THE CITY OF HOUSTON ETJ,
HARRIS COUNTY, TEXAS

DATE ISSUE

0 25 50 100ft
Drawing Scale is 1" = 50'
(Original size is 24 x 36")

Drawn LK
Checked JC, JH
Professional Seal:

Project #: 0460-4898

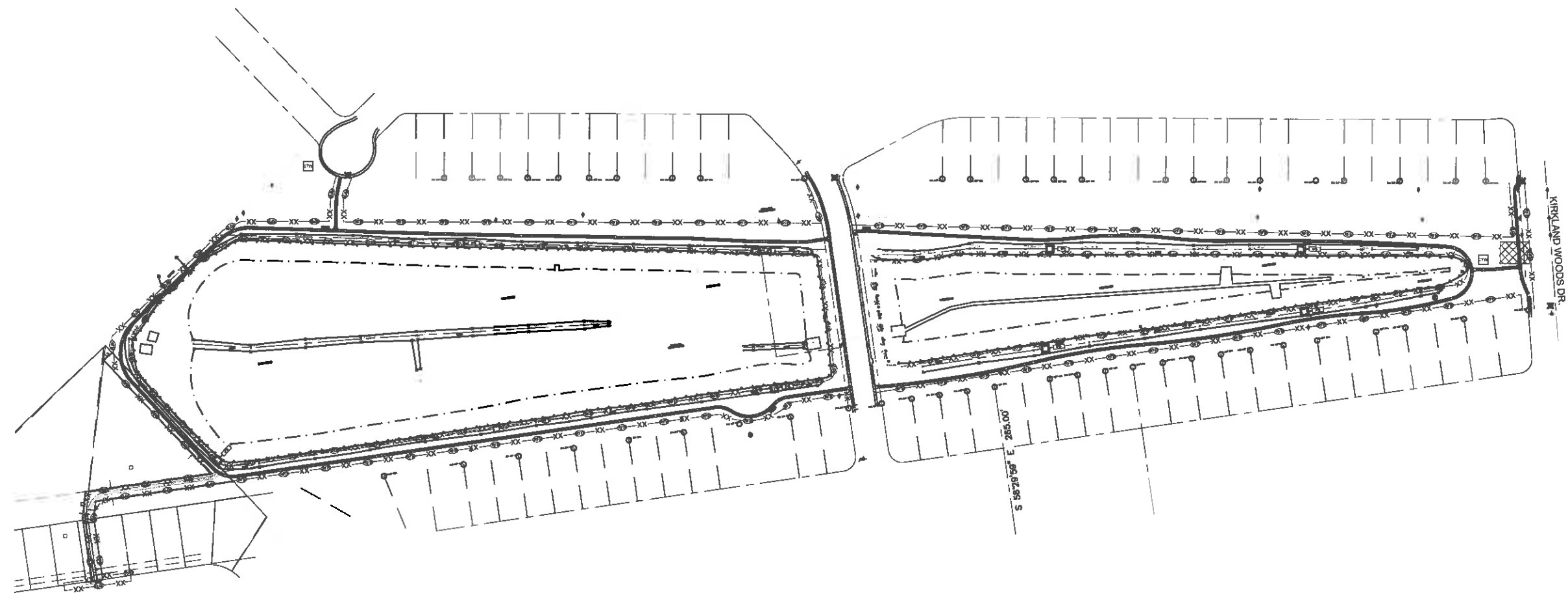
FOR CONSTRUCTION

Date: August 21, 2019

Revision	Date	Remarks

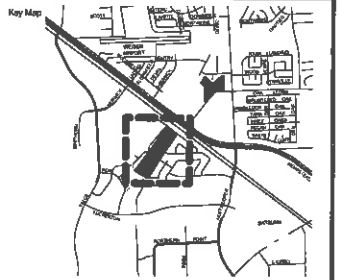
Sheet Title
SWPPP PLAN

Sheet Number
H-0.2



SWPPP LEGEND

- XX** REINFORCED FILTER FABRIC FENCE (SEE DETAIL, SHEET XX)
MIN 2' FROM B.O.C.
- CTW** CONCRETE TRUCK WASHOUT
- IPB** INLET PROTECTION BARRIER (SEE DETAIL, SHEET XX)
- STABILIZED CONSTRUCTION EXIT**



HCMUD 248 WHITE OAK SPRINGS & WHITE OAK FALLS TRAILS

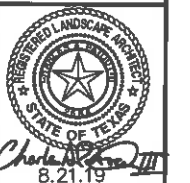
HARDSCAPE DRAWINGS

THE CITY OF HOUSTON ETJ,
HARRIS COUNTY, TEXAS

DATE _____ ISSUE _____

0 50 100 200ft
 Drawing Scale is 1" = 100'
 (Original size is 24 x 36")

Drawn LK
 Checked JC, JH

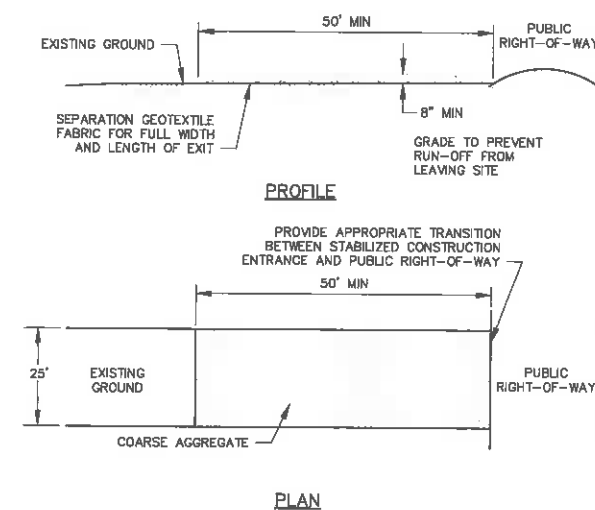


Project #: 0460-4898
 FOR CONSTRUCTION
 Date: August 21, 2019

Revision	Date	Revised

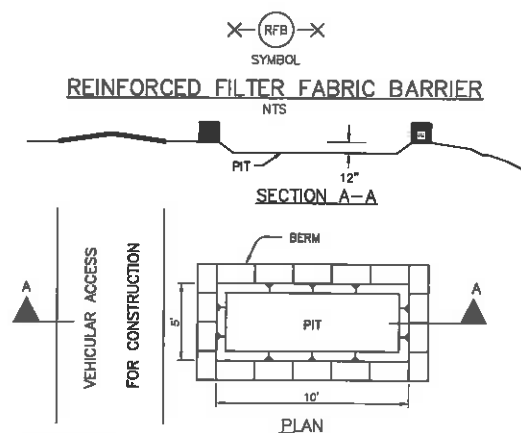
Sheet Title:
SWPP PLAN

Sheet Number:
H-0.3



NOTES

1. SET 2 INCH BY 2 INCH WOODEN STAKES SPACE A MAX OF 8 FEET APART AND EMBEDDED A MIN OF 12 INCHES.
2. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH STAPLES.
3. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE, WITH TIES SPACED EVERY 24 INCHES AT TOP AND MIDSECTION.
4. MINIMUM HEIGHT OF FILTER SHOULD BE 18 INCHES AND A MAXIMUM OF 36 INCHES ABOVE NATURAL GROUND.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED 6 INCHES AT THE POSTS AND JOINED.



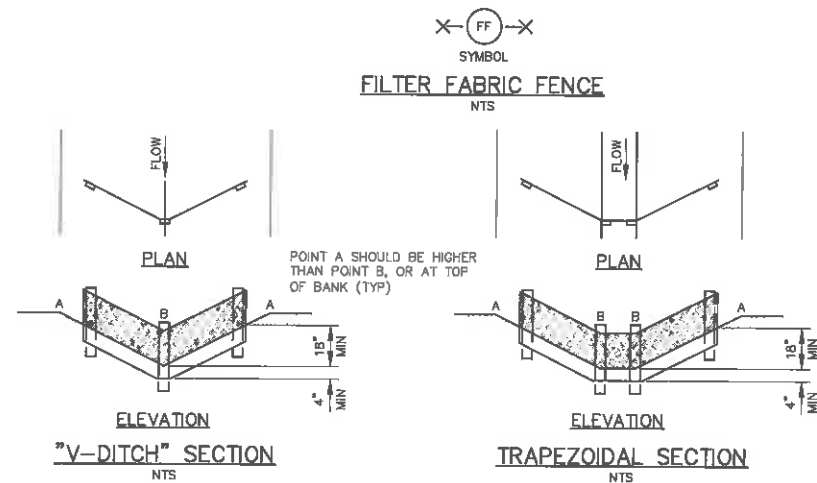
GENERAL NOTES:

1. DETAIL ILLUSTRATES MINIMUM DIMENSIONS. PIT CAN BE INCREASED IN SIZE DEPENDING ON EXPECTED FREQUENCY OF USE.
2. WASHOUT PIT SHALL BE LOCATED IN AN AREA EASILY ACCESSIBLE TO CONSTRUCTION TRAFFIC.
3. WASHOUT PIT SHALL NOT BE LOCATED IN AREAS SUBJECT TO FLOODING FROM STORM WATER RUNOFF.
4. CONTRACTOR TO REMOVE ALL DEBRIS AND REPLACE ANY VOIDS WITH CLEAN SOIL ONCE CONSTRUCTION IS COMPLETE.

CONCRETE TRUCK WASHOUT PIT

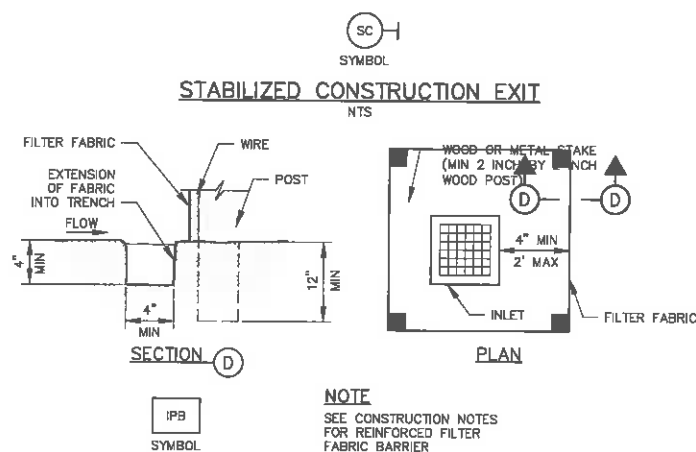
NOTES

1. 2 INCH THICK BY 2 INCH WOODEN STAKES TO BE SET AT MAX SPACING OF 3 FEET AND EMBEDDED A MIN OF 8 INCHES. IF PRE ASSEMBLED FENCE WITH SUPPORT NETTING IS USED, SPACING OF POST MAY BE INCREASED TO 8 FEET MAX.
 2. ATTACH FILTER FABRIC TO WOODED STAKES. FILTER FABRIC FENCE SHALL HAVE A MIN HEIGHT OF 18 INCHES AND MAX HEIGHT OF 36 INCHES ABOVE NATURAL GROUND.
 3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHOULD BE OVERLAPPED 6 INCHES AT THE POSTS AND FOLDED.
 4. MINIMUM HEIGHT OF FILTER SHOULD BE 18 INCHES AND A MAXIMUM OF 36 INCHES ABOVE NATURAL GROUND.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED 6 INCHES AT THE POSTS AND FOLDED.



NOTES

1. LENGTH SHALL BE AS SHOWN ON THE CONSTRUCTION DRAWINGS, BUT NOT LESS THAN 50 FEET.
2. THICKNESS SHALL BE NOT LESS THAN 8 INCHES.
3. WIDTH SHALL BE NOT LESS FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
4. STABILIZATION FOR OTHER AREAS SHALL HAVE THE SAME AGGREGATE THICKNESS AND WIDTH REQUIREMENTS AS THE STABILIZED CONSTRUCTION EXIT, UNLESS OTHERWISE SHOWN ON THE CONSTRUCTION DRAWINGS.
5. STABILIZED AREA MAY BE WIDENED OR LENGTHENED TO ACCOMMODATE A TRUCK WASHING AREA. AN OUTLET SEDIMENT TRAP MUST BE PROVIDED FOR THE TRUCK WASHING AREA.
6. STABILIZED CONSTRUCTION EXIT SHALL BE MAINTAINED FREE OF SEDIMENT FOR THE DURATION OF THE PROJECT.



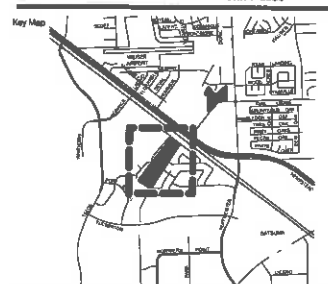
NOTE

SEE CONSTRUCTION NOTES
FOR REINFORCED FILTER
FABRIC BARRIER

SILT FENCE DROP INLET PROTECTION BARRIER
NTS

CONTRACTOR NOTES

- CONTRACTOR NOTES
1. CONTRACTOR IS RESPONSIBLE FOR DEVELOPING, IMPLEMENTING AND ADHERING TO THE CONTRACTOR DEVELOPED STORM WATER POLLUTION PREVENTION PLAN (SWPPP).
 2. CONTRACTOR SHALL PREPARE ALL NOTICE OF INTENT FORMS FOR THE WORK AND OBTAIN THE NECESSARY CERTIFICATES AND SIGNATURES FROM THE OWNER, APPLICABLE SUBCONTRACTORS AND OTHERS AS REQUIRED.



**HCMUD 248
WHITE OAK
SPRINGS &
WHITE OAK
FALLS
TRAILS**

HARDSCAPE DRAWINGS

THE CITY OF HOUSTON ETJ,
HARRIS COUNTY, TEXAS

DATE _____ ISSUE _____

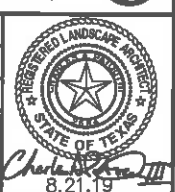
0 50 100 200ft

Drawing Scale is 1" = 100'
(Original size is 24 x 36")



Drawn	LK
-------	----

Checked	JC, JH
---------	--------



Project #: 0460-4898

FOR CONSTRUCTION

Date: August 21, 2019

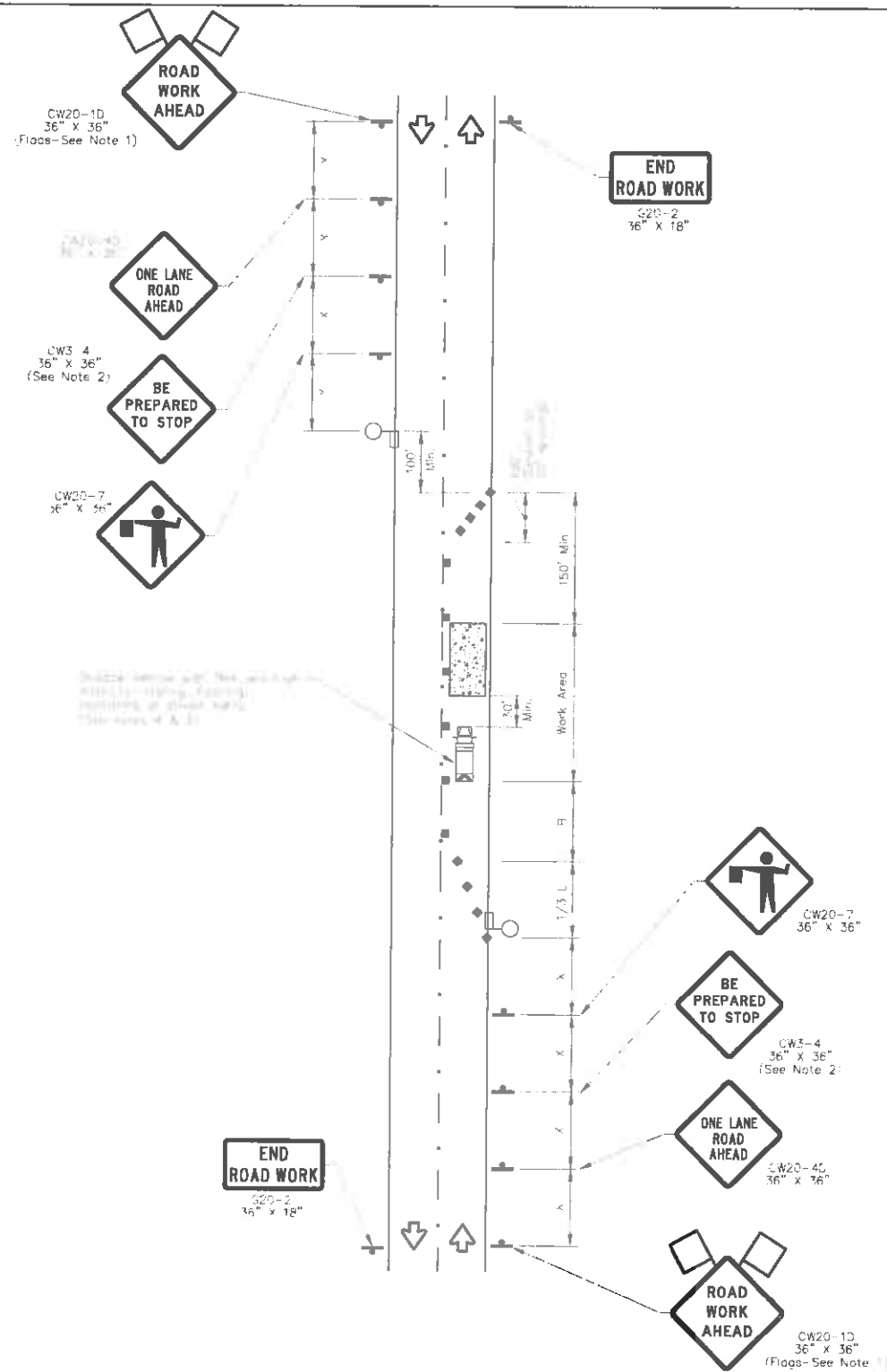
Revising	Date	Remarks
----------	------	---------

Sheet Title:

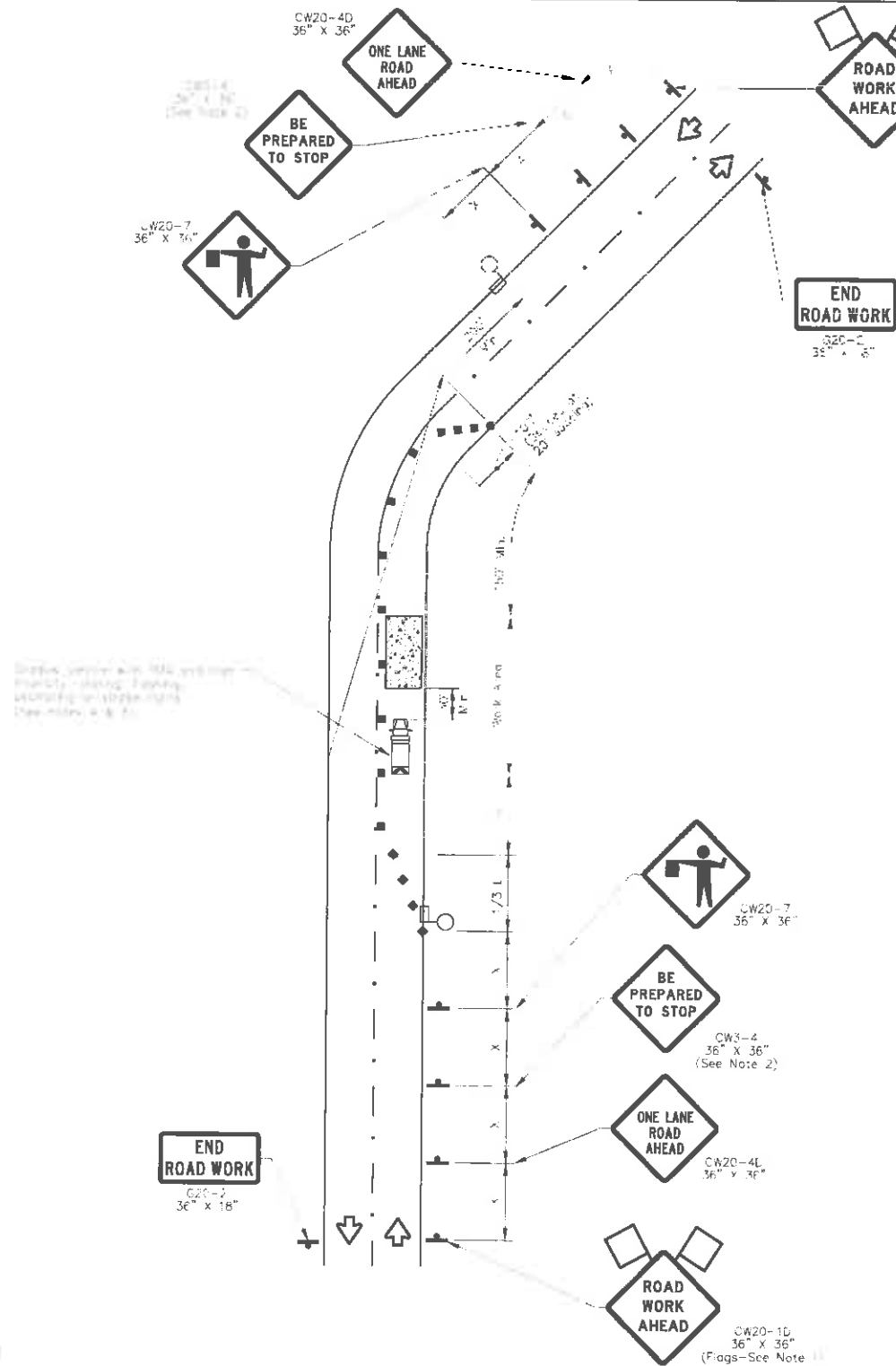
SWPP DETAILS

Albert Murray

H-0.4



ONE-LANE TWO-WAY SINGLE LANE CLOSURE
CONTROL WITH FLAGGERS
(ON STRAIGHT SECTION OF ROADWAY)



ONE-LANE TWO-WAY SINGLE LANE CLOSURE
CONTROL WITH FLAGGERS
(ON CURVED SECTION OF ROADWAY)

TRAFFIC CONTROL PLAN SECTION SHALL BE
COMPLETED BY ENGINEER

TRAFFICWAY	POSTED SPEED	TAPER LENGTH	SPACING CHANGING TRUCKS	SPACING TRUCKS	SPACING BUTTER SPACE
WHITE OAK SPRINGS DR	30 MPH	150'	30'	60'	120'
WHITE OAK FALLS TRAILS	30 MPH	150'	30'	60'	120'
CLOVER CREST DR	30 MPH	150'	30'	60'	120'

FLU-10

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

Posted Speed	Minimum Taper Length	Minimum Spacing of Flagging	Minimum Spacing of Flagging	Minimum Spacing of Flagging	Minimum Spacing of Flagging
30	150'	30'	60'	120'	120'
35	200'	40'	80'	160'	160'
40	250'	50'	100'	200'	200'
45	300'	60'	120'	240'	240'
50	350'	70'	140'	280'	280'
55	400'	80'	160'	320'	320'
60	450'	90'	180'	360'	360'
65	500'	100'	200'	400'	400'
70	550'	110'	220'	440'	440'
75	600'	120'	240'	480'	480'
80	650'	130'	260'	520'	520'
85	700'	140'	280'	560'	560'
90	750'	150'	300'	600'	600'
95	800'	160'	320'	640'	640'
100	850'	170'	340'	680'	680'

* Conventional Roads Only

1. Flagging Location shall be determined by the Engineer.
2. Flagging Location shall be determined by the Engineer.

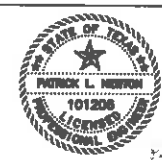
GENERAL NOTES

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

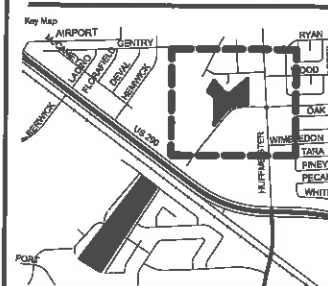
NO.	REV	SIGNS	DATE	NAME
1				
2				
3				
4				
5				



LJA Engineering, Inc.
1801 W. Grand Parkway North
Suite 100
Katy, Texas 77449
Phone 713 933 5200
Fax 713 933 5676
FAX 713 933 5676



PROJECT TITLE:	HCMUD 248 WHITE OAK SPRINGS & WHITE OAK FALLS TRAILS	TRAFFIC STANDARD
SHEET DESCRIPTION:	TRAFFIC CONTROL PLAN	TCP-12
DRAWN BY:	BSH	DATE:
CHECKED BY:	BSH	7/18/19
SCALE:	NONE	SHEET NO:
		H-2.5/H-2.3



HCMUD 248 WHITE OAK SPRINGS & WHITE OAK FALLS TRAILS

HARDSCAPE DRAWINGS

THE CITY OF HOUSTON ETJ,
 HARRIS COUNTY, TEXAS

DATE	ISSUE

0 25 50 100
 Drawing Scale is 1" = 50'
 (Original size is 24 x 36")

Drawn	LK
Checked	JC, JH

Charles J. Kohn
 8.21.19

Project #: 0460-4898

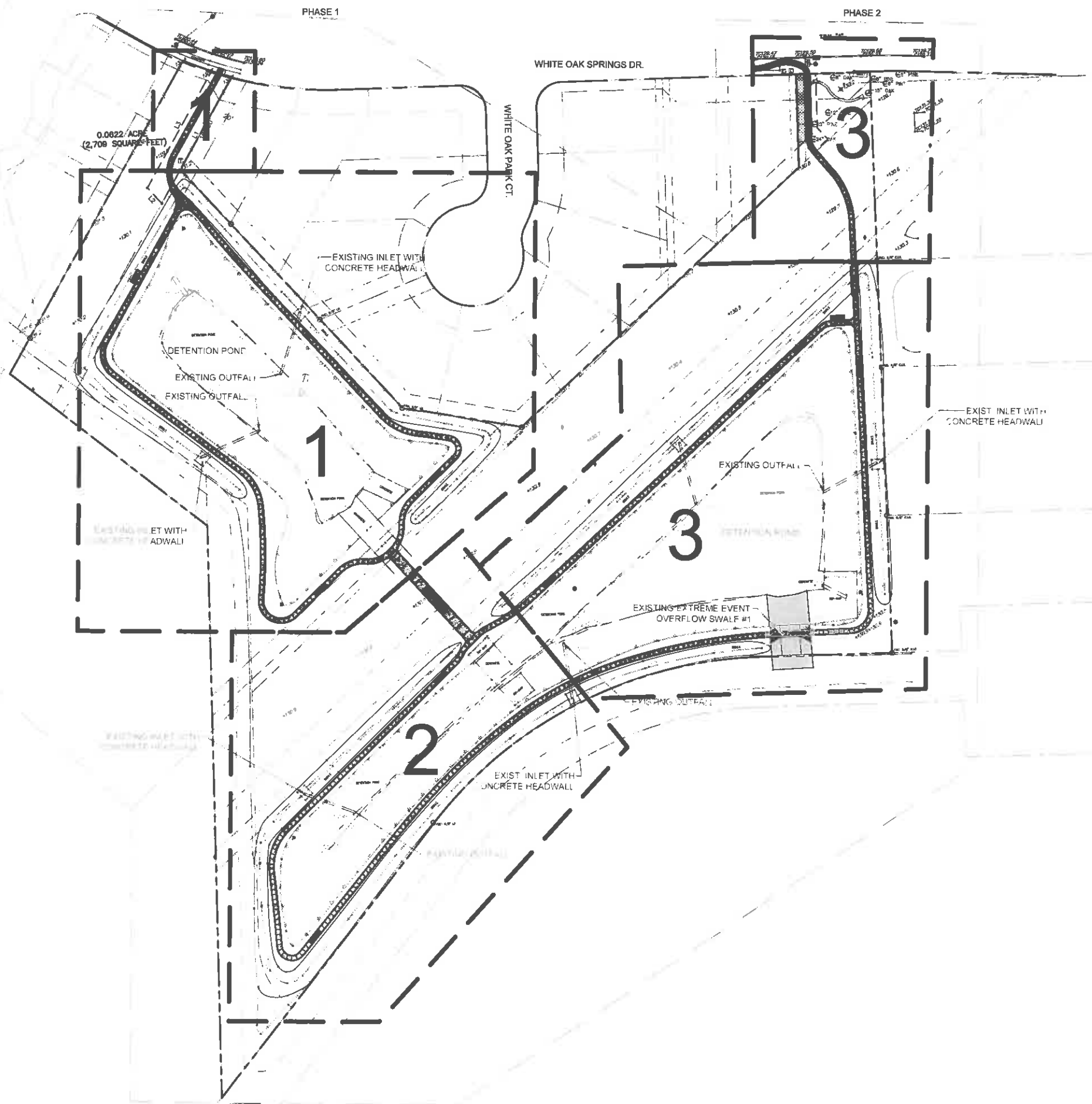
FOR CONSTRUCTION

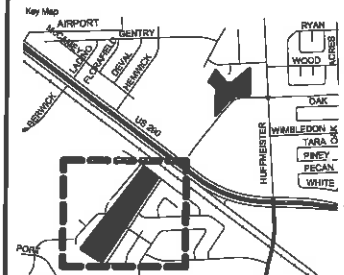
Date: August 21, 2019

Revision	Date	Remarks

Sheet Title:
OVERALL SITE PLAN

Sheet Number
H-1.0A





**HCMUD 248
 WHITE OAK
 SPRINGS &
 WHITE OAK
 FALLS
 TRAILS**

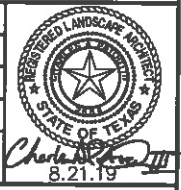
HARDSCAPE DRAWINGS

THE CITY OF HOUSTON ETJ,
 HARRIS COUNTY, TEXAS

DATE	ISSUE

0 50 100 200'
 Drawing Scale is 1" = 100'
 (Original size is 24 x 36")

Drawn LK
 Checked JC, JH

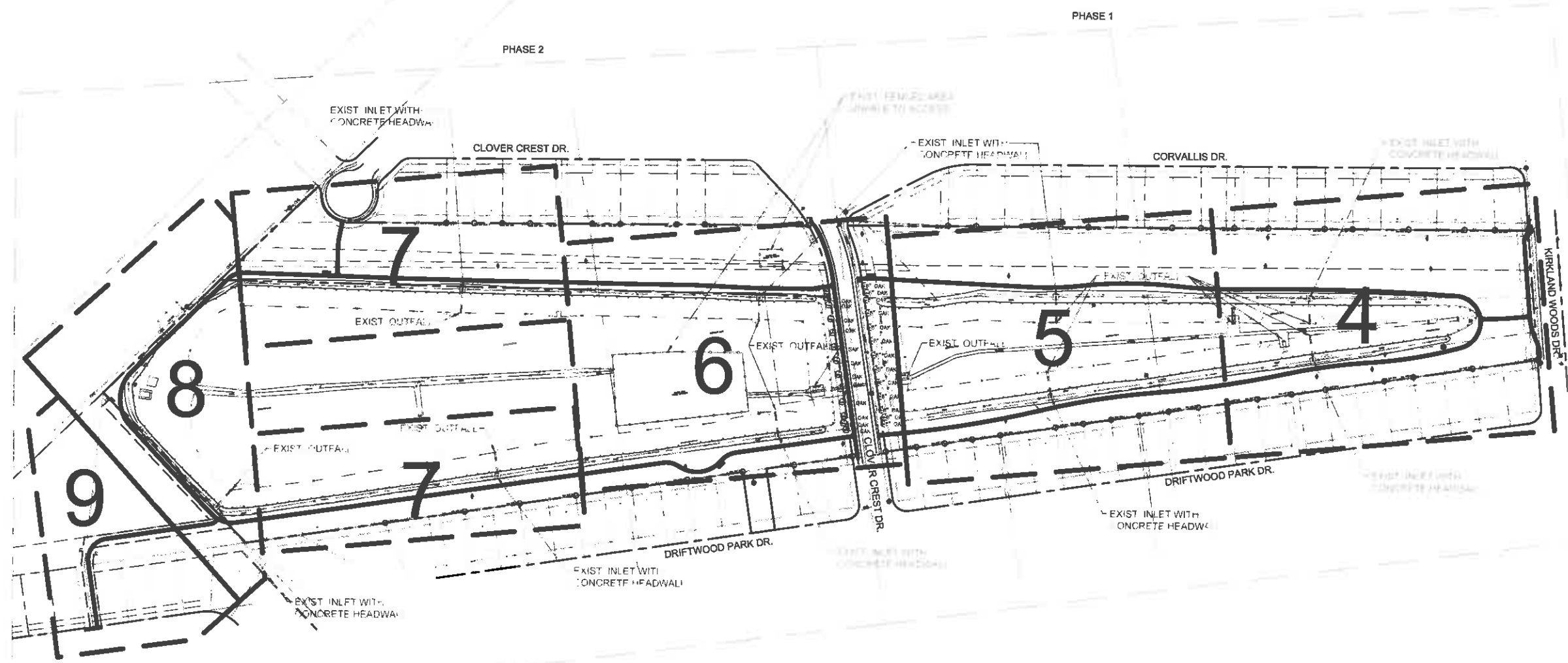


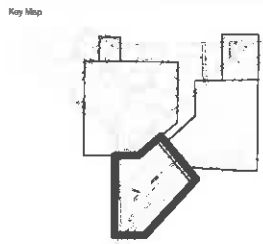
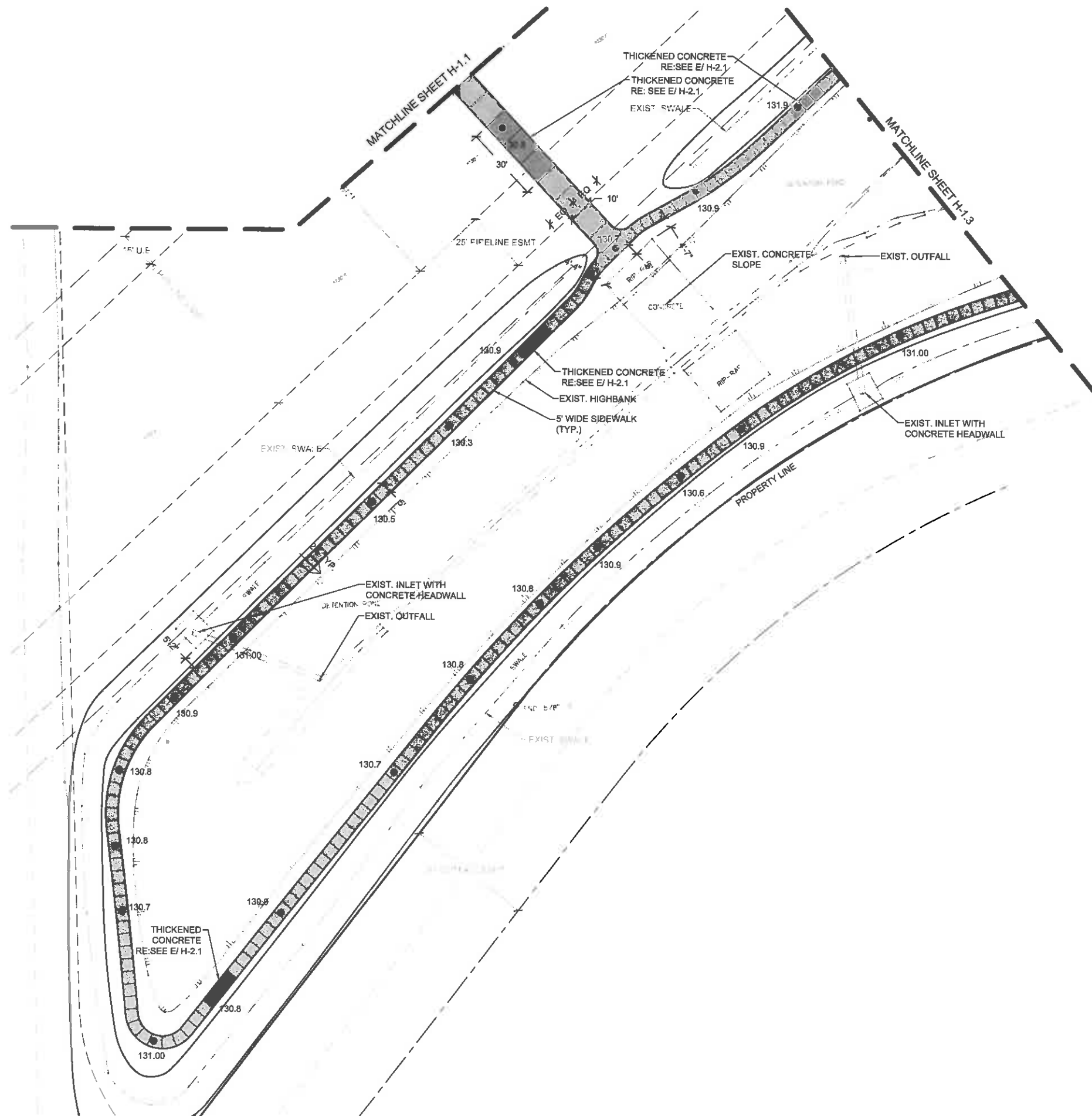
Project #: 0460-4898
FOR CONSTRUCTION
 Date: August 21, 2019

Revision	Date	Description

Sheet Title:
OVERALL SITE PLAN

Sheet Number:
H-1.0B





HCMUD 248 WHITE OAK SPRINGS & WHITE OAK FALLS TRAILS

HARDSCAPE DRAWINGS

THE CITY OF HOUSTON ETJ,
HARRIS COUNTY, TEXAS

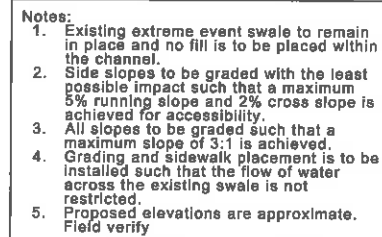
DATE _____ ISSUE _____

D 10 20 40ft
Drawing Scale is 1" = 20'
(Original size is 24 x 36")

Drawn LK
Checked JC, JH
Project # 0460-4898
FOR CONSTRUCTION
Date: August 21, 2019
Revision Date Remarks

Project # 0460-4898
FOR CONSTRUCTION
Date: August 21, 2019
Revision Date Remarks

Sheet Title:
HARDSCAPE LAYOUT
Sheet Number:
H-1.2



THE CITY OF HOUSTON ETJ,
HARRIS COUNTY, TEXAS

Drawn	LK	
Checked	JC, JH	


 8.21.19

Street Number

H-1.3

Key Map



HCMUD 248 WHITE OAK SPRINGS & WHITE OAK FALLS TRAILS

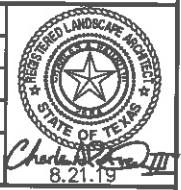
HARDSCAPE DRAWINGS

THE CITY OF HOUSTON ETJ,
 HARRIS COUNTY, TEXAS

DATE	ISSUE

0 10 20 40ft
 Drawing Scale is 1" = 20'
 (Original size is 24 x 36")

Drawn LK
 Checked JC, JH

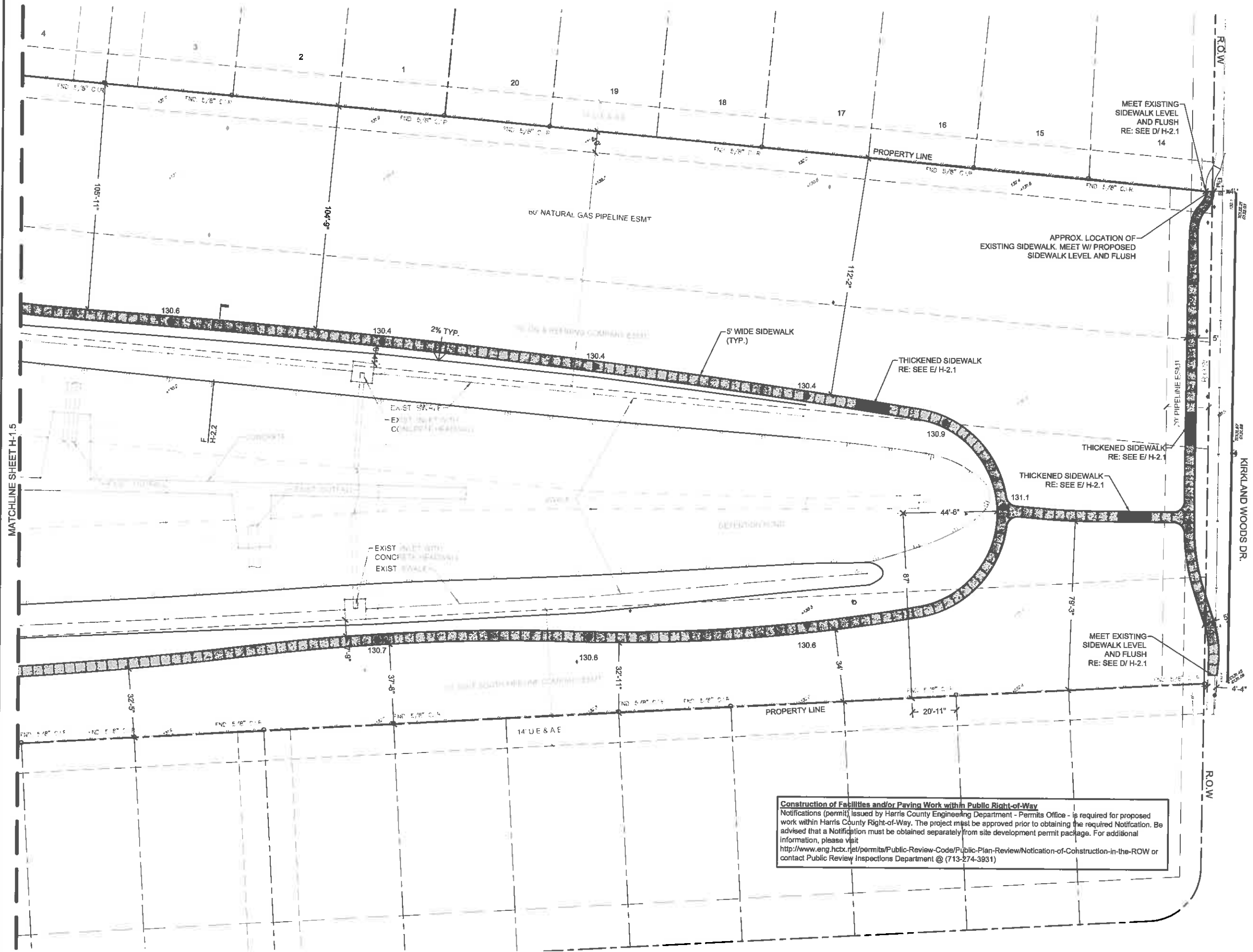


Project #: 0460-4898
FOR CONSTRUCTION
 Date: August 21, 2019

Revision	Date	Remarks
07-22-19	County Comments	

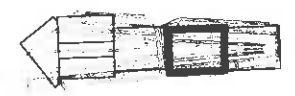
Sheet Title
HARDSCAPE LAYOUT

Sheet Number
H-1.4



Construction of Facilities and/or Paving Work within Public Right-of-Way
 Notifications (permit) Issued by Harris County Engineering Department - Permits Office - is required for proposed work within Harris County Right-of-Way. The project must be approved prior to obtaining the required Notification. Be advised that a Notification must be obtained separately from site development permit package. For additional information, please visit [http://www.eng.hctx.net/permits/Public-Review-Code/Public-Plan-Review/Notification-of-Construction-in-the-ROW-or-contact-Public-Review-Inspections-Department-@-\(713-274-3931\)](http://www.eng.hctx.net/permits/Public-Review-Code/Public-Plan-Review/Notification-of-Construction-in-the-ROW-or-contact-Public-Review-Inspections-Department-@-(713-274-3931))

Key Map



HCMUD 248 WHITE OAK SPRINGS & WHITE OAK FALLS TRAILS

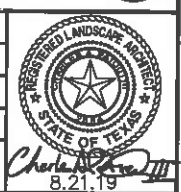
HARDSCAPE DRAWINGS

THE CITY OF HOUSTON ETJ,
 HARRIS COUNTY, TEXAS

DATE	ISSUE

0 10 20 40'
 Drawing Scale is 1" = 20'
 (Original size is 24 x 36")

Drawn LK
 Checked JC, JH



Project #: 0460-4898
FOR CONSTRUCTION
 Date: August 21, 2019

Revision	Date	Remarks

Sheet Title:
HARDSCAPE LAYOUT

Sheet Number:
H-1.5





**Planning &
Landscape Architecture**

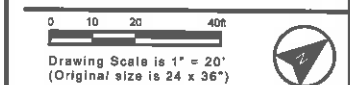
Sustainable Design
Community Planning
Urban Design
Landscape Architecture

LJA Engineering, Inc.
2929 Strawberry Drive Suite 500
Houston, Texas 77062-4763
713.953.5200 / 713.953.5206
FRN-P-1388

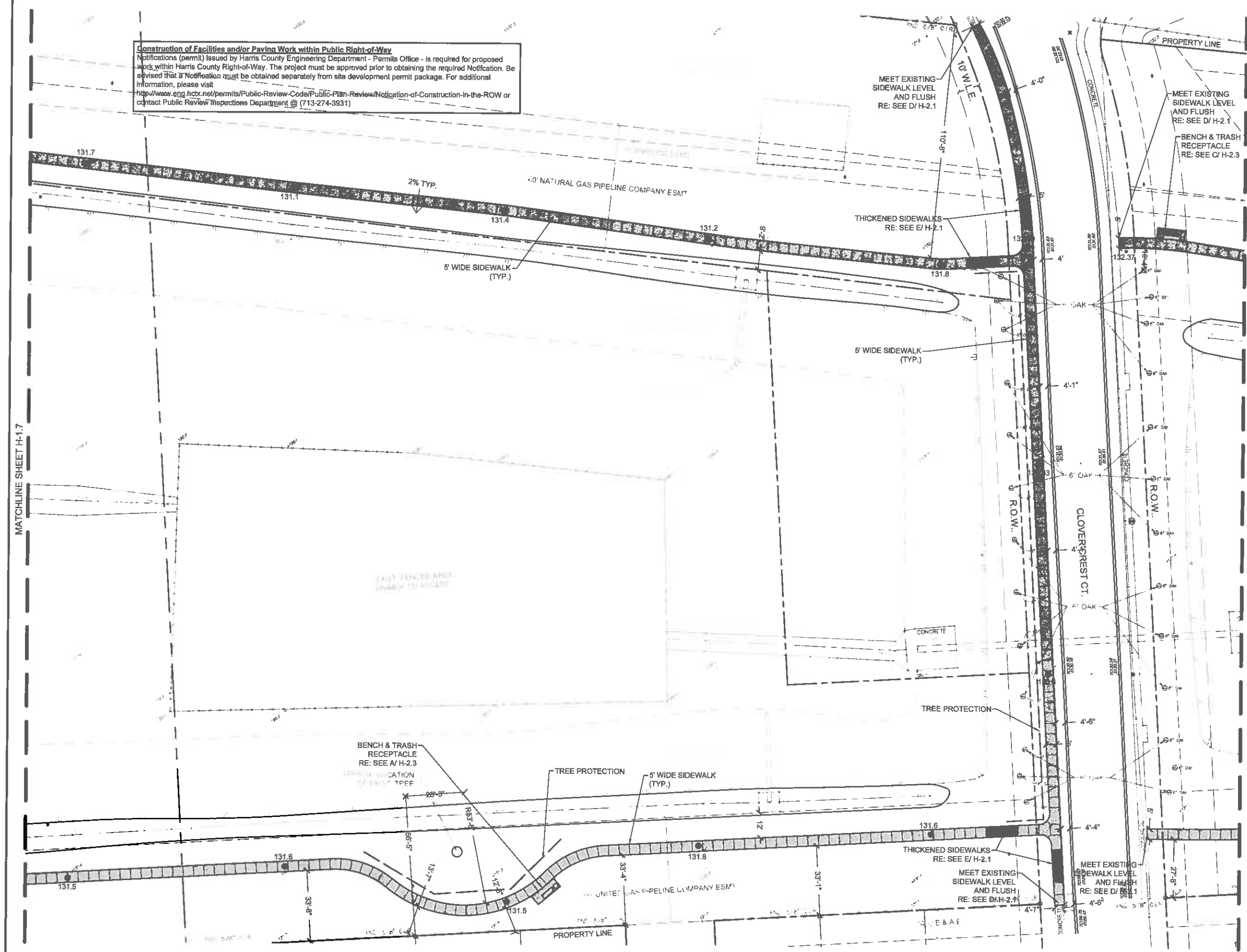


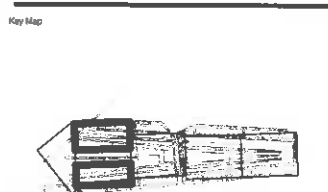
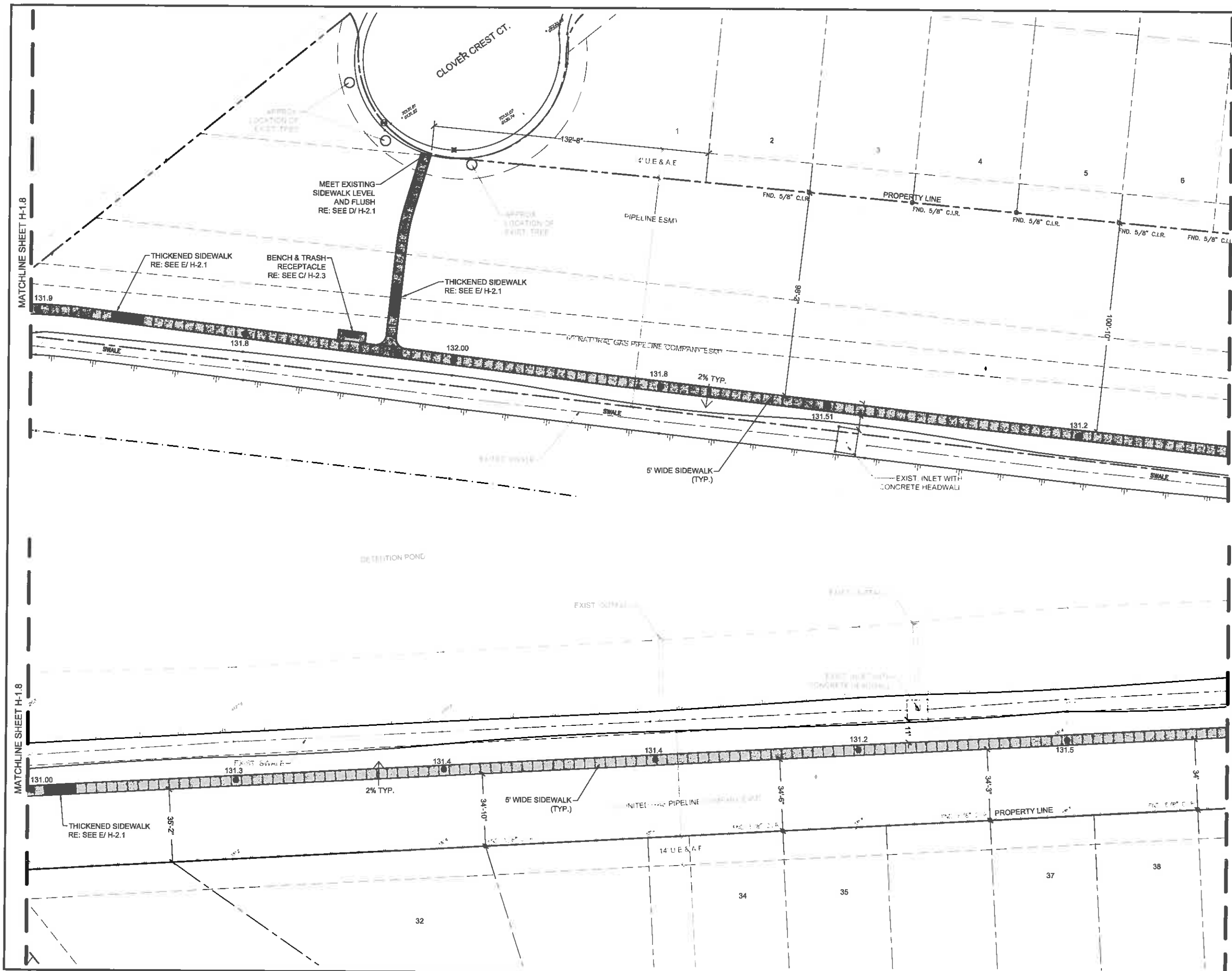
HARDSCAPE DRAWINGS

DATE	ISSUE

[illegible]

Street Number
H-1.6





**HCMUD 248
 WHITE OAK
 SPRINGS &
 WHITE OAK
 FALLS
 TRAILS**

HARDSCAPE DRAWINGS

THE CITY OF HOUSTON ETJ,
 HARRIS COUNTY, TEXAS

DATE	ISSUE

D 10 20 40
 Drawing Scale is 1" = 20'
 (Original size is 24 x 36")

Drawn LK
 Checked JC, JH

Project #: 0460-4898
FOR CONSTRUCTION
 Date: August 21, 2019

Revision	Date	Remarks

Sheet Title
HARDSCAPE LAYOUT

Sheet Number
H-1.7

Key Map



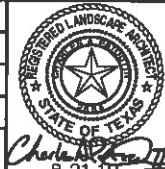
HCMUD 248 WHITE OAK SPRINGS & WHITE OAK FALLS TRAILS

HARDSCAPE DRAWINGS

THE CITY OF HOUSTON ETJ,
HARRIS COUNTY, TEXAS

DATE	ISSUE

0 10 20 40
Drawing Scale is 1" = 20'
(Original size is 24 x 36")

Drawn LK
Checked JC, JH

8.21.19

Project #: 0460-4898

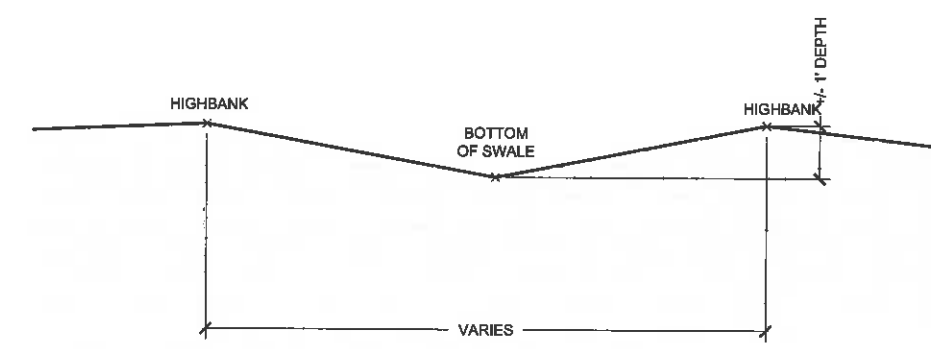
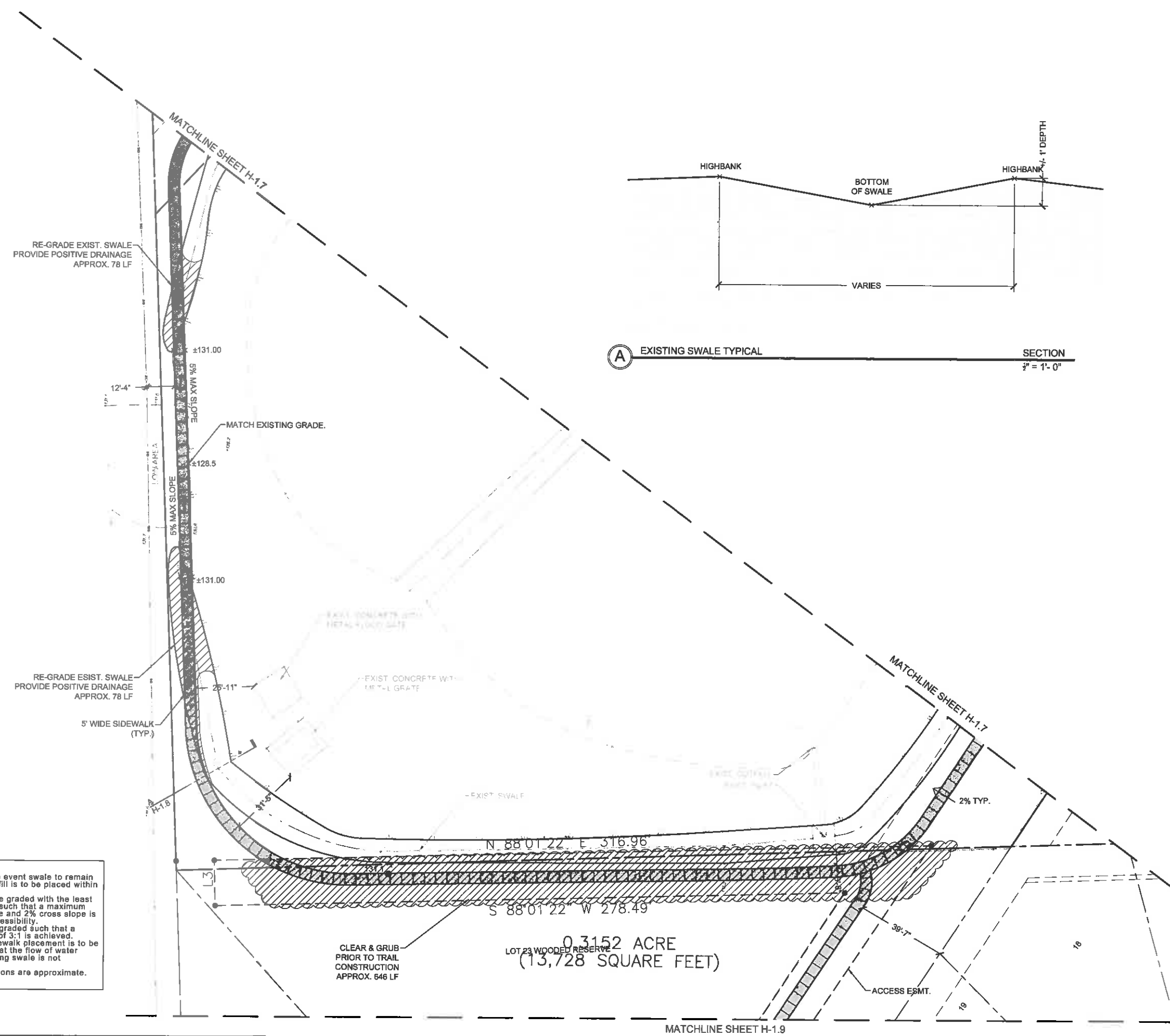
FOR CONSTRUCTION

Date: August 21, 2019

Revision	Date	Remarks

Sheet Title:
HARDSCAPE LAYOUT

Sheet Number:
H-1.8



(A) EXISTING SWALE TYPICAL SECTION
3/8" = 1'-0"

- Notes:**
- Existing extreme event swale to remain in place and no fill is to be placed within the channel.
 - Slope to be graded with the least possible impact such that a maximum 5% running slope and 2% cross slope is achieved for accessibility.
 - All slopes to be graded such that a maximum slope of 3:1 is achieved.
 - Grading and sidewalk placement is to be installed such that the flow of water across the existing swale is not restricted.
 - Proposed elevations are approximate. Field verify.

Key Map



HCMUD 248 WHITE OAK SPRINGS & WHITE OAK FALLS TRAILS

HARDSCAPE DRAWINGS

THE CITY OF HOUSTON ETJ,
 HARRIS COUNTY, TEXAS

DATE	ISSUE

0 10 20 40ft
 Drawing Scale is 1" = 20'
 (Original size is 24 x 36")

Drawn LK
 Checked JC, JH

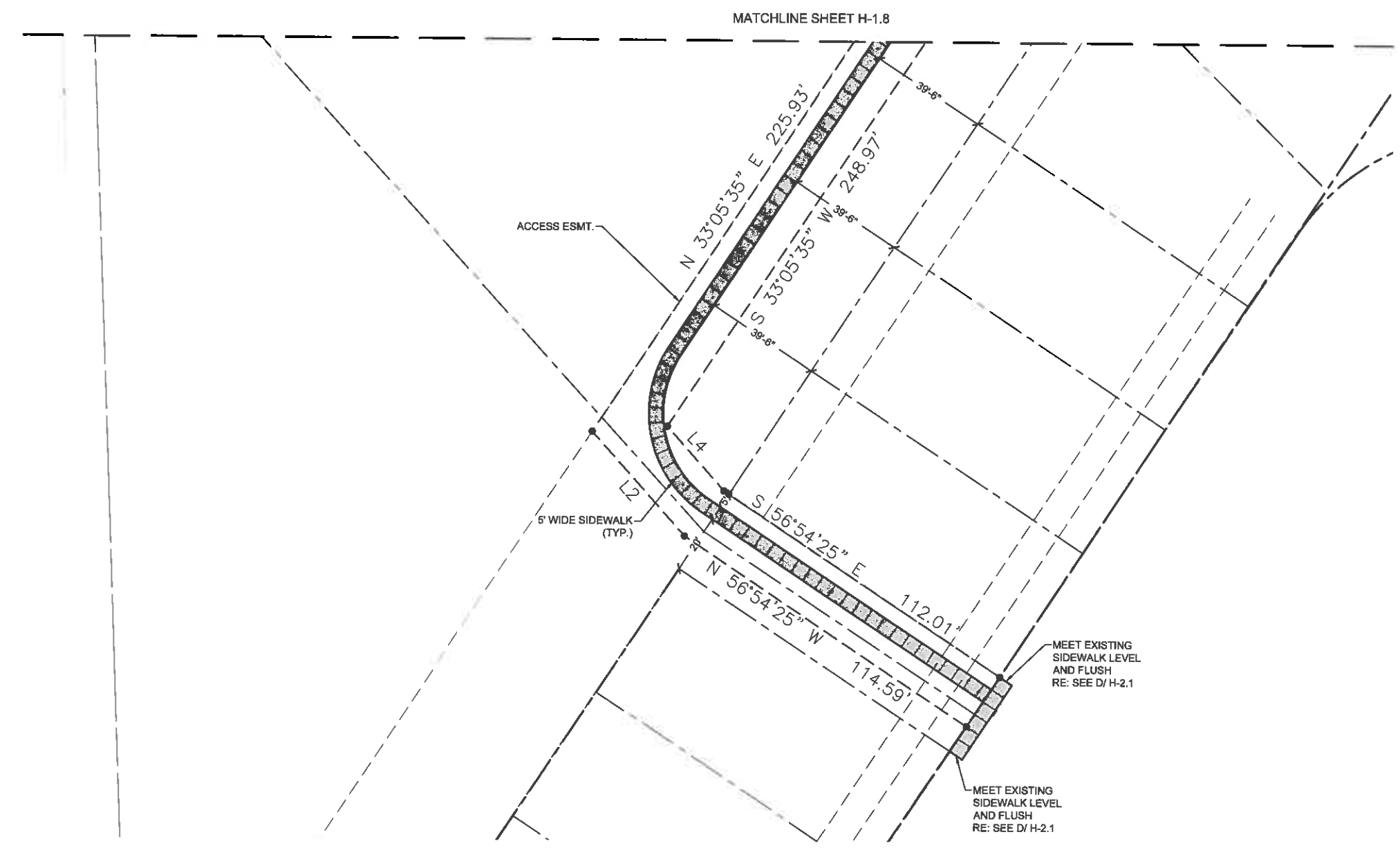
 8.21.19

Project #: 0460-4898
 FOR CONSTRUCTION
 Date: August 21, 2019

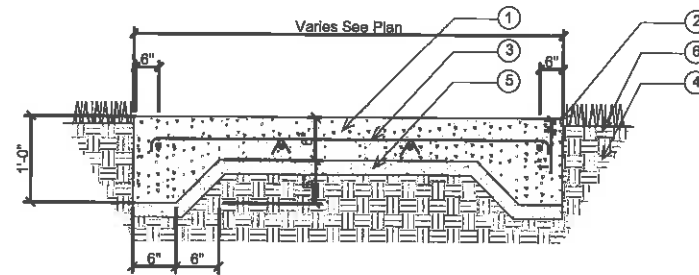
Revision	Date	Remarks

Sheet Title
HARDSCAPE LAYOUT

Sheet Number
H-1.9



- Notes:
- Existing extreme event swale to remain in place and no fill is to be placed within the channel.
 - Slope to be graded with the least possible impact such that a maximum 5% running slope and 2% cross slope is achieved for accessibility.
 - All slopes to be graded such that a maximum slope of 3:1 is achieved.
 - Grading and sidewalk placement is to be installed such that the flow of water across the existing swale is not restricted.
 - Proposed elevations are approximate. Field verify.

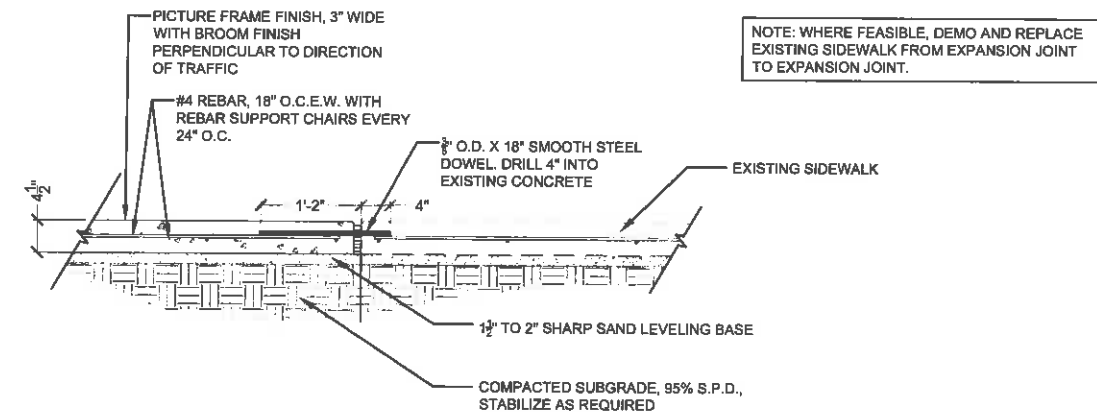


Detail Callout Legend:

1. Concrete sidewalk/paving.
 2. 1/4" chamfer, typ.
 3. See paving detail for Reinforcement.
 4. Compacted subgrade.
 5. 2" thick sand base.
 6. Finish grade.
- See L-1.1 - L-1.6 for areas with thickened paving.

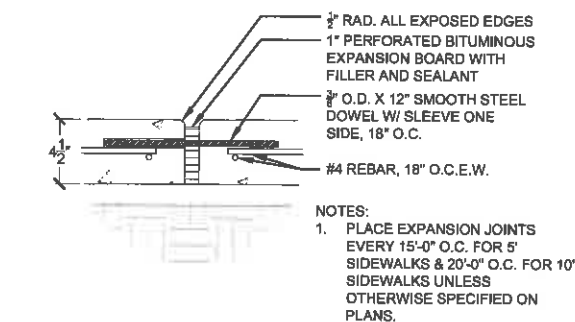
E CONCRETE SIDEWALK/PAVING THICKENED EDGE

SECTION
1"= 1'-0"



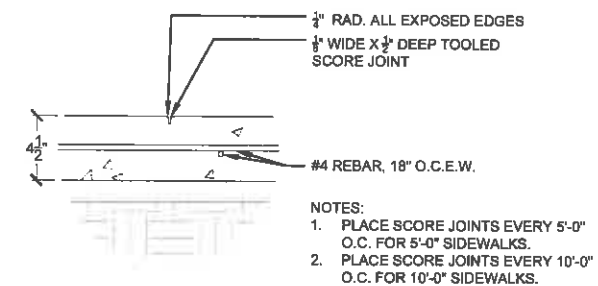
D PROPOSED TO EXISTING SIDEWALK CONNECTION

SECTION
1"= 1'-0"



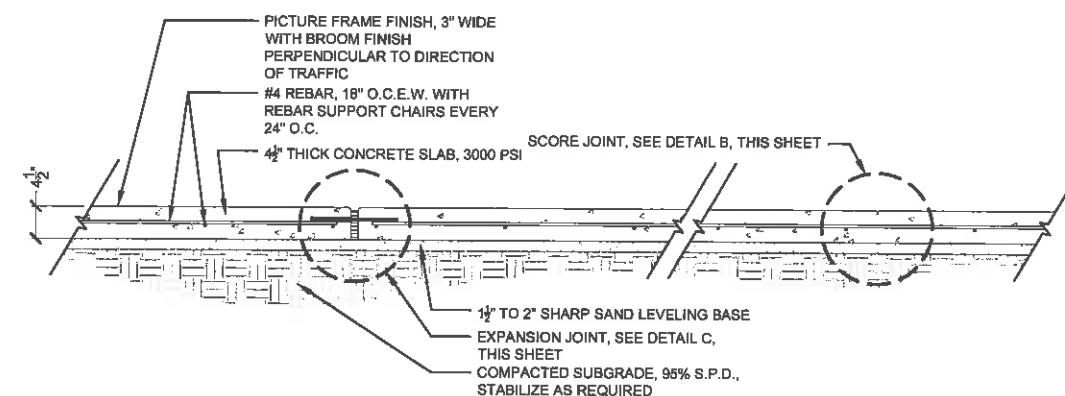
C EXPANSION JOINT (TYP.)

SECTION
2"= 1'-0"



B SCORE JOINT (TYP.)

SECTION
2"= 1'-0"



A CONCRETE SIDEWALK DETAIL

SECTION
1"= 1'-0"

- NOTES:
1. ALL EDGES SHALL BE ROUNDED WITH 3/8" RADIUS.
 2. CONTROL JOINTS SHALL BE SPACED AT INTERVALS SAME AS WIDTH OF SIDEWALK.
 3. CONTROL JOINTS SHALL BE 1/2" DEEP AND TROWEL EDGE.
 4. 1/2" EXPANSION MATERIAL REQUIRED WHERE SIDEWALKS ABUT BUILDINGS, CURBS, DRIVEWAYS, OR EXISTING SIDEWALKS.
 5. EXPANSION JOINTS SHALL BE SPACED AT 15' INTERVALS FOR 5' SIDEWALKS TYPICALLY.
 6. WHERE NEW SIDEWALK IS PLACED AGAINST EXISTING SIDEWALK, SAWCUT EXISTING SIDEWALK FULL DEPTH TO AN EVEN STRAIGHT LINE PRIOR TO INSTALLATION OF THE NEW SIDEWALK.

Key Map

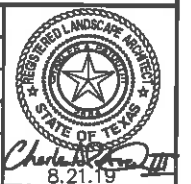
HCMUD 248 WHITE OAK SPRINGS & WHITE OAK FALLS TRAILS

HARDSCAPE DRAWINGS

THE CITY OF HOUSTON ETJ,
HARRIS COUNTY, TEXAS

DATE ISSUE

Drawn LK
Checked JC, JH



Project #: 0460-4898

FOR CONSTRUCTION

Date: August 21, 2019

Revision Date Remarks

Sheet Title:
HARDSCAPE DETAILS

Sheet Number

H-2.1

Key Map

HCMUD 248 WHITE OAK SPRINGS & WHITE OAK FALLS TRAILS

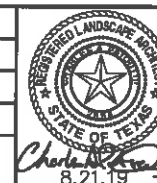
HARDSCAPE DRAWINGS

THE CITY OF HOUSTON ETJ,
HARRIS COUNTY, TEXAS

DATE ISSUE

0 5 10 20'
Drawing Scale is 1" = 10'
(Original size is 24 x 36")

Drawn LK
Checked JC, JH



Project #: 0460-4898
FOR CONSTRUCTION
Date: August 21, 2019

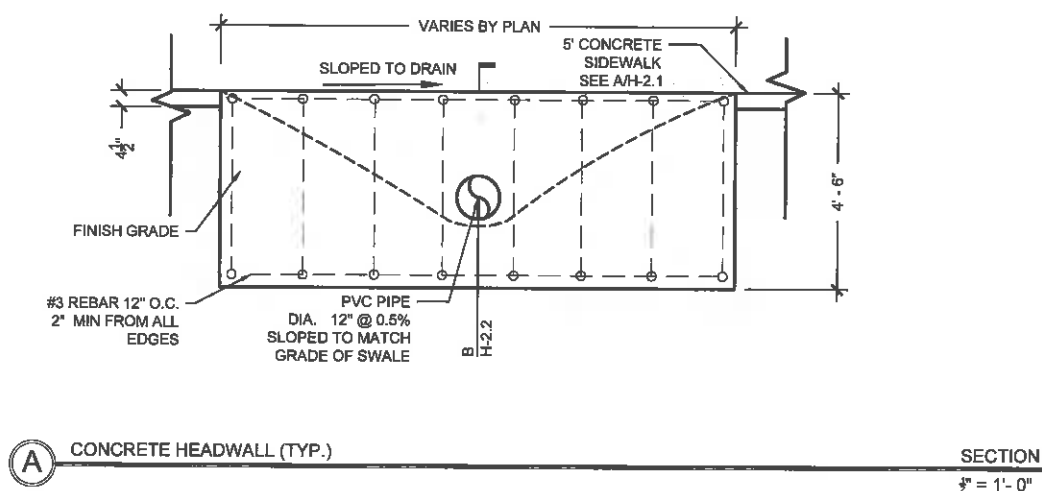
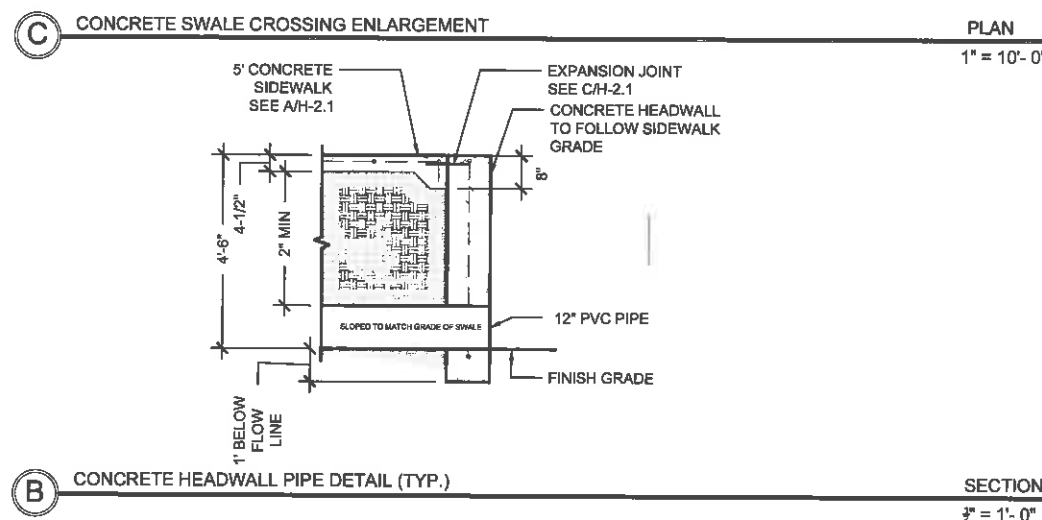
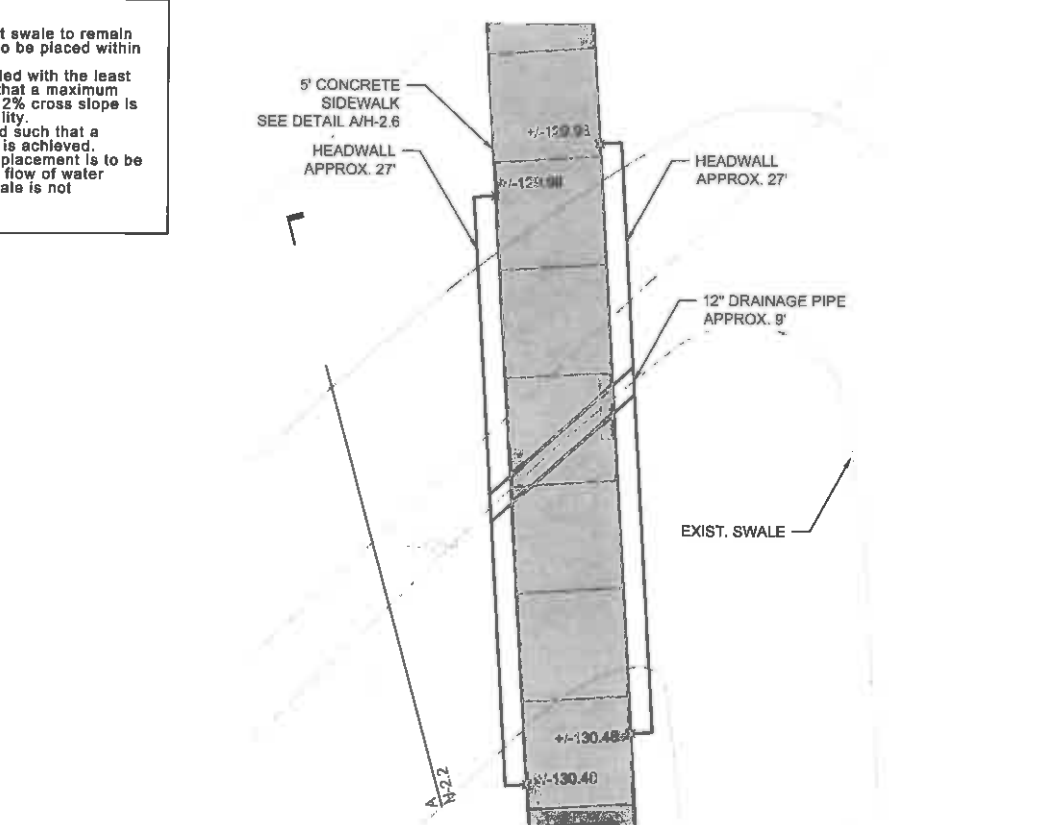
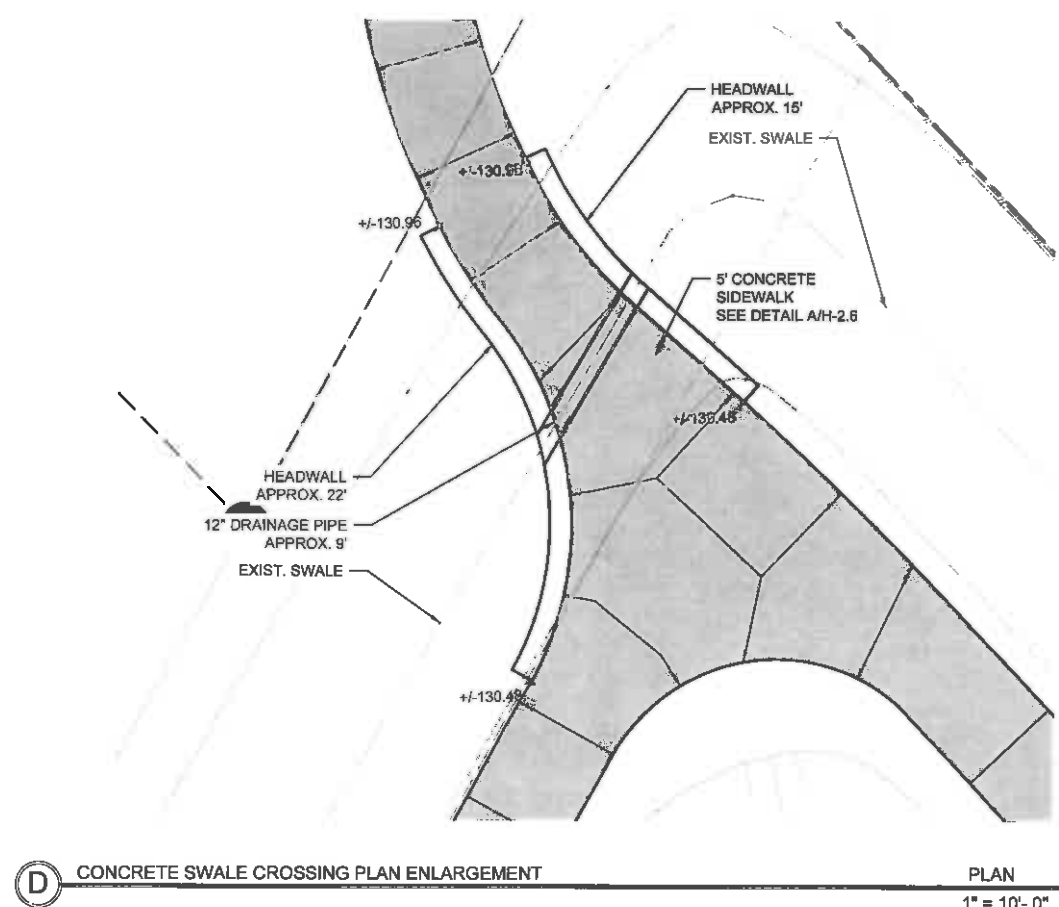
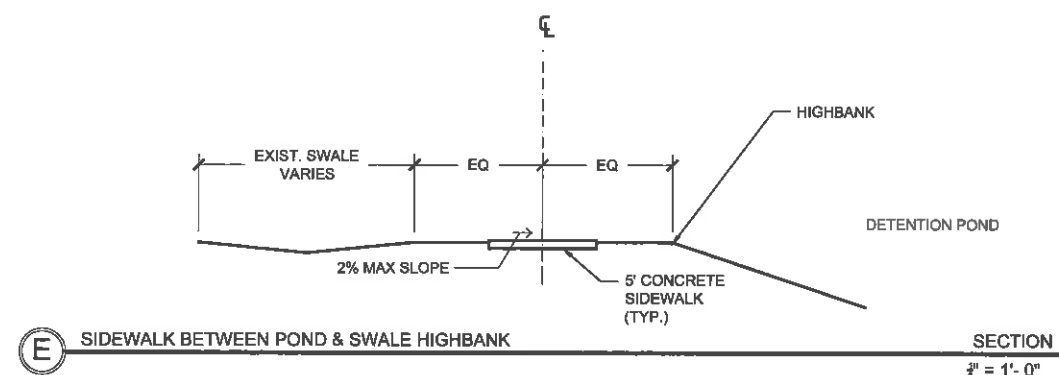
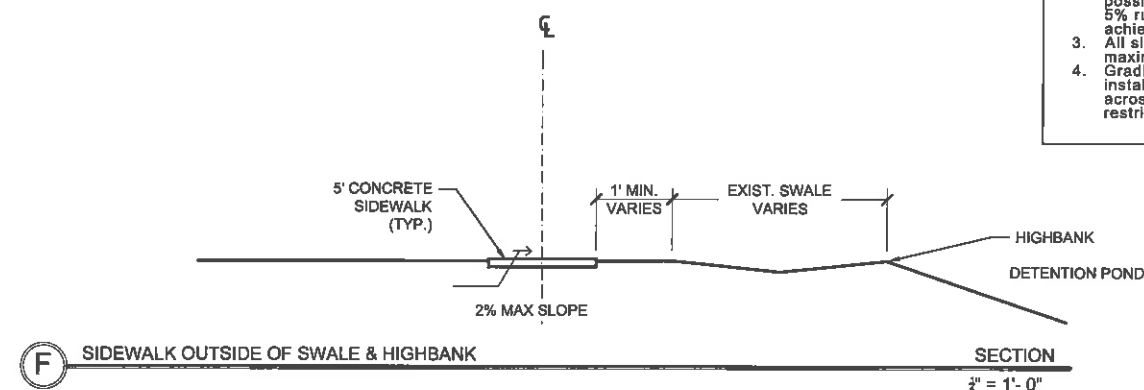
Revisions

Sheet Title
HARDSCAPE DETAILS

Sheet Number

H-2.2

- Note:
- Existing extreme event swale to remain in place and no fill is to be placed within the channel.
 - Side slopes to be graded with the least possible impact such that a maximum 5% running slope and 2% cross slope is achieved for accessibility.
 - All slopes to be graded such that a maximum slope of 4:1 is achieved.
 - Grading and sidewalk placement is to be installed such that the flow of water across the existing swale is not restricted.



SITE FURNISHINGS SCHEDULE

ITEM	QTY	TYPE / DESCRIPTION	MANUF./VENDOR	MODEL NUMBER	NOTES
BENCH	5	BENCH160	Du Mor	160-60	SURFACE MOUNT TO FOOTING. POWDERCOAT COLOR: BLACK METAL
TRASH RECEPTACLE	5	RECEPTACLE 157	Du Mor	157-22	SURFACE MOUNT TO CONCRETE PAD. POWDERCOAT COLOR: BLACK. LID OPTION: CROWN LID

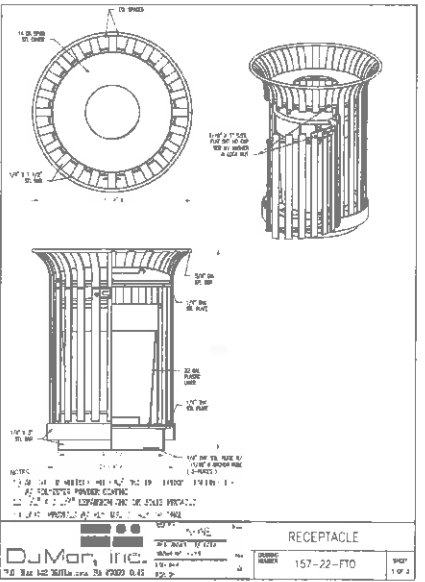
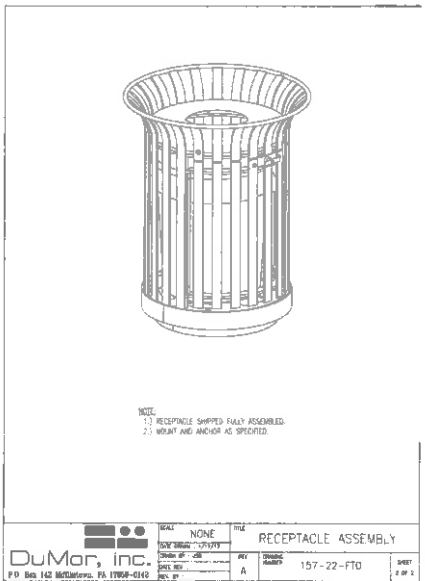
PROJECT BENCH SUPPLIER:
CONTACT: ERIC D. MILLER
PAUL E. ALLEN CO., INC.
972-724-2658 / 888-977-4887
972-724-2660 (FAX)
ERIC.MILLER@PAULEALLENCO.COM

DRAWING FOR REFERENCE ONLY.
INSTALL PER MANUFACTURER'S
RECOMMENDATIONS.

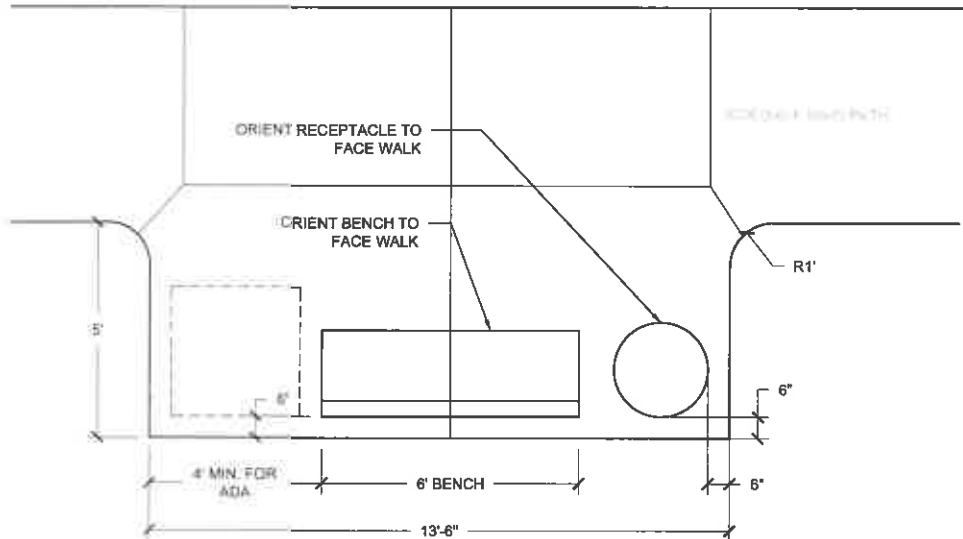
COLOR: NOTED IN SCHEDULE

GENERAL FURNISHING NOTES:

- CONTRACTOR TO PROVIDE PRODUCT CUT SHEETS AND COLOR SELECTIONS FOR APPROVAL PRIOR TO FABRICATION / INSTALLATION
- INSTALL ALL FURNISHINGS PER MANUFACTURER'S RECOMMENDATIONS UNLESS OTHERWISE SPECIFIED

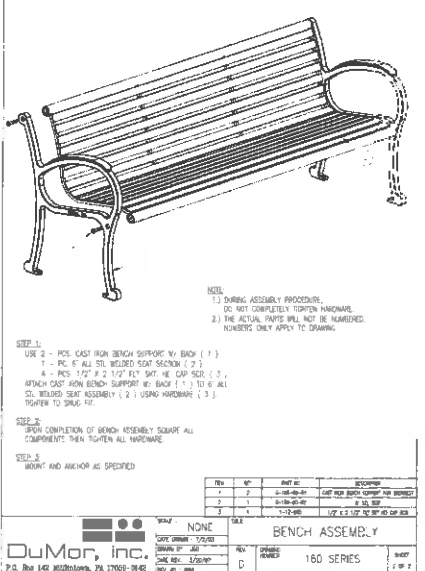


B TRASH RECEPTACLE

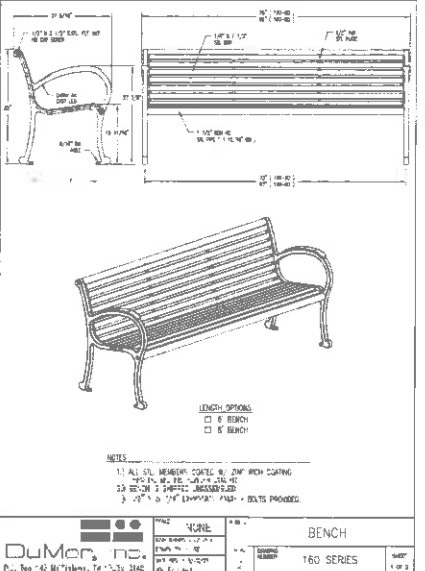


C BENCH AND TRASH RECEPTACLE WITH CONCRETE PATH

SECTION
2" = 1'-0"



A BENCH



Key Map

HCMUD 248 WHITE OAK SPRINGS & WHITE OAK FALLS TRAILS

HARDSCAPE DRAWINGS

THE CITY OF HOUSTON ETJ,
HARRIS COUNTY, TEXAS

DATE

ISSUE

Drawn LK

Checked JC, JH



Project #: 0460-4898

FOR CONSTRUCTION

Date: August 21, 2019

Revision

Date

Remarks

Sheet Title
HARDSCAPE DETAILS

Sheet Number

H-2.3