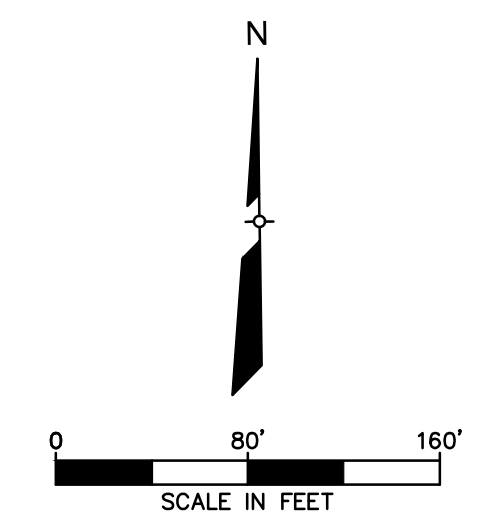
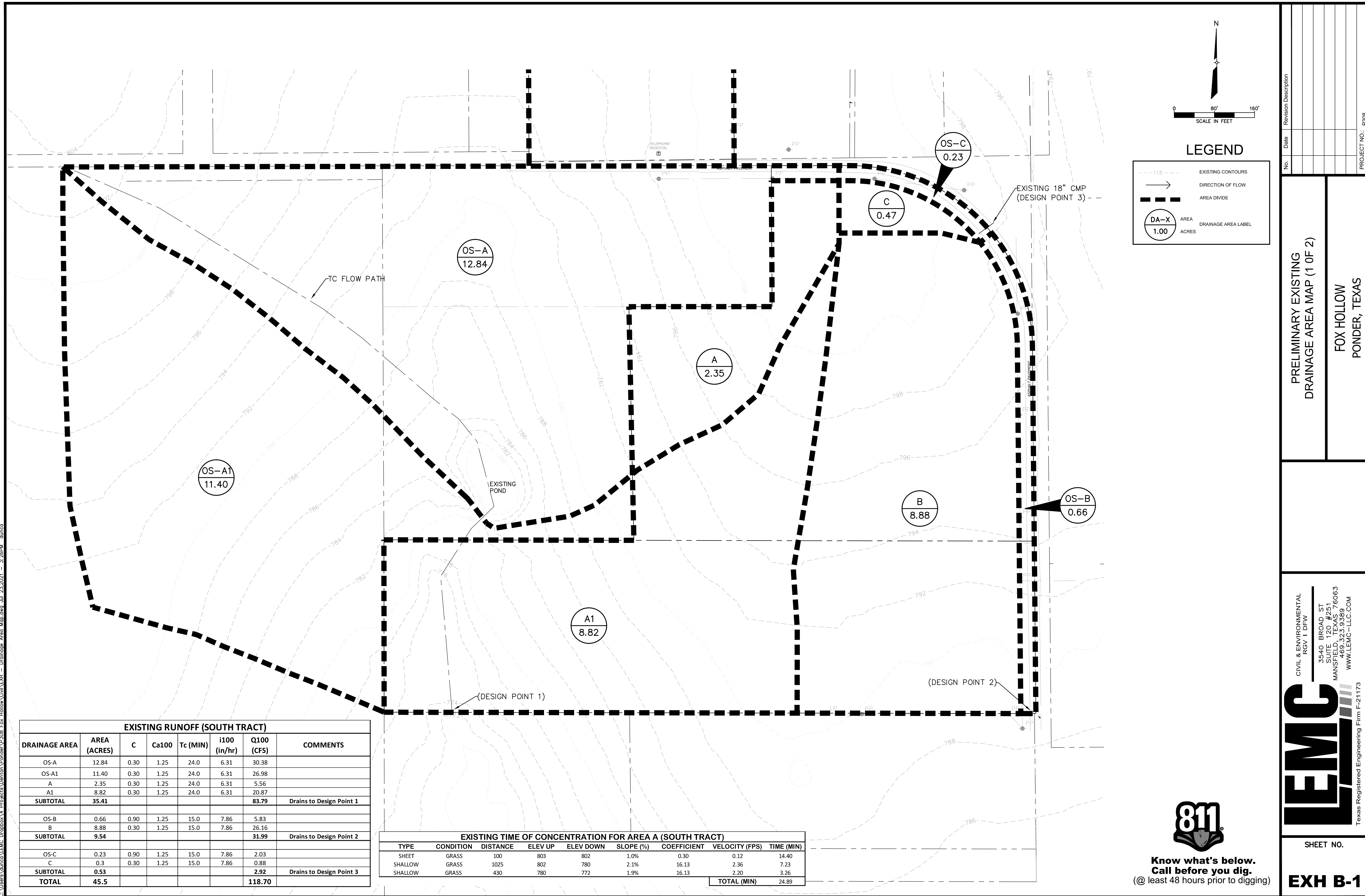


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LEGEND

- EXISTING CONTOURS
- DIRECTION OF FLOW
- AREA DIVIDE
- AREA DRAINAGE AREA LABEL
ACRES

No.	Date	Revision Description

PRELIMINARY EXISTING
DRAINAGE AREA MAP (1 OF 2)

FOX HOLLOW
PONDER, TEXAS

CIVIL & ENVIRONMENTAL
REGV I DFW

LEMC

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Texas Registered Engineering Firm F-21173

SHEET NO.

EXH B-1

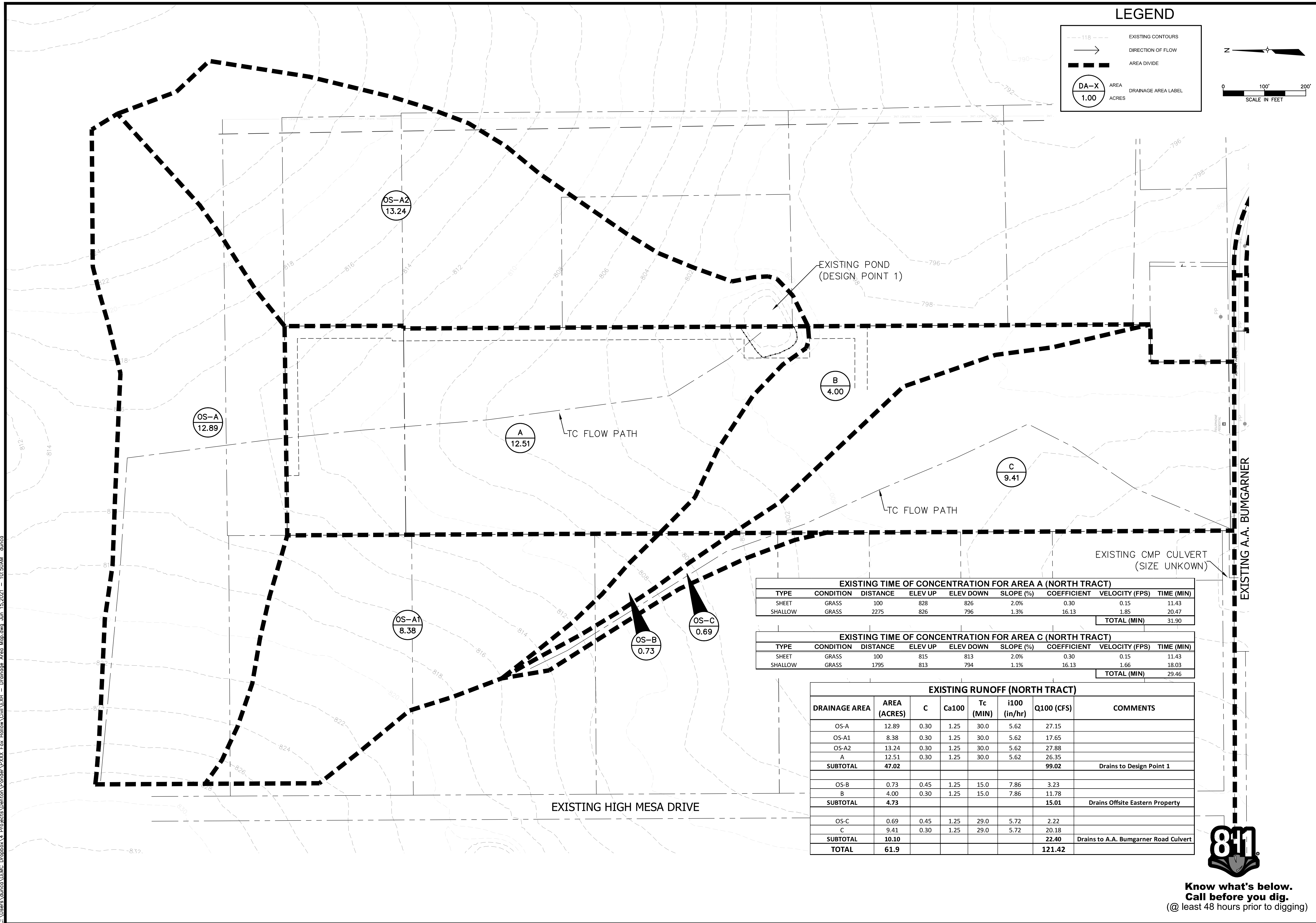
DRAINAGE AREA	AREA (ACRES)	C	Ca100	Tc (MIN)	i100 (in/hr)	Q100 (CFS)	COMMENTS
OS-A	12.84	0.30	1.25	24.0	6.31	30.38	
OS-A1	11.40	0.30	1.25	24.0	6.31	26.98	
A	2.35	0.30	1.25	24.0	6.31	5.56	
A1	8.82	0.30	1.25	24.0	6.31	20.87	
SUBTOTAL	35.41					83.79	Drains to Design Point 1
OS-B	0.66	0.90	1.25	15.0	7.86	5.83	
B	8.88	0.30	1.25	15.0	7.86	26.16	
SUBTOTAL	9.54					31.99	Drains to Design Point 2
OS-C	0.23	0.90	1.25	15.0	7.86	2.03	
C	0.3	0.30	1.25	15.0	7.86	0.88	
SUBTOTAL	0.53					2.92	Drains to Design Point 3
TOTAL	45.5					118.70	

TYPE	CONDITION	DISTANCE	ELEV UP	ELEV DOWN	SLOPE (%)	COEFFICIENT	VELOCITY (FPS)	TIME (MIN)
SHEET	GRASS	100	803	802	1.0%	0.30	0.12	14.40
SHALLOW	GRASS	1025	802	780	2.1%	16.13	2.36	7.23
SHALLOW	GRASS	430	780	772	1.9%	16.13	2.20	3.26
TOTAL (MIN)								24.89



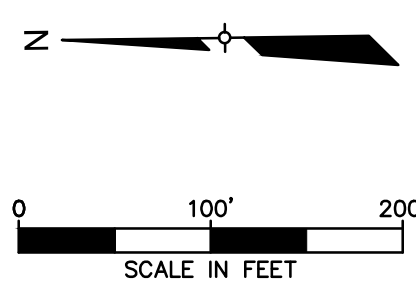
**Know what's below.
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(@ least 48 hours prior to digging)

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LEGEND

- - - 118 - - - EXISTING CONTOURS
- DIRECTION OF FLOW
- - - - - AREA DIVIDE
- DA-X
1.00 ACRES AREA DRAINAGE AREA LABEL



No.	Date	Revision Description

PRELIMINARY EXISTING
DRAINAGE AREA MAP (2 OF 2)

FOX HOLLOW
PONDER, TEXAS

PROJECT NO.: P308

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SHEET NO.
EXH B-2

EXISTING POND
(DESIGN POINT 1)

A 12.51 TC FLOW PATH

C 9.41 TC FLOW PATH

EXISTING CMP CULVERT
(SIZE UNKNOWN)

EXISTING A.A. BUMGARNER

EXISTING HIGH MESA DRIVE

EXISTING TIME OF CONCENTRATION FOR AREA A (NORTH TRACT)

TYPE	CONDITION	DISTANCE	ELEV UP	ELEV DOWN	SLOPE (%)	COEFFICIENT	VELOCITY (FPS)	TIME (MIN)
SHEET	GRASS	100	828	826	2.0%	0.30	0.15	11.43
SHALLOW	GRASS	2275	826	796	1.3%	16.13	1.85	20.47
TOTAL (MIN)								31.90

EXISTING TIME OF CONCENTRATION FOR AREA C (NORTH TRACT)

TYPE	CONDITION	DISTANCE	ELEV UP	ELEV DOWN	SLOPE (%)	COEFFICIENT	VELOCITY (FPS)	TIME (MIN)
SHEET	GRASS	100	815	813	2.0%	0.30	0.15	11.43
SHALLOW	GRASS	1795	813	794	1.1%	16.13	1.66	18.03
TOTAL (MIN)								29.46

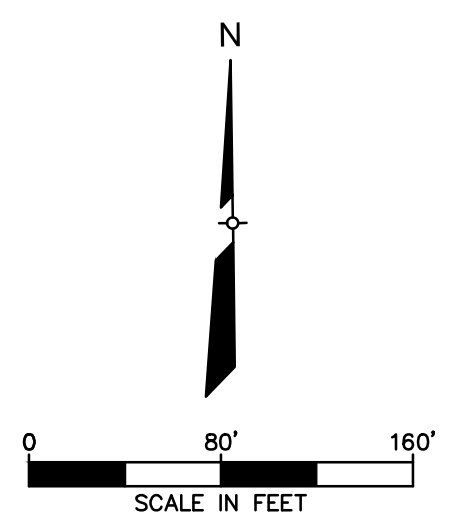
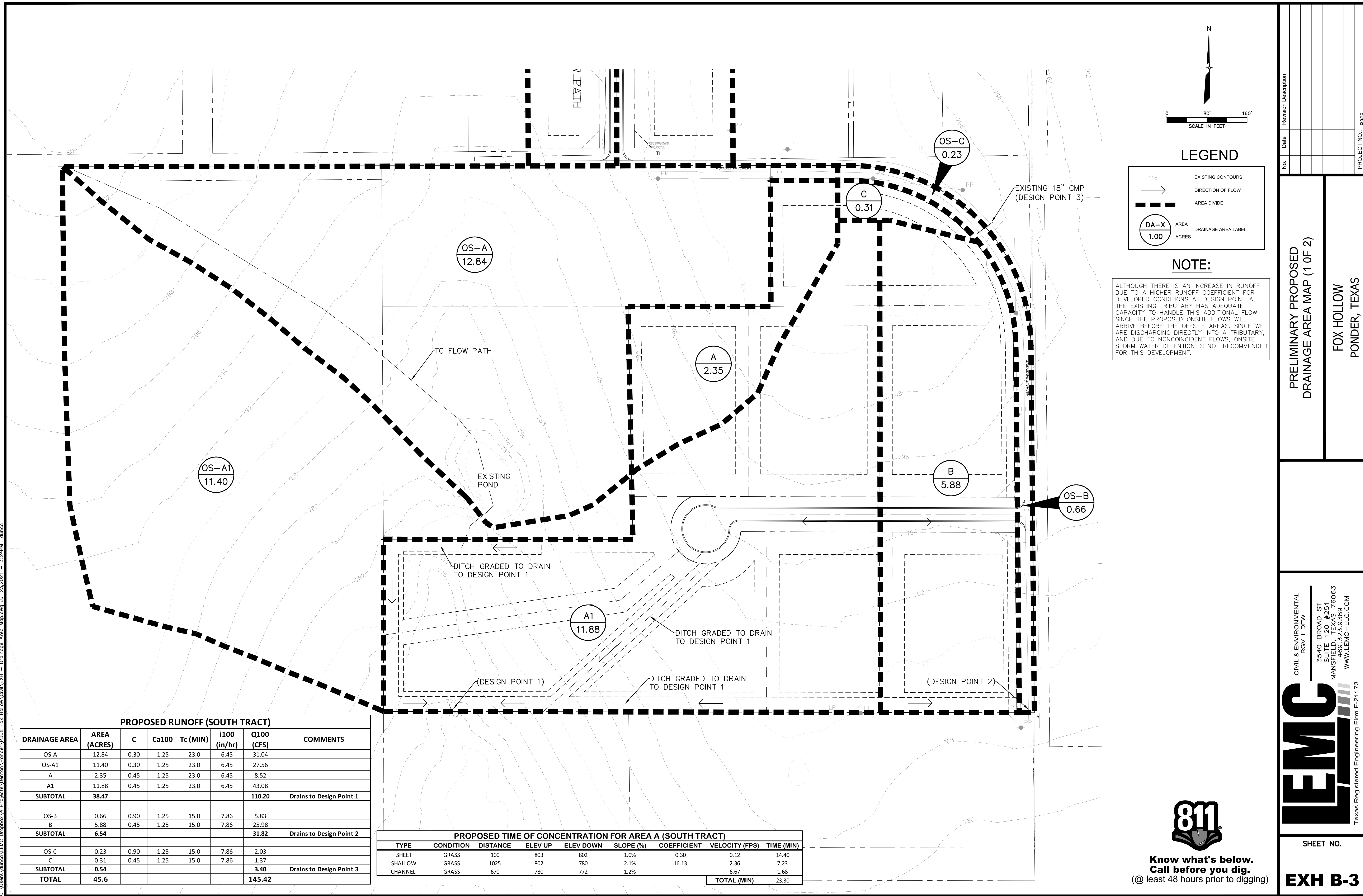
EXISTING RUNOFF (NORTH TRACT)

DRAINAGE AREA	AREA (ACRES)	C	Ca100	Tc (MIN)	i100 (in/hr)	Q100 (CFS)	COMMENTS
OS-A	12.89	0.30	1.25	30.0	5.62	27.15	Drains to Design Point 1
OS-A1	8.38	0.30	1.25	30.0	5.62	17.65	
OS-A2	13.24	0.30	1.25	30.0	5.62	27.88	
A	12.51	0.30	1.25	30.0	5.62	26.35	
SUBTOTAL	47.02					99.02	
OS-B	0.73	0.45	1.25	15.0	7.86	3.23	Drains Offsite Eastern Property
B	4.00	0.30	1.25	15.0	7.86	11.78	
SUBTOTAL	4.73					15.01	
OS-C	0.69	0.45	1.25	29.0	5.72	2.22	Drains to A.A. Bumgarner Road Culvert
C	9.41	0.30	1.25	29.0	5.72	20.18	
SUBTOTAL	10.10					22.40	
TOTAL	61.9					121.42	



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LEGEND

- EXISTING CONTOURS
- DIRECTION OF FLOW
- AREA DIVIDE
- AREA DRAINAGE AREA LABEL
ACRES

NOTE:

ALTHOUGH THERE IS AN INCREASE IN RUNOFF DUE TO A HIGHER RUNOFF COEFFICIENT FOR DEVELOPED CONDITIONS AT DESIGN POINT A, THE EXISTING TRIBUTARY HAS ADEQUATE CAPACITY TO HANDLE THIS ADDITIONAL FLOW SINCE THE PROPOSED ONSITE FLOWS WILL ARRIVE BEFORE THE OFFSITE AREAS. SINCE WE ARE DISCHARGING DIRECTLY INTO A TRIBUTARY, AND DUE TO NONCOINCIDENT FLOWS, ONSITE STORM WATER DETENTION IS NOT RECOMMENDED FOR THIS DEVELOPMENT.

No.	Date	Revision Description

PRELIMINARY PROPOSED
 DRAINAGE AREA MAP (1 OF 2)
 FOX HOLLOW
 PONDER, TEXAS
 PROJECT NO.: P308

PROPOSED RUNOFF (SOUTH TRACT)

DRAINAGE AREA	AREA (ACRES)	C	Ca100	Tc (MIN)	i100 (in/hr)	Q100 (CFS)	COMMENTS
OS-A	12.84	0.30	1.25	23.0	6.45	31.04	
OS-A1	11.40	0.30	1.25	23.0	6.45	27.56	
A	2.35	0.45	1.25	23.0	6.45	8.52	
A1	11.88	0.45	1.25	23.0	6.45	43.08	
SUBTOTAL	38.47					110.20	Drains to Design Point 1
OS-B	0.66	0.90	1.25	15.0	7.86	5.83	
B	5.88	0.45	1.25	15.0	7.86	25.98	
SUBTOTAL	6.54					31.82	Drains to Design Point 2
OS-C	0.23	0.90	1.25	15.0	7.86	2.03	
C	0.31	0.45	1.25	15.0	7.86	1.37	
SUBTOTAL	0.54					3.40	Drains to Design Point 3
TOTAL	45.6					145.42	

PROPOSED TIME OF CONCENTRATION FOR AREA A (SOUTH TRACT)

TYPE	CONDITION	DISTANCE	ELEV UP	ELEV DOWN	SLOPE (%)	COEFFICIENT	VELOCITY (FPS)	TIME (MIN)
SHEET	GRASS	100	803	802	1.0%	0.30	0.12	14.40
SHALLOW	GRASS	1025	802	780	2.1%	16.13	2.36	7.23
CHANNEL	GRASS	670	780	772	1.2%	-	6.67	1.68
TOTAL (MIN)								23.30



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 SHEET NO.
EXH B-3

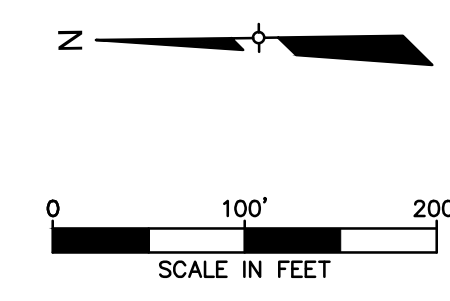
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NOTE:

ALTHOUGH THERE IS AN INCREASE IN RUNOFF DUE TO A HIGHER RUNOFF COEFFICIENT FOR DEVELOPED CONDITIONS AT DESIGN POINT 1, THE EXISTING TRIBUTARY HAS ADEQUATE CAPACITY TO HANDLE THIS ADDITIONAL FLOW SINCE THE PROPOSED ONSITE FLOWS WILL ARRIVE BEFORE THE OFFSITE AREAS. SINCE WE ARE DISCHARGING DIRECTLY INTO A TRIBUTARY, AND DUE TO NONCOINCIDENT FLOWS, ONSITE STORM WATER DETENTION IS NOT RECOMMENDED.

LEGEND

--- 118 --- EXISTING CONTOURS
 → DIRECTION OF FLOW
 - - - - - AREA DIVIDE
 (DA-X) AREA DRAINAGE AREA LABEL
 1.00 ACRES



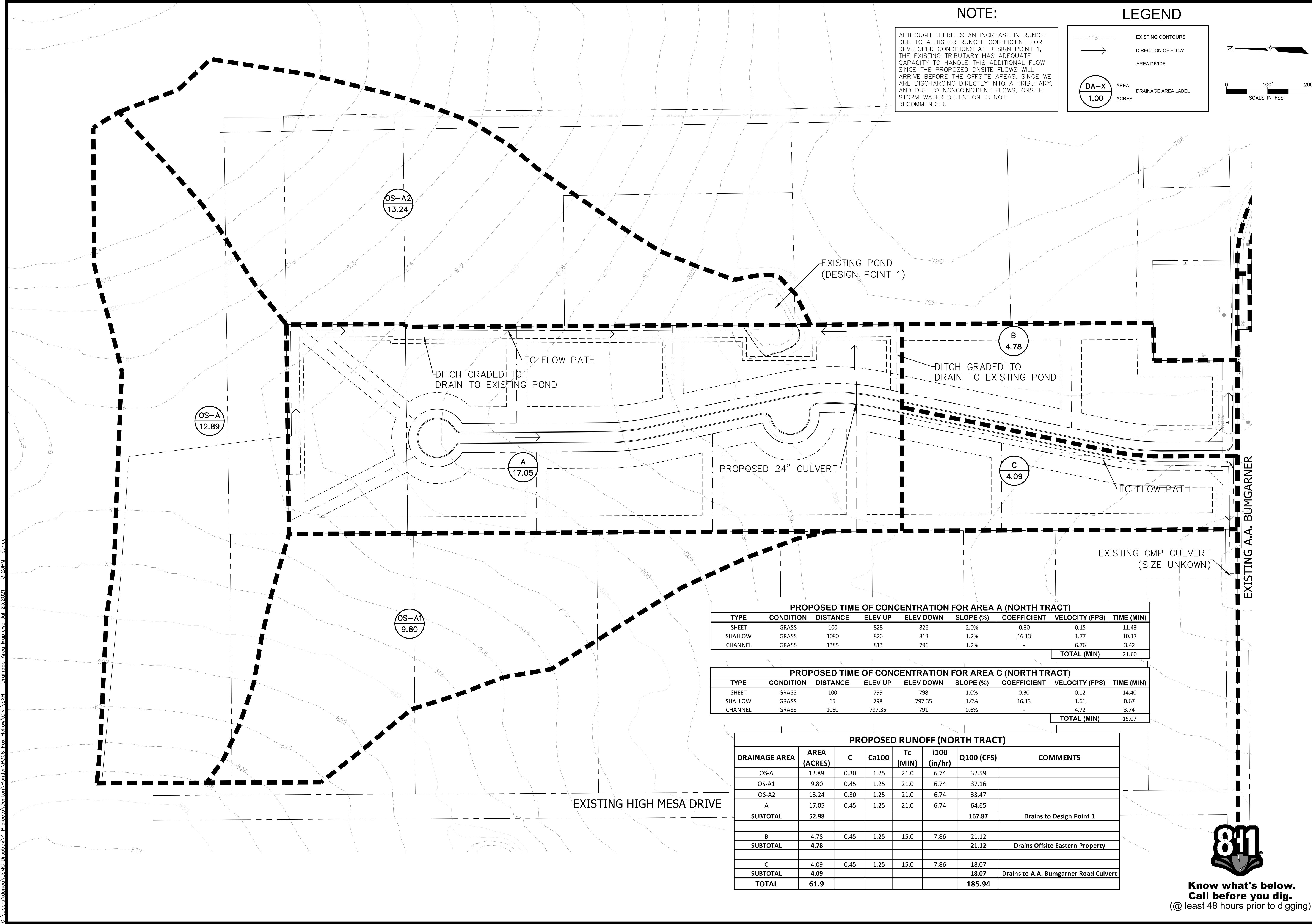
No.	Date	Revision Description

PRELIMINARY PROPOSED
 DRAINAGE AREA MAP (2 OF 2)
 FOX HOLLOW
 PONDER, TEXAS

PROJECT NO.: P308

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SHEET NO.
EXH B-4



PROPOSED TIME OF CONCENTRATION FOR AREA A (NORTH TRACT)

TYPE	CONDITION	DISTANCE	ELEV UP	ELEV DOWN	SLOPE (%)	COEFFICIENT	VELOCITY (FPS)	TIME (MIN)
SHEET	GRASS	100	828	826	2.0%	0.30	0.15	11.43
SHALLOW	GRASS	1080	826	813	1.2%	16.13	1.77	10.17
CHANNEL	GRASS	1385	813	796	1.2%	-	6.76	3.42
TOTAL (MIN)								21.60

PROPOSED TIME OF CONCENTRATION FOR AREA C (NORTH TRACT)

TYPE	CONDITION	DISTANCE	ELEV UP	ELEV DOWN	SLOPE (%)	COEFFICIENT	VELOCITY (FPS)	TIME (MIN)
SHEET	GRASS	100	799	798	1.0%	0.30	0.12	14.40
SHALLOW	GRASS	65	798	797.35	1.0%	16.13	1.61	0.67
CHANNEL	GRASS	1060	797.35	791	0.6%	-	4.72	3.74
TOTAL (MIN)								15.07

PROPOSED RUNOFF (NORTH TRACT)

DRAINAGE AREA	AREA (ACRES)	C	Ca100	Tc (MIN)	i100 (in/hr)	Q100 (CFS)	COMMENTS
OS-A	12.89	0.30	1.25	21.0	6.74	32.59	
OS-A1	9.80	0.45	1.25	21.0	6.74	37.16	
OS-A2	13.24	0.30	1.25	21.0	6.74	33.47	
A	17.05	0.45	1.25	21.0	6.74	64.65	
SUBTOTAL	52.98					167.87	Drains to Design Point 1
B	4.78	0.45	1.25	15.0	7.86	21.12	
SUBTOTAL	4.78					21.12	Drains Offsite Eastern Property
C	4.09	0.45	1.25	15.0	7.86	18.07	
SUBTOTAL	4.09					18.07	Drains to A.A. Bumgarner Road Culvert
TOTAL	61.9					185.94	



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