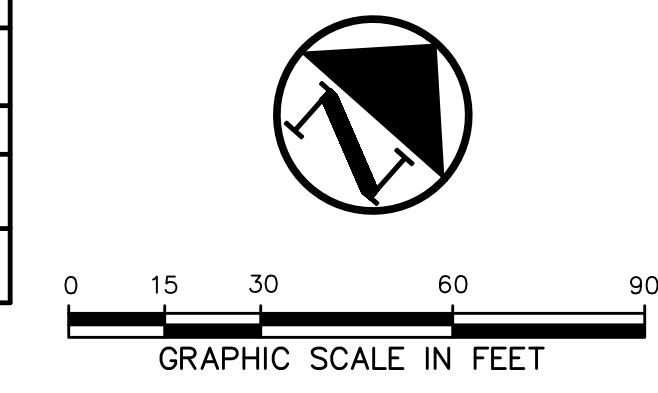


DRAINAGE AREA TABLE						
DRAINAGE AREA ID	AREA (acres)	C	Tc (min)	I <sub>100</sub> (in/hr)	Q <sub>100</sub> (cfs)	COMMENTS
^ DA 1A	0.97	0.80	10	9.80	7.60	DRAINS TO PROPOSED CURB INLET
^ DA 1B	0.21	0.80	10	9.80	1.65	DRAINS TO PROPOSED CURB INLET
^ DA 2	0.21	0.80	10	9.80	1.65	DRAINS TO DETENTION POND "D"
^ DA 3	0.21	0.80	10	9.80	1.65	DRAINS TO EXISTING ROOF DRAINS
^ DA 4	0.48	0.80	10	9.80	3.76	DRAINS TO EXISTING Y-INLET
# DA 5	0.92	0.80	10	9.80	7.21	DRAINS TO DETENTION POND "B"
# DA 6	0.17	0.80	10	9.80	1.33	DRAINS TO EXISTING GRATE INLETS & ROOF DRAINS
# DA 7	0.35	0.80	10	9.80	2.74	DRAINS TO EXISTING ROOF DRAINS
# DA 8	0.11	0.80	10	9.80	0.86	DRAINS TO EXISTING GRATE INLETS

DRAINAGE AREA TABLE						
DRAINAGE AREA ID	AREA (acres)	C	Tc (min)	I <sub>100</sub> (in/hr)	Q <sub>100</sub> (cfs)	COMMENTS
# DA 9	0.11	0.80	10	9.80	0.86	DRAINS TO EXISTING GRATE INLETS
# DA 10	0.23	0.80	10	9.80	1.80	DRAINS TO EXISTING ROOF DRAINS
# DA 11	0.37	0.80	10	9.80	2.90	DRAINS TO EXISTING ROOF DRAINS
+ DA 12	1.31	0.80	10	9.80	10.27	DRAINS TO EXISTING DETENTION POND "A"
% DA 13	1.98	0.80	10	9.80	15.52	DRAINS TO DETENTION POND "C"
OS 1	1.48	0.35	20	8.30	4.30	DRAINS TO EXISTING Y-INLET
OS 2	4.50	0.35	20	8.30	13.07	DRAINS TO EXISTING Y-INLET
OS 3	1.65	0.35	20	8.30	4.79	DRAINS TO OS 2
OS 4	1.74	0.35	20	8.30	5.05	DRAINS TO OS 2

DRAINAGE AREA TABLE						
DRAINAGE AREA ID	AREA (acres)	C	Tc (min)	I <sub>100</sub> (in/hr)	Q <sub>100</sub> (cfs)	COMMENTS
OS 5	2.52	0.35	20	8.30	7.32	DRAINS TO EXISTING WYE INLET
OS 6	0.50	0.90	10	9.80	4.41	DRAINS TO EXISTING CURB INLET
OS 7	0.38	0.90	10	9.80	3.35	DRAINS TO EXISTING CURB INLET
OS 8	0.50	0.90	10	9.80	4.41	DRAINS TO EXISTING CURB INLET

DETENTION POND DRAINAGE TABLE	
+ DETENTION POND "A"	DRAINS TO DETENTION POND "C"
# DETENTION POND "B"	DRAINS TO DETENTION POND "C"
% DETENTION POND "C"	DRAINS TO EXISTING STORM SEWER IN TOWNSEND DRIVE
^ DETENTION POND "D"	DRAINS TO EXISTING STORM SEWER IN EAST YELLOW JACKET



DRAINAGE AREA TABLE						
DRAINAGE AREA ID	AREA (acres)	C	Tc (min)	I <sub>100</sub> (in/hr)	Q <sub>100</sub> (cfs)	COMMENTS
# 5A	0.10	0.80	10	9.80	0.75	DRAINS TO PROPOSED ROOF DRAINS
# 5B	0.05	0.80	10	9.80	0.44	DRAINS TO PROPOSED ROOF DRAINS
# 5C	0.10	0.80	10	9.80	0.78	DRAINS TO COURTYARD GRATE INLET
# 5D	0.10	0.80	10	9.80	0.78	DRAINS TO COURTYARD GRATE INLET
# 5E	0.06	0.80	10	9.80	0.54	DRAINS TO PROPOSED ROOF DRAINS
# 5F	0.07	0.80	10	9.80	0.55	DRAINS TO PROPOSED ROOF DRAINS
# 5G	0.14	0.80	10	9.80	1.11	DRAINS TO PROPOSED ROOF DRAINS

LEGEND	
B	BOLLARD
EM	ELECTRIC METER
PP	POWER POLE
LS	LIGHT STANDARD
WM	WATER METER
WV	WATER VALVE
ICV	IRRIGATION CONTROL VALVE
FH	FIRE HYDRANT
CO	CLEANOUT
MH	MANHOLE
TSC	TRAFFIC SIGNAL CONTROL
TSP	TRAFFIC SIGNAL POLE
TELE	TELEPHONE BOX
FL	FLOOD LIGHT
FP	FLAG POLE
TS	TRAFFIC SIGN
PL	PROPERTY LINE
F	FENCE
613	EXISTING CONTOUR
450	PROPOSED CONTOUR
→	DRAINAGE FLOW DIRECTION
---	100-YR FLOODPLAIN LIMITS
---	DRAINAGE DIVIDE
DA 8	PROPOSED DRAINAGE AREA ID
1.00	AREA IN ACRES
7.99	Q <sub>100</sub> IN CUBIC FEET PER SECOND

2001 DRAINAGE INFORMATION: ACCORDING TO THE DESIGN PACKAGE "FIRST UNITED METHODIST CHURCH", SHEET C-3 "DRAINAGE AREA MAP" BY F&S PARTNERS AND BSM ENGINEERS, SIGNED 11-01, THE DESIGN VALUES FOR DETENTION PONDS "A", "B", AND "C" ARE AS FOLLOWS:

POND "A"  
 RUNOFF FACTOR C= 0.8  
 AREA=3.40 ACRES  
 INTENSITY= 9.8 in/hr

POND "B"  
 RUNOFF FACTOR C= 0.8  
 AREA=3.55 ACRES  
 INTENSITY= 9.8 in/hr

POND "C"  
 RUNOFF FACTOR C= 0.8  
 AREA=2.23 ACRES  
 INTENSITY= 9.8 in/hr

TOTAL AREA DESIGNED TO DRAIN TO DETENTION PONDS "A", "B", AND "C" = 9.18 ACRES

PROPOSED DRAINAGE AREA CRITERIA  
 POND "A"  
 RUNOFF FACTOR C= 0.8  
 AREA=1.31 ACRES  
 INTENSITY= 9.8 in/hr

POND "C"  
 RUNOFF FACTOR C= 0.8  
 AREA=1.98 ACRES  
 INTENSITY= 9.8 in/hr

POND "D"  
 RUNOFF FACTOR C= 0.8  
 AREA=2.08 ACRES  
 INTENSITY= 9.8 in/hr

POND "B"  
 RUNOFF FACTOR C= 0.8  
 AREA=2.85 ACRES  
 INTENSITY= 9.8 in/hr

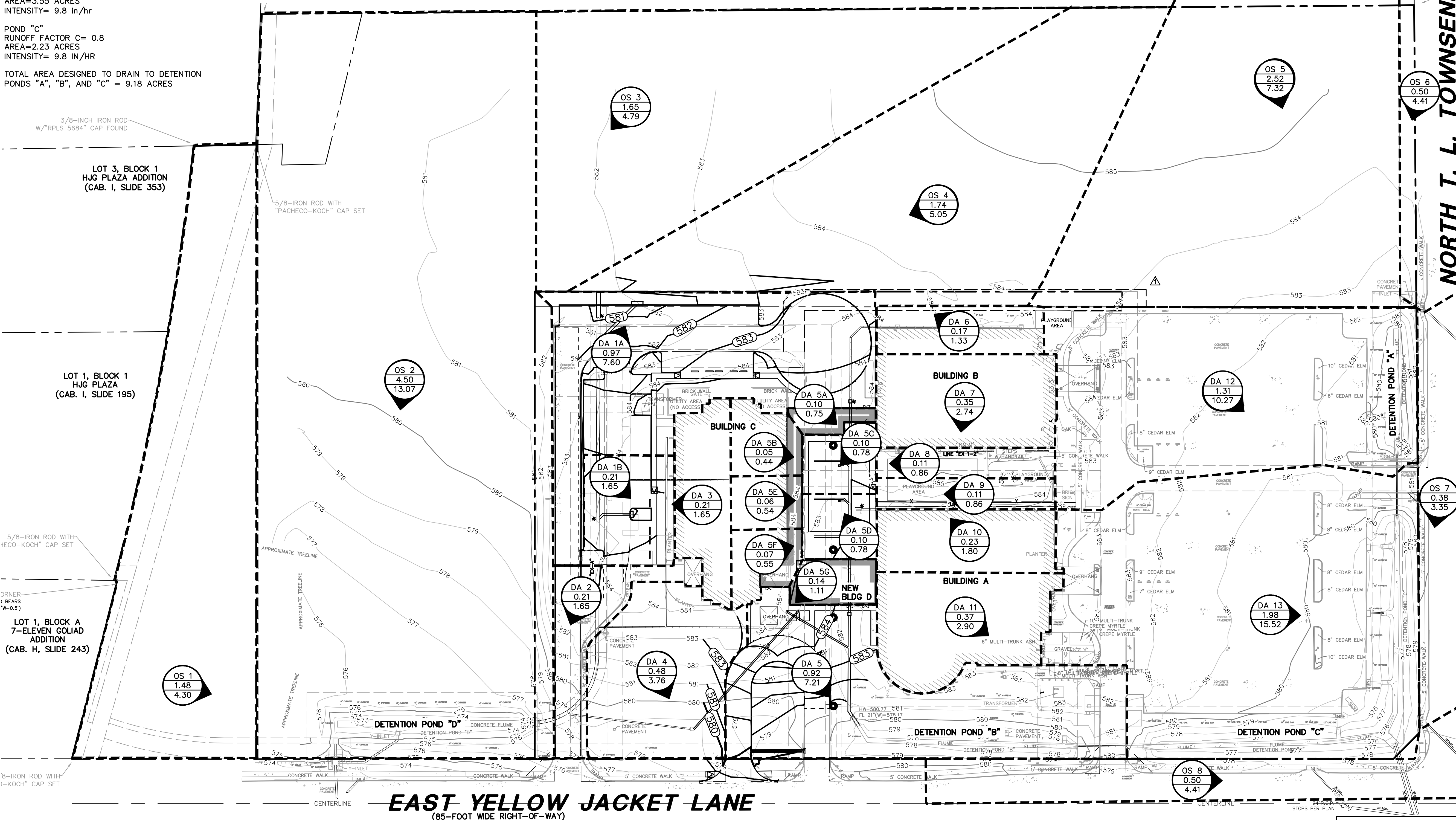
3/8-INCH IRON ROD WITH "RPLS 5684" CAP FOUND

LOT 3, BLOCK 1  
 HJG PLAZA ADDITION  
 (CAB. I, SLIDE 353)

LOT 1, BLOCK 1  
 HJG PLAZA  
 (CAB. I, SLIDE 195)

LOT 1, BLOCK A  
 7-ELEVEN COLIAD ADDITION  
 (CAB. H, SLIDE 243)

ROWLLIS 8/21/2023 3:05 PM M:\VWC-21\1919-18.283\DWG\CIVIL C-3D 2016\1919-18.283\PROPDAMS.DWG



WITH THE ADDITION OF NEW BUILDING "D", THE PROPOSED FLOW GOING TO PONDS "A", "B", "C" AND DETENTION POND "D" ARE AS FOLLOWS:

POND "A"  
 DRAINAGE AREA DA 12 = 1.31 ACRES

POND "B"  
 DRAINAGE AREAS DA 5-11 = 2.85 ACRES

POND "C"  
 DRAINAGE AREA DA 13 = 1.98 ACRES

POND "D"  
 DRAINAGE AREAS DA 1-4 = 2.08 ACRES  
 NOTE: APPROXIMATELY 0.02 ACRES IS BEING REDIRECTED TO POND "B" WITH NEW BUILDING "D". DETENTION POND "B" WAS DESIGNED FOR A TOTAL AREA OF 3.55 ACRES. THEREFORE, DETENTION POND "B" IS STILL OVERSIZED FOR THE PROPOSED AMOUNT OF FLOW WITH THIS DEVELOPMENT.

TOTAL PROPOSED AREA DRAINING TO DETENTION PONDS "A", "B", AND "C" = 6.14 ACRES

9.18 ACRES - 6.14 ACRES = 3.04 ACRES NO LONGER DRAIN TO ONSITE DETENTION PONDS

**RECORD DRAWING**

THE SIGNED AND SEALED CONSTRUCTION DOCUMENT HAS BEEN REVIEWED TO REFLECT CONSTRUCTION RECORDS MAINTAINED AND PROVIDED BY THE CONTRACTOR FOR THIS PROJECT. THE INFORMATION SHOWN ON THIS RECORD DRAWING, WHICH WAS PROVIDED BY THE CONTRACTOR, OR OTHERS NOT ASSOCIATED WITH THE DESIGN ENGINEER, CANNOT BE VERIFIED FOR ACCURACY OR COMPLETENESS. PACHECO KOCH SHALL ASSUME NO LIABILITY FOR ANY CHANGES MADE DURING CONSTRUCTION THAT WERE NOT SPECIFICALLY APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION. THE SEALED CONSTRUCTION DRAWINGS ARE ON FILE AT THE OFFICES OF PACHECO KOCH.

ATTESTED BY: STEVEN M. HEILBRUN, PE  
 SIGNATURE: *Steven M. Heilbrun*  
 ENGINEER OF RECORD: STEVEN M. HEILBRUN, PE  
 CONTRACTOR: THE CHRISTMAN COMPANY  
 DATE REVISED: 07/21/2023

NO.	DATE	REVISION
07/21/2023	RECORD DRAWING	
02/18/2022	PR-01	

**Pacheco Koch** 7557 RAMBLER ROAD, SUITE 1400 DALLAS, TX 75231 972.235.3031 TX REG. ENGINEERING FIRM F-469 TX REG. SURVEYING FIRM LS-10008000

**PROPOSED DRAINAGE AREA MAP**  
**FIRST UNITED METHODIST CHURCH**  
**YELLOW JACKET LANE & TOWNSEND ROAD**  
**LOT 7, BLOCK 1**  
**CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS**

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
SMH	GAC	APR 2022	1"=30'			<b>C4.2</b>

LAND USE: CHURCH

OWNER:  
 GARY HANCOCK  
 FIRST UNITED METHODIST ROCKWALL  
 1200 EAST YELLOW JACKET LANE  
 ROCKWALL, TEXAS 75087