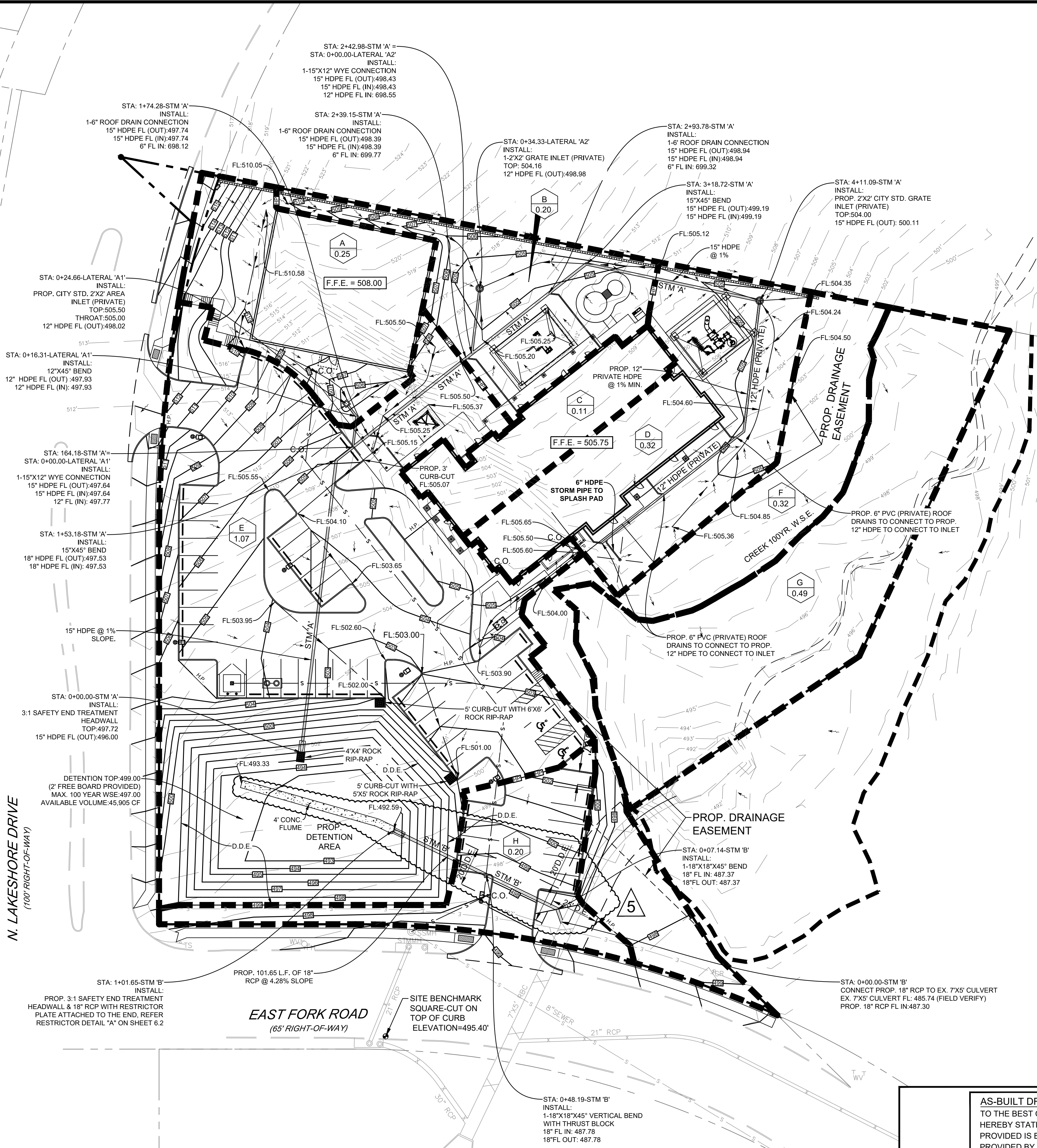


BENCHMARK
 SQUARE-CUT ON TOP OF CURB AT EAST FORK ROAD
 ELEVATION = 495.40'



DEVELOPED DRAINAGE CALCULATION (100 YEAR STORM)

DRAINAGE AREA	C	A	Tc	I-100	Q-100	REMARKS
		(ACRES)	(MINUTES)	(IN/HR)	(CFS)	
A	0.90	0.25	10	9.8	2.21	FLOW TO DETENTION
B	0.90	0.20	10	9.8	1.76	FLOW TO DETENTION
C	0.90	0.11	10	9.8	0.97	FLOW TO DETENTION
D	0.90	0.32	10	9.8	2.82	FLOW TO DETENTION
E	0.90	1.07	10	9.8	9.44	FLOW TO DETENTION
F	0.90	0.32	10	9.8	2.82	BY PASS RUNOFF TO CREEK
G	0.35	0.49	20	8.3	1.42	EX. CREEK / BY PASS RUNOFF
H	0.90	0.20	10	9.8	1.76	BY PASS RUNOFF TO EAST FORK DRIVE

DEVELOPED DRAINAGE CALCULATION (50 YEAR STORM)

DRAINAGE AREA	C	A	Tc	I-100	Q-100	REMARKS
		(ACRES)	(MINUTES)	(IN/HR)	(CFS)	
A	0.90	0.25	10	9.0	2.03	FLOW TO DETENTION
B	0.90	0.20	10	9.0	1.62	FLOW TO DETENTION
C	0.90	0.11	10	9	0.89	FLOW TO DETENTION
D	0.90	0.32	10	9.0	2.59	FLOW TO DETENTION
E	0.90	1.07	10	9.0	8.67	FLOW TO DETENTION
F	0.90	0.32	10	9.0	2.59	BY PASS RUNOFF TO CREEK
G	0.35	0.49	20	7.5	1.29	EX. CREEK / BY PASS RUNOFF
H	0.90	0.20	10	9.0	1.62	BY PASS RUNOFF TO EAST FORK DRIVE

DEVELOPED DRAINAGE CALCULATION (25 YEAR STORM)

DRAINAGE AREA	C	A	Tc	I-100	Q-100	REMARKS
		(ACRES)	(MINUTES)	(IN/HR)	(CFS)	
A	0.90	0.25	10	8.3	1.87	FLOW TO DETENTION
B	0.90	0.20	10	8.3	1.49	FLOW TO DETENTION
C	0.90	0.11	10	8.3	0.82	FLOW TO DETENTION
D	0.90	0.32	10	8.3	2.39	FLOW TO DETENTION
E	0.90	1.07	10	8.3	7.99	FLOW TO DETENTION
F	0.90	0.32	10	8.3	2.39	BY PASS RUNOFF TO CREEK
G	0.35	0.49	20	6.75	1.16	EX. CREEK / BY PASS RUNOFF
H	0.90	0.20	10	8.3	1.49	BY PASS RUNOFF TO EAST FORK DRIVE

DEVELOPED DRAINAGE CALCULATION (10 YEAR STORM)

DRAINAGE AREA	C	A	Tc	I-100	Q-100	REMARKS
		(ACRES)	(MINUTES)	(IN/HR)	(CFS)	
A	0.90	0.25	10	8.0	1.80	FLOW TO DETENTION
B	0.90	0.20	10	8.0	1.44	FLOW TO DETENTION
C	0.90	0.11	10	8.0	0.79	FLOW TO DETENTION
D	0.90	0.32	10	8.0	2.30	FLOW TO DETENTION
E	0.90	1.07	10	8.0	7.70	FLOW TO DETENTION
F	0.90	0.32	10	8.0	2.30	BY PASS RUNOFF TO CREEK
G	0.35	0.49	20	5.7	0.98	EX. CREEK / BY PASS RUNOFF
H	0.90	0.20	10	8.0	1.44	BY PASS RUNOFF TO EAST FORK DRIVE

DEVELOPED DRAINAGE CALCULATION (5 YEAR STORM)

DRAINAGE AREA	C	A	Tc	I-100	Q-100	REMARKS
		(ACRES)	(MINUTES)	(IN/HR)	(CFS)	
A	0.90	0.25	10	6.9	1.55	FLOW TO DETENTION
B	0.90	0.20	10	6.9	1.24	FLOW TO DETENTION
C	0.90	0.11	10	6.9	0.68	FLOW TO DETENTION
D	0.90	0.32	10	6.9	1.99	FLOW TO DETENTION
E	0.90	1.07	10	6.9	6.64	FLOW TO DETENTION
F	0.90	0.32	10	6.9	1.99	BY PASS RUNOFF TO CREEK
G	0.35	0.49	20	5.0	0.86	EX. CREEK / BY PASS RUNOFF
H	0.90	0.20	10	6.9	1.24	BY PASS RUNOFF TO EAST FORK DRIVE

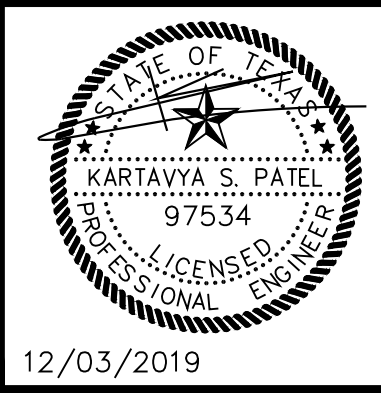
RAINFALL EVENT	ALLOWABLE DISCHARGE (X-A OF EX.)	BYPASS RUNOFF (DA-E+DA-G)	MAXIMUM DISCHARGE FROM DETENTION POND
100-YEAR	7.18 CFS	4.58 CFS	2.60 CFS
50-YEAR	6.48 CFS	4.21 CFS	2.27 CFS
25-YEAR	5.84 CFS	3.88 CFS	1.95 CFS
10-YEAR	4.93 CFS	3.74 CFS	1.18 CFS
5-YEAR	4.32 CFS	3.23 CFS	1.09 CFS

- NOTE**
- VERIFY ROOF DRAIN LOCATION WITH ARCHITECTURAL PLANS.
 - ALL ROOF DRAINS TO CONNECT TO STORM SEWER SYSTEM.
 - POSITIVE DRAINAGE SHALL BE ALLOWED AROUND THE BUILDING FOUNDATION TO PREVENT WATER GOING TO BUILDING.

AS-BUILT DRAWINGS:
 TO THE BEST OF OUR KNOWLEDGE TRIANGLE ENGINEERING LLC., HEREBY STATES THAT THIS PLAN IS AS-BUILT. THE INFORMATION PROVIDED IS BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.

KARTAVYA S. PATEL, P.E. NO. 97534

NO.	DATE	DESCRIPTION	BY
1	12/03/2019	AS-BUILT RECORD DRAWINGS	KP



RECORD DRAWING

PROP. DRAINAGE AREA MAP
 KIDDIE ACADEMY
 NEC OF N. LAKESHORE DRIVE & E. FORK ROAD
 CITY OF ROCKWALL
 ROCKWALL COUNTY, TEXAS



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 W: triangle-engr.com | O: 1784 W. McDermott Drive, Suite 110, Allen, TX 75013

Planning | Civil Engineering | Construction Management

DESIGN/DRAWN	DATE	SCALE	PROJECT NO.	SHEET NO.
KP	DS	08/23/16	SEE SCALE BAR	028-16

TX PE FIRM #11525