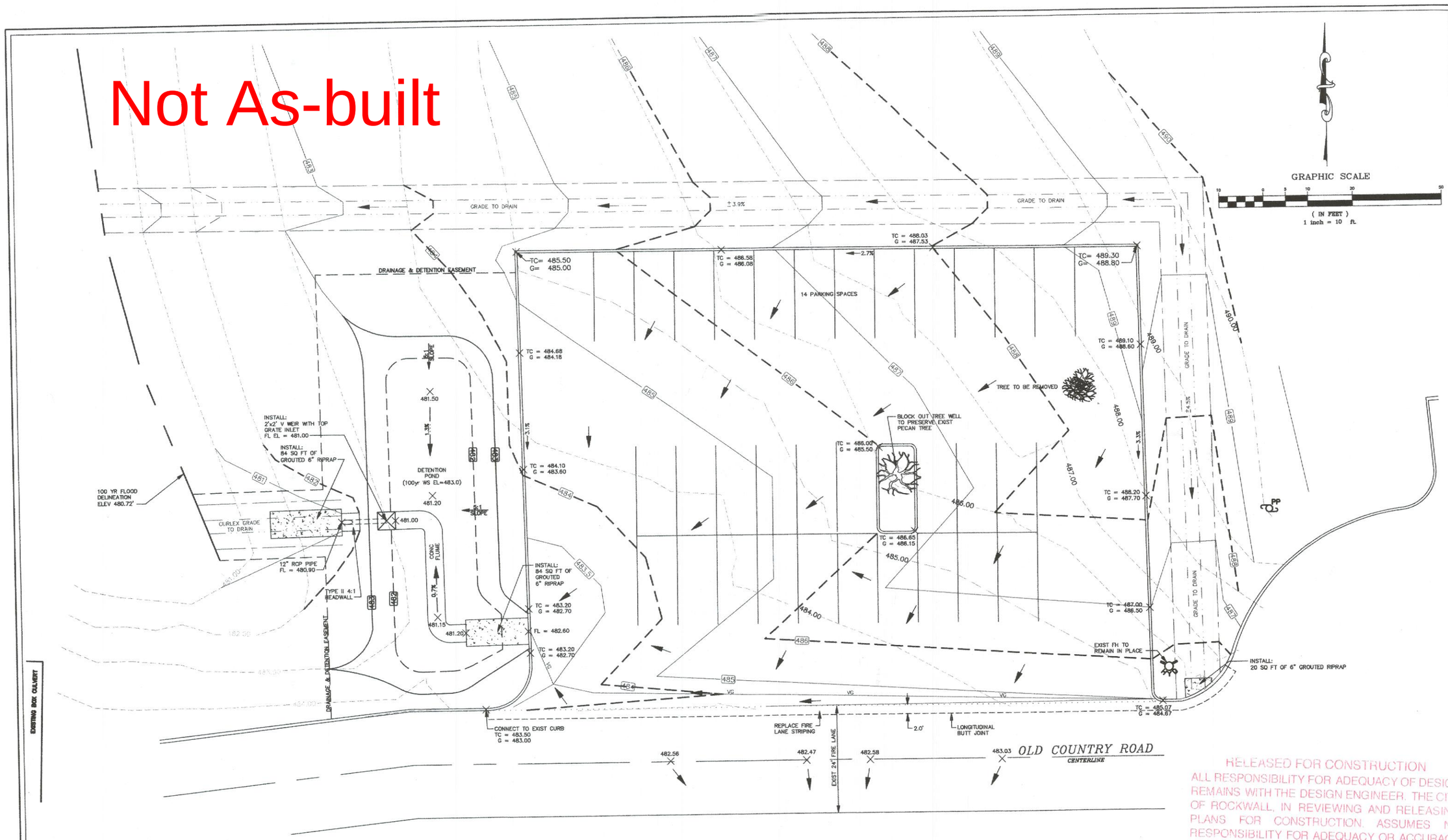
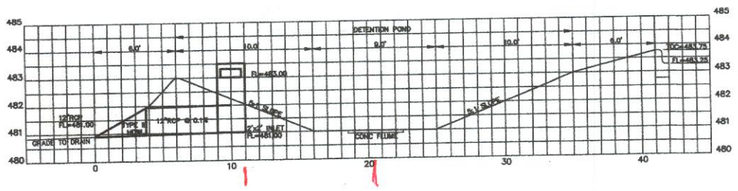
Not As-built





NOTES:

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5. PAVEMENT THICKNESS SHALL BE A MINIMUM OF 6" THICKNESS WITH A STRENGTH OF 3600 PSI AT 28 DAYS AND REINFORCED WITH NO. 3 BAR AT 24" CENTERS EACH WAY. (MIN 6.5 SACK MIX)
6. CONTRACTOR SHALL SEED SWALES WITH MIX OF WINTER WYE AND BERMUDA TO RE-ESTABLISH VEGETATION UPON COMPLETION OF CONSTRUCTION
7. CONTRACTOR TO STRIP PARKING SPACES TO STANDARD 6" WIDTH.

FILE

RELEASED FOR CONSTRUCTION
ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN.

CITY _____ 4-9-13 DATE

ALL BEARINGS ARE ON THE GRID COORDINATE SYSTEM NAD 83 (1993 ADJ.) NORTH CENTRAL ZONE. ALL COORDINATES SHOWN ARE GRID AND MAY BE CONVERTED TO SURFACE BY MULTIPLYING BY TxDOT CONVERSION FACTOR OF 1.000136506.

GRAPHIC SCALE
(IN FEET)
1 inch = 10 ft.

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY W.L. DOUPHRATE II TEXAS P.E. NO. 60102 DATE 4/9/13 Firm # 816

DOUPHRATE & ASSOCIATES, INC.
ENGINEERING PROJECT MANAGEMENT - SURVEYING
2235 RIDGE RD. # 200 ROCKWALL, TEXAS 75087
PHONE: (972)771-9004 FAX: (972)771-9005

YELLOWJACKET PLAZA
PARKING LOT ADDITION GRADING PLAN
CITY OF ROCKWALL
ROCKWALL COUNTY, TEXAS

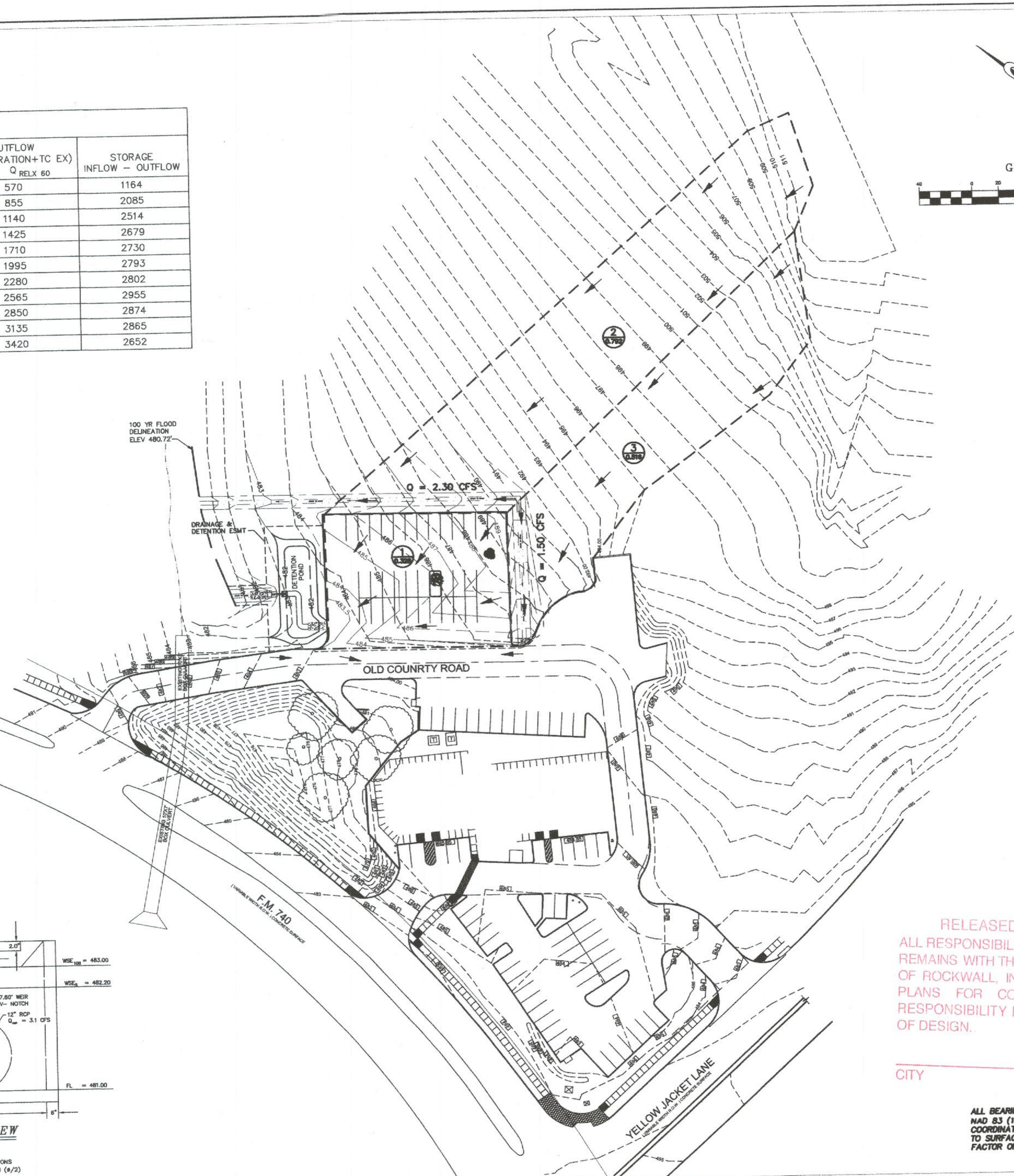
REVISION
W.L.D.
CHECKED
DRAWN
12/2012
DATE
12007
PROJECT
1

DETENTION POND CALCULATIONS						
INTERVAL	DURATION (MIN)	INTENSITY (IN/HR)	DISCHARGE CIA (C=.90) (CFS)	INFLOW CF DISCHARGE+DURATION	OUTFLOW .5(TC DURATION+TC EX) $Q_{RELX\ 60}$	STORAGE INFLOW – OUTFLOW
1	10	9.8	2.89	1734	570	1164
2	20	8.3	2.45	2940	855	2085
3	30	6.9	2.03	3654	1140	2514
4	40	5.8	1.71	4104	1425	2679
5	50	5.0	1.48	4440	1710	2730
6	60	4.5	1.33	4788	1995	2793
7	70	4.1	1.21	5082	2280	2802
8	80	3.9	1.15	5520	2565	2955
9	90	3.6	1.06	5724	2850	2874
10	100	3.4	1.00	6000	3135	2865
11	110	3.1	0.92	6072	3420	2652

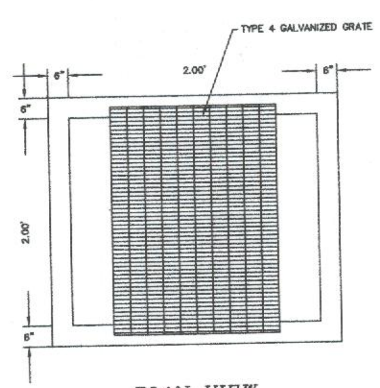
EXISTING DRAINAGE CALCULATIONS Q=CIA						
DRAINAGE AREA	AREA (ACRES)	C	TIME OF CONC. (MIN)	I_{100}	Q_{100}	REMARKS
1	0.328	0.35	20	8.3	0.95	PARKING LOT
2	0.792	0.35	20	8.3	2.30	EXISTING DRAINAGE
3	0.516	0.35	20	8.3	1.50	EXISTING DRAINAGE

PROPOSED DRAINAGE CALCULATIONS Q=CIA						
DRAINAGE AREA	AREA (ACRES)	C	TIME OF CONC. (MIN)	I_{100}	Q_{100}	REMARKS
1	0.328	0.90	10	9.8	2.89	PARKING LOT
2	0.792	0.35	20	8.3	2.30	EXISTING DRAINAGE
3	0.516	0.35	20	8.3	1.50	EXISTING DRAINAGE

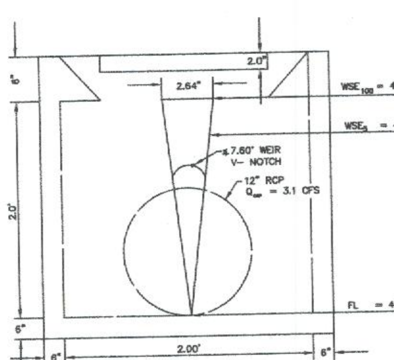
PARKING LOT Q ALLOWABLE VS Q ACTUAL			
	INTENSITY	ALLOWABLE RELEASE	ACTUAL RELEASE
Q_5	4.9	0.70	0.70
Q_{25}	6.6	0.83	0.83
Q_{50}	7.5	0.94	0.94
Q_{100}	8.3	0.95	0.95



2'X2' DROP INLET



PLAN VIEW



FRONT VIEW

V-NOTCH CALCULATIONS
Q = 2.5*H^2.5* TAN (θ/2)
Q = 0.95 CFS

RELEASED FOR CONSTRUCTION
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CITY ____________ DATE ____________

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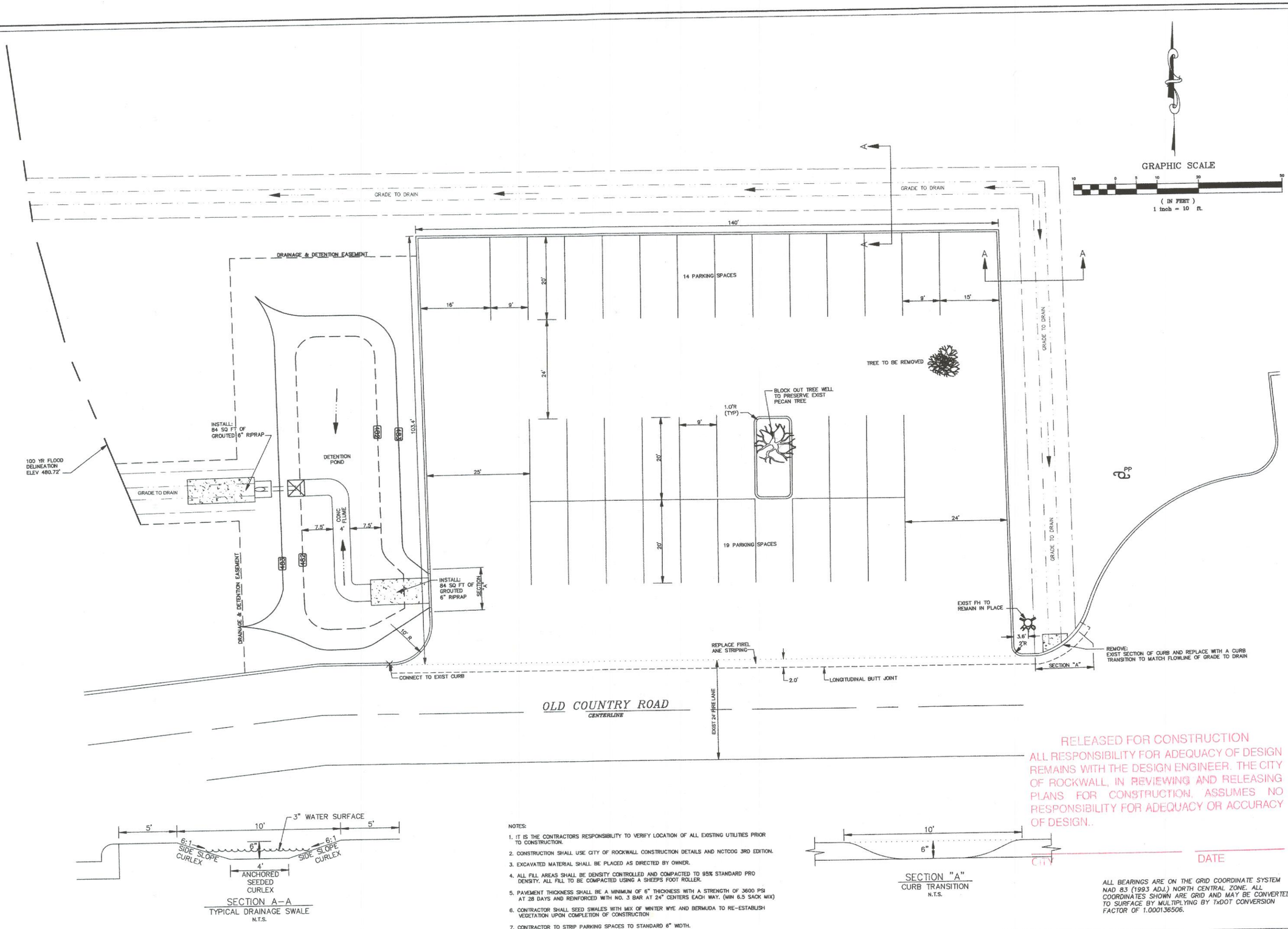
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY W.L. DOUPHRATE II TEXAS P.E. NO. 60102 ON DATE 4/4/13 Firm # 886

DOUPHRATE & ASSOCIATES, INC.
2235 RIDGE RD., # 200 ROCKWALL, TEXAS 75087
PHONE: (972)771-9004 FAX: (972)771-9005

YELLOWJACKET PLAZA
PARKING LOT ADDITION DRAINAGE AREA MAP
CITY OF ROCKWALL
ROCKWALL COUNTY, TEXAS

REVISION
W.L.D.
CHECKED
DRAWN
12/2012
DATE
12007
PROJECT

PLOT SCALE: 1:10.000 PLOT STYLE: MONODEBBY.ctb PLOTTED BY: RICK BELKNAP ON 10/28/2012



SECTION A–A
TYPICAL DRAINAGE SWALE
N.T.S.

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SECTION "A"
CURB TRANSITION
N.T.S.

RELEASED FOR CONSTRUCTION
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ENGINEERING PROJECT MANAGEMENT - SURVEYING
2235 RIDGE RD. # 200 ROCKWALL, TEXAS 75087
PHONE: (972)771-9004 FAX: (972)771-9005

YELLOWJACKET PLAZA
PARKING LOT ADDITION DIMENSION CONTROL PLAN
CITY OF ROCKWALL
ROCKWALL COUNTY, TEXAS

REVISION	
W.L.D. CHECKED	
DRAWN	
12/2012 DATE	
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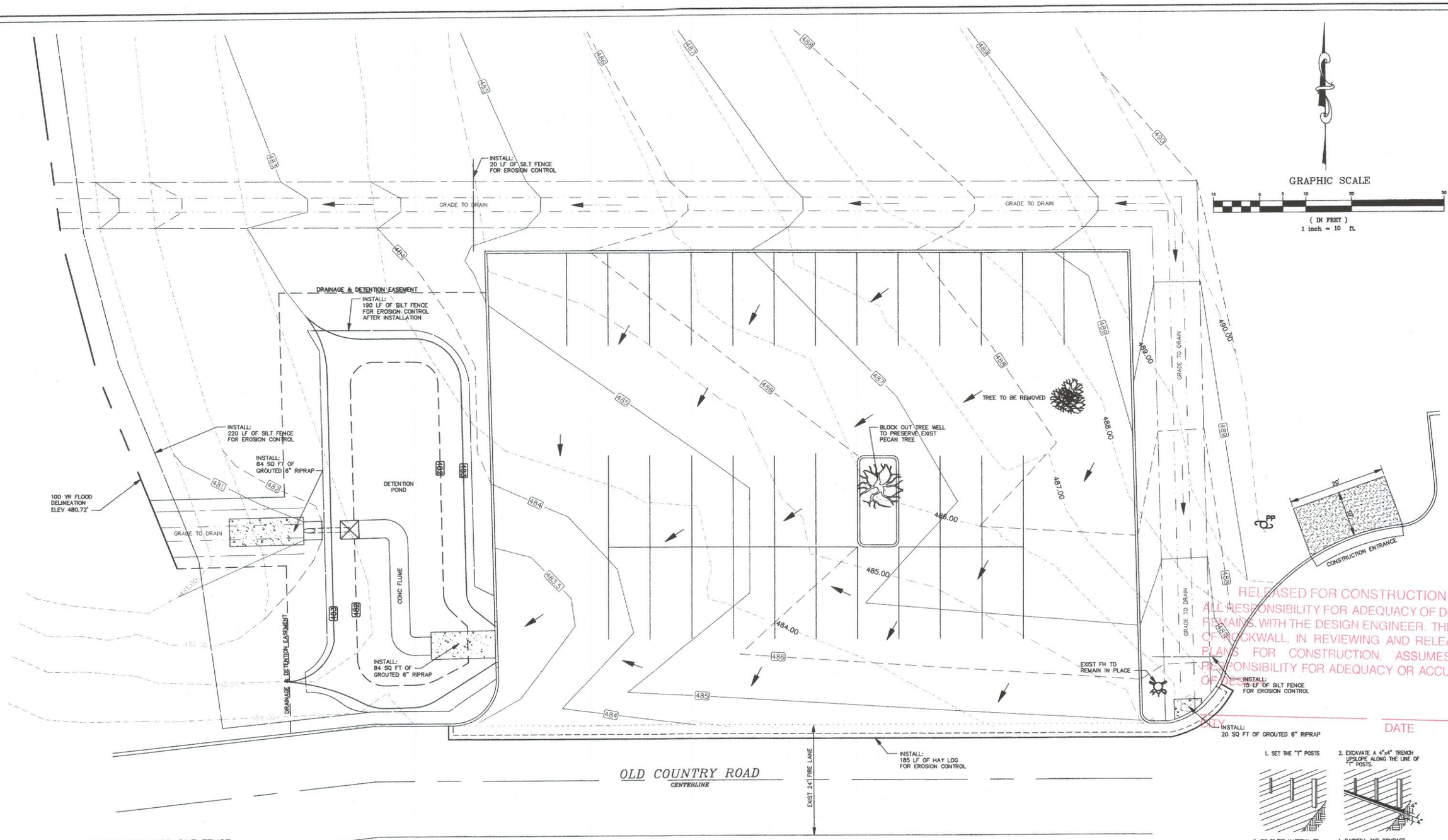

GRAPHIC SCALE

(IN FEET)
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CITY _____ DATE _____

STANDARDS FOR SILT FENCE

DEFINITION

TEMPORARY BARRIER FENCE MADE OF BURLAP OR POLYPROPYLENE MATERIAL WHICH IS WATER PERMEABLE BUT WILL TRAP WATER BORNE SEDIMENT.

PURPOSE

TO INTERCEPT AND DETAIN WATER BORNE SEDIMENT FROM UNPROTECTED AREAS OF LIMITED EXTENT.

CONDITIONS WHERE PRACTICE APPLIES

SILT FENCE IS USED DURING THE PERIOD OF CONSTRUCTION NEAR THE PERIMETER OF A DISTURBED AREA TO INTERCEPT SEDIMENT WHILE ALLOWING WATER TO PERCOLATE THROUGH. THIS FENCE SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED. SILT FENCE SHOULD NOT BE USED WHERE THERE IS A CONCENTRATION OF WATER IN A CHANNEL OR OTHER DRAINAGE WAY.

DESIGN CRITERIA

SILT FENCE IS CONSTRUCTED NEAR THE PERIMETER OF A DISTURBED SITE WITHIN THE DEVELOPING AREA. IT IS NOT TO BE CONSTRUCTED OUTSIDE THE PROPERTY LINES WITHOUT OBTAINING A LETTER OF PERMISSION FROM THE AFFECTED ADJACENT PROPERTY OWNERS.

A DESIGN IS NOT REQUIRED FOR THE INSTALLATION OF THE SILT FENCE. HOWEVER, THE FOLLOWING CRITERIA SHALL BE OBSERVED :

DRAINAGE AREA –	LESS THAN TWO ACRES
HEIGHT –	30 INCHES MINIMUM HEIGHT MEASURED FROM EXISTING OR GRADED GROUND.
MATERIAL –	BURLAP, POLYPROPYLENE FABRIC, OR NYLON REINFORCED WITH POLYESTER NETTING. THE MULLEN BURST STRENGTH SHALL BE GREATER THAN 150 PSI. THE EDGES SHALL BE TREATED TO PREVENT UNRAVELING.
SUPPORT –	STEEL FENCE POSTS SPACED A MAXIMUM OF 8 FEET APART. WOVEN WIRE WILL BE USED TO SUPPORT THE MATERIAL.

OUTLET

SILT FENCE SHALL BE PLACED AND CONSTRUCTED IN SUCH A MANNER THAT RUNOFF FROM A DISTURBED SURFACE OR EXPOSED UPLAND AREA SHALL BE INTERCEPTED, SEDIMENT TRAPPED, AND THE SURFACE RUNOFF ALLOWED TO PERCOLATE THROUGH THE STRUCTURE.

SILT FENCE SHALL BE PLACED IN SUCH A MANNER THAT SURFACE RUNOFF WHICH PURCOLATES THROUGH WILL FLOW ONTO AN UNDISTURBED STABILIZED AREA OR STABILIZED OUTLET.

" T " POST WITH WIRE MESH SHALL BE USED IF SLOPE TOWARDS FENCE IS GREATER THAN 6%.

EROSION CONTROL GENERAL NOTES

1. STEEL POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE.
2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW.
3. THE TRENCH SHOULD BE A MINIMUM OF 4 INCHES DEEP AND 4 INCHES WIDE TO ALLOW FOR THE SILT FENCE TO BE LAID IN THE GROUND AND BACKFILLED.
4. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST.
5. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN IT HAS SERVED ITS USEFULNESS, SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
7. SEDIMENT TRAPPED BY THIS PRACTICE SHALL BE DISPOSED OF IN AN APPROVED SITE IN A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.
8. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6 INCHES AND DISPOSED OF IN AN APPROVED SPOIL SITE OR AS IN NO. 7 ABOVE.
9. EROSION PROTECTION WILL BE DELETED OR ADDED PER COLLIN COUNTY OR OTHER GROWTH TO PREVENT EROSION.
10. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL EROSION, CONSERVATION, AND SILTATION ORDINANCES. THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF PERMANENT DRAINAGE FACILITIES AND THE ESTABLISHMENT OF A STAND OF GRASS
11. ALL SEEDING, FERTILIZATION AND WATERING OF DISTURBED AREAS WILL BE THE RESPONSIBILITY OF THE GRADING CONTRACTOR. MUST BE 75% – 80% COVERAGE AND A MINIMUM OF 1" IN HEIGHT BEFORE CITY ACCEPTANCE.
12. AFTER FINAL LOT GRADING AND BEFORE CITY ACCEPTANCE, SILT FENCE MUST BE INSTALLED AT THE BACK OF CURB (FOR STREETS) AND EDGE OF PAVING (FOR ALLEYS).
13. DETENTION POND SIDES AND BOTTOM TO HAVE SOD OR ANCHORED SEEDED MATTING BEFORE PAVING CAN BEGIN.

CONSTRUCTION OF
A FILTER BARRIER
N.T.S.

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DOUPHRATE & ASSOCIATES, INC.

YELLOW JACKET PLAZA
PARKING LOT ADDITION EROSION CONTROL

REVISION

W.L.D.
CHECKED

DRAWN

12/20
DATE

1200
PROJECT

4