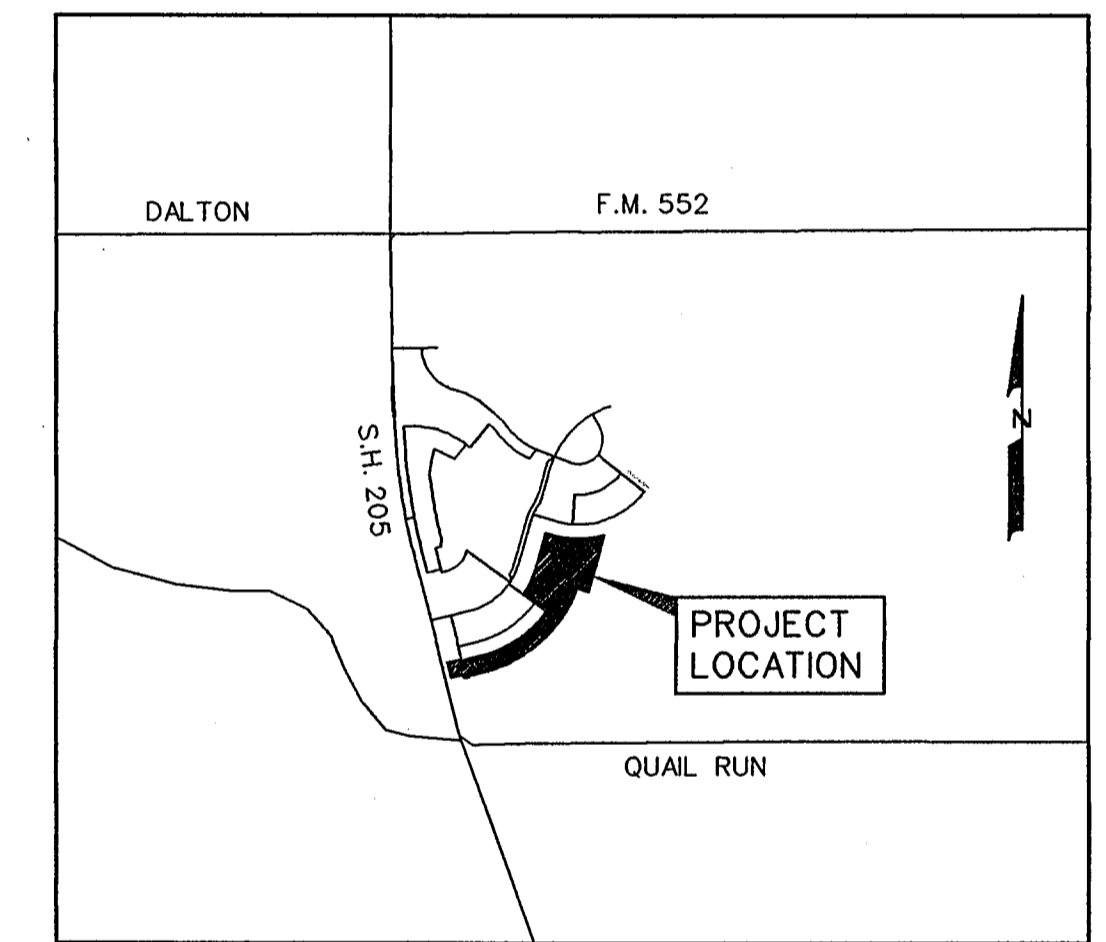


DEVELOPMENT PLANS FOR STONE CREEK PHASE IV CITY OF ROCKWALL, TEXAS

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1 OF 1	TREE MITIGATION PLAN



VICINITY MAP
NOT TO SCALE

PREPARED FOR
STONE CREEK PHASE IV 60'S POD, LTD.
8214 WESTCHESTER DRIVE, SUITE 710 DALLAS, TEXAS 75225

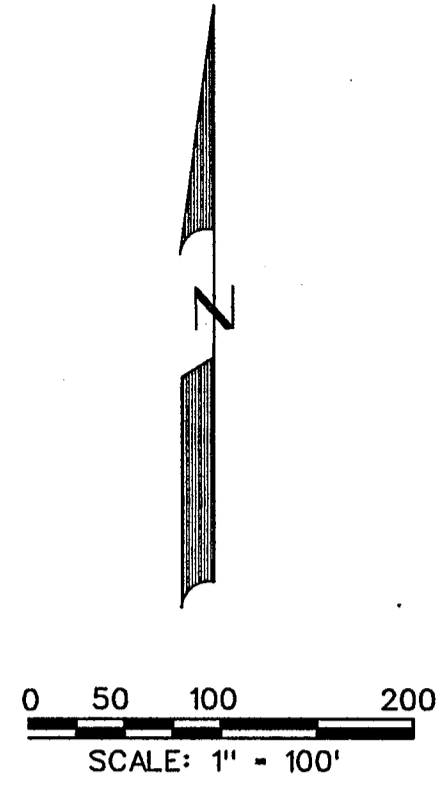
CORWIN ENGINEERING, INC. — CONSULTING ENGINEERS
200 W. BELMONT, SUITE E ALLEN, TEXAS 75013

NOTE:
CITY OF ROCKWALL STANDARDS
AND NCTCOG 3rd ADDITION STANDARDS
SHALL BE USED FOR REFERENCE.

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January 23, 2014

1	PER CITY COMMENTS	2-7-13
NO.	REVISIONS	BY DATE



Area #	Area (sf)	Area (acres)	Runoff Coefficient	Tc (min)	I(100) (in/hr)	Q(100) (cfs)
1	54043	1.24	0.50	10	9.8	6.1
2	66067	1.52	0.50	10	9.8	7.4
3	52773	1.21	0.50	10	9.8	5.9
4A	91310	2.10	0.50	10	9.8	10.3
4B	84005	1.93	0.50	10	9.8	9.4
5	57298	1.32	0.50	10	9.8	6.4
6	51756	1.19	0.50	10	9.8	5.8
7	26100	0.60	0.50	10	9.8	2.9
8	73947	1.70	0.50	10	9.8	8.3
9	14629	0.34	0.50	10	9.8	1.6
10	14630	0.34	0.50	10	9.8	1.6
11	100192	2.30	0.50	10	9.8	11.3
12	115925	2.66	0.50	10	9.8	13.0
13	25031	0.57	0.50	10	9.8	2.8
14	25015	0.57	0.50	10	9.8	2.8
15	77933	1.79	0.50	10	9.8	8.8
16	42553	0.98	0.50	10	9.8	4.8
17	140694	3.23	0.50	10	9.8	15.8

INLET CALCULATIONS

Inlet #	Location	Station	Design Storm Frequency (yrs.)	Time of Conc. (min.)	Intensity (in/hr)	Runoff Coeff	Area (acres)	Q (cfs)	Carry-Over from Upstream (cfs)	Gutter Flow (cfs)	Gutter Capacity (cfs)	Gutter Slope (ft/ft)	Crown Type	Selected Inlet Length (ft)	Type	Carry-Over to Downstream (cfs)	Inlet Capacity (cfs)
1	Cornell	2+49.00	100	10	9.8	0.50	1.21	5.9	0.0	5.9	24.6	2.54%	6" pbl	10	STD.	0.2	5.7
2	Hanover	9+92.11	100	10	9.8	0.50	2.10	10.3	0.0	10.3	22.0	2.03%	6" pbl	15	STD.	0.6	9.7
3	Hanover	9+89.40	100	10	9.8	0.50	1.93	9.4	0.0	9.4	22.0	2.03%	6" pbl	15	STD.	0.0	9.7
4	York	16+29.36	100	10	9.8	0.50	1.32	6.4	0.2	6.6	23.3	2.28%	6" pbl	15	STD.	0.0	9.5
5	York	12+67.31	100	10	9.8	0.50	1.19	5.8	0.0	5.8	18.1	1.36%	6" pbl	15	STD.	0.0	10.5
6	York	12+03.89	100	10	9.8	0.50	0.60	2.9	0.0	2.9	18.1	1.36%	6" pbl	10	STD.	0.0	6.3
7	Harvard	9+20.18	100	10	9.8	0.50	0.34	1.6	0.6	2.2	22.7	2.18%	6" pbl	5	STD.	0.0	2.5
8	Harvard	9+20.18	100	10	9.8	0.50	0.34	1.6	0.0	1.6	22.7	2.18%	6" pbl	5	STD.	0.0	2.5
9	York	0+50.97	100	10	9.8	0.50	0.98	4.8	5.3	10.1	19.8	Low Pt	6" pbl	10	STD.	0.0	21.0
10	York	0+12.49	100	10	9.8	0.50	1.79	8.8	0.0	8.8	19.8	Low Pt	6" pbl	10	STD.	0.0	21.0
11	York	2+05.30	100	10	9.8	0.50	3.23	15.8	0.0	15.8	19.8	1.64%	6" pbl	15	STD.	5.3	10.5

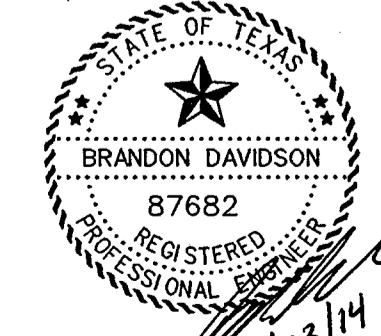
STORM SEWER CALCULATIONS

Upstream Station	Downstream Station	Distance (ft)	AREA NO.	Total Area (Acres)	Picked Up (Acres)	C	CA	Accumulated CA	Tc (Min)	Design Storm Intensity (in/hr)	Q (CFS)	S (ft/ft)	Pipe Size (in)	Velocity (ft/s)	Head Loss (ft)	Flow Time (Min)	Time at DS (Min)	A Velocity Head (ft)	Hydraulic Grade Upstream	Hydraulic Grade Downstream	
Line D1																					
4+38.49	3+01.59	136.90	11-14	6.11	0.50	3.06	3.06	10.00	100	9.80	30.0	0.0176	24	9.5	1.40	0.24	10.24	0.24	489.57	489.57	
3+01.59	2+75.49	26.10	D4	4.21	4.21	0.50	2.10	5.16	10.24	100	9.76	50.4	0.0151	30	10.3	1.65	0.04	10.28	0.25	487.17	486.92
2+75.49	2+50.00	25.49	15	1.79	1.79	0.50	0.89	6.05	10.28	100	9.76	59.1	0.0107	30	12.0	2.24	0.04	10.32	0.59	485.52	485.93
2+50.00	2+20.00	30.00	MH	0.00	0.00	0.50	0.00	6.05	10.32	100	9.75	59.0	0.0078	36	8.3	1.07	0.06	10.38	0.91	483.40	484.69
2+20.00	2+20.00	220.00	0	0.00	0.00	0.50	0.00	6.05	10.38	100	9.74	58.9	0.0078	36	8.3	1.07	0.44	10.82		484.26	
Line D2																					
2+54.83	1+52.00	62.83	4A,4B	4.02	3.90	0.50	1.95	1.95	10.00	100	9.80	19.1	0.0145	21	7.9	0.97	0.13	10.13	0.97	504.33	504.33
1+52.00	1+25.14	6.86	9	0.34	0.46	0.50	0.23	2.18	10.13	100	9.78	21.3	0.0089	24	6.8	0.72	0.02	10.15	0.13	503.41	503.54
1+25.14	1+51.89	33.25	10	0.34	0.34	0.50	0.17	2.35	10.15	100	9.78	23.0	0.0103	24	7.3	0.83	0.08	10.23	0.11	503.48	503.37
1+51.89	1+04.18	47.71	D3	7.07	7.07	0.50	3.54	5.89	10.23	100	9.76	57.5	0.0074	36	8.1	1.02	0.10	10.33	0.19	503.02	502.83
1+04.18	1+04.18	0	0	0.00	0.00	0.50	0.00	5.89	10.33	100	9.75	57.4	0.0074	36	8.1	1.02	0.21	10.54	0.00	502.48	
Line D3																					
8+51.12	6+87.72	263.40	1,2	2.76	2.76	0.50	1.38	1.38	10.00	100	9.80	13.5	0.0073	21	5.6	0.49	0.61	10.61	0.49	514.34	513.85
6+87.72	4+68.89	218.83	3	1.21	1.21	0.50	0.61	1.99	10.61	100	9.70	19.3	0.0073	24	6.1	0.58	0.60	11.21	0.09	512.35	512.26
4+68.89	1+07.61	361.28	5	1.32	1.32	0.50	0.66	2.65	11.21	100	9.61	25.5	0.0127	24	8.1	1.02	0.74	11.95	0.44	510.67	510.23
1+07.61	0+48.16	59.45	6	1.19	1.19	0.50	0.59	3.24	11.25	100	9.49	30.8	0.0185	24	9.8	1.49	0.10	12.05	0.47	505.65	505.18
0+48.16	0+00.00	48.16	7	0.60	0.60	0.50	0.30	3.54	12.05	100	9.47	33.5	0.0117	27	8.4	1.09	0.10	12.15	0.20	504.08	504.27
0+00.00	0+00.00	0.00	0	0.00	0.00	0.50	0.00	3.54	12.15	100	9.46	33.5	0.0117	27	8.1	1.02	0.00	12.15	-0.04	503.71	502.83
Line D4																					
2+10.66	0+43.71	166.95	17	3.23	2.14	0.50	1.07	1.07	10.00	100	9.80	10.5	0.0044	21	4.4	0.30	0.63	10.63	0.30	489.65	489.35
0+43.71	0+00.00	43.71	16	0.98	2.06	0.50	1.03	2.10	10.63	100	9.70	20.4	0.0081	24	6.5	0.66	0.11	10.74	0.36	488.62	488.26
0+00.00	0+00.00	0.00	0	0.00	0.00	0.50	0.00	2.10	10.74	100	9.68	20.3	0.0081	24	10.3	1.65	0.00	10.74	0.99	487.91	486.92

LEGEND

- PROP. STORM SEWER
- PROP. CURB INLETS
- PROP. CONC. HEADWALL
- EXIST. STORM SEWER
- DRAINAGE AREA DIVIDE
- FLOW ARROW
- DRAINAGE AREA NO.

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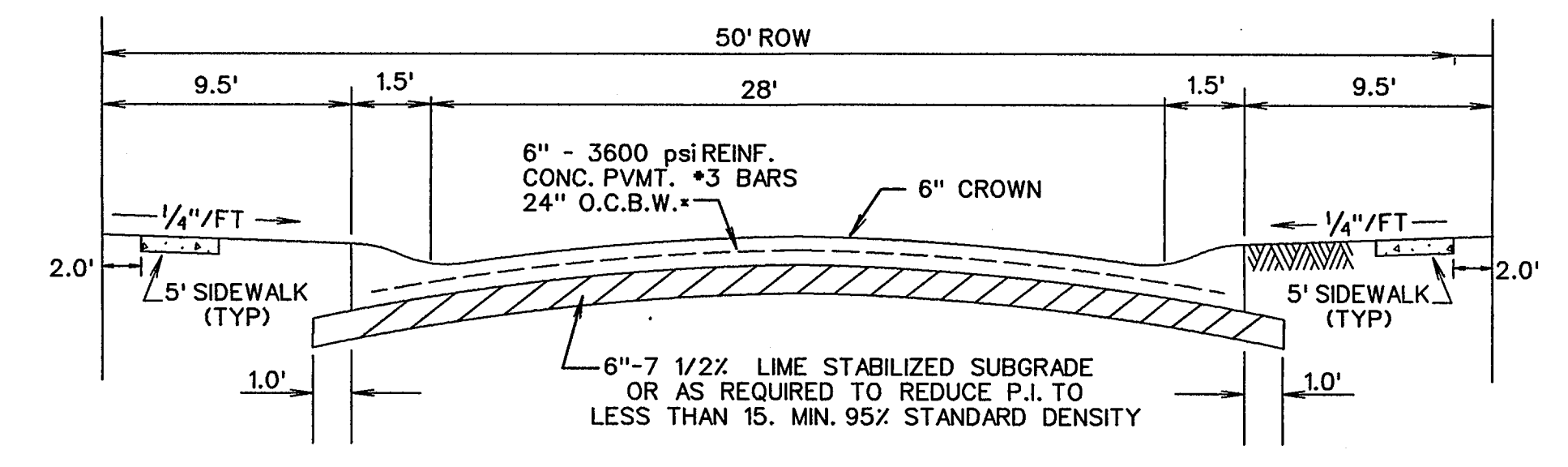
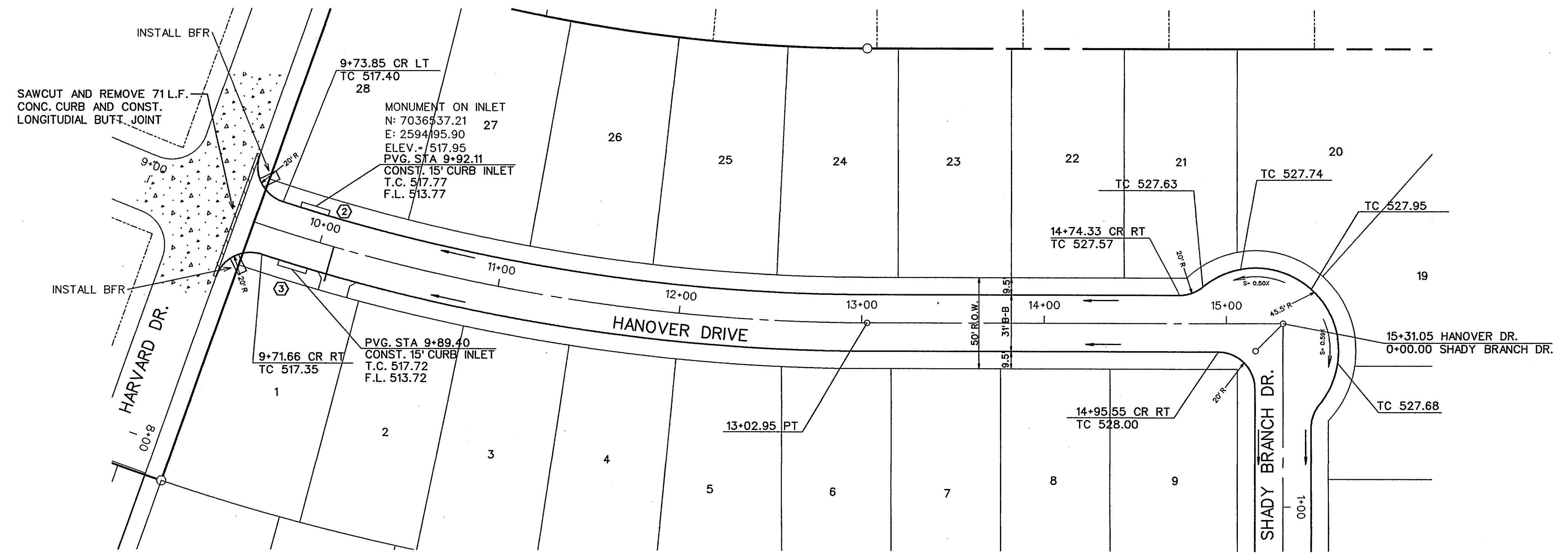
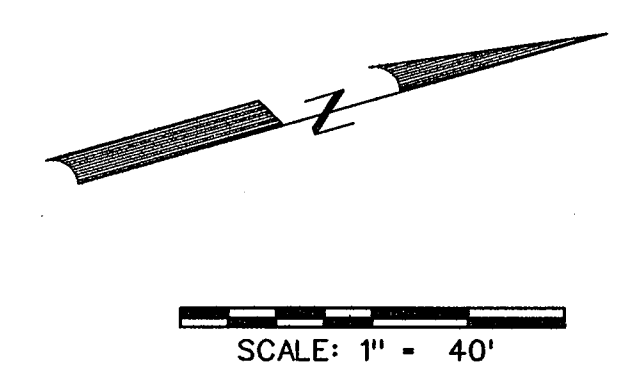
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ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

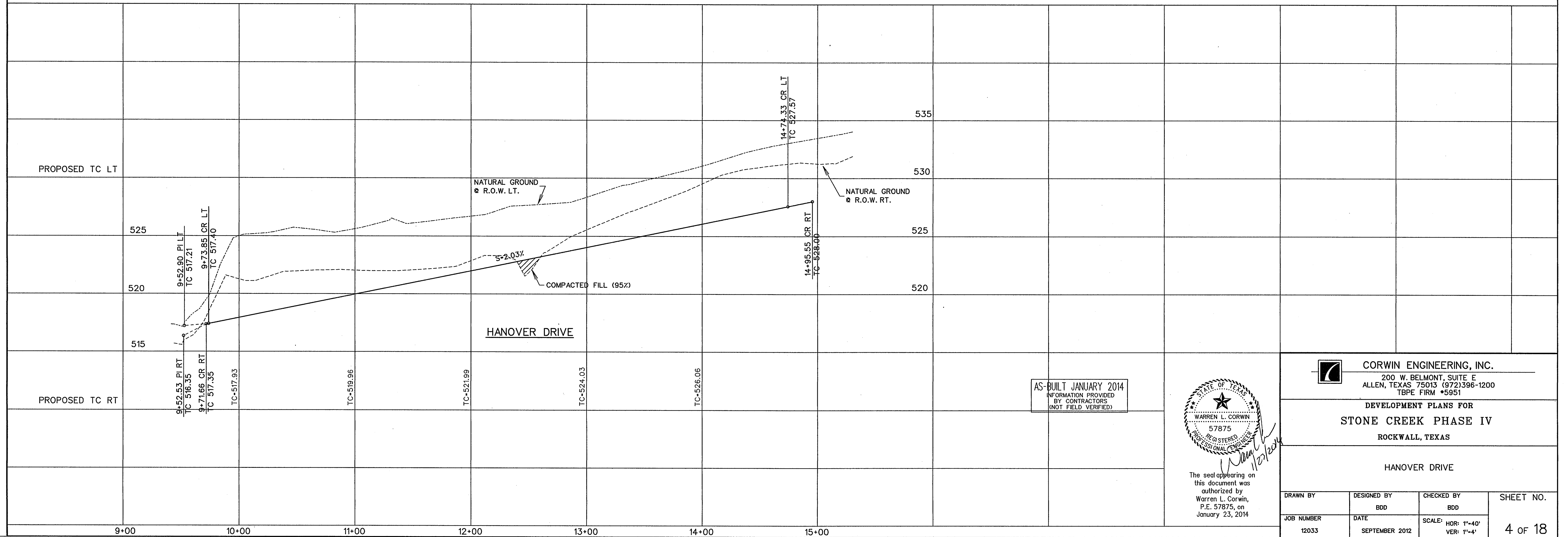
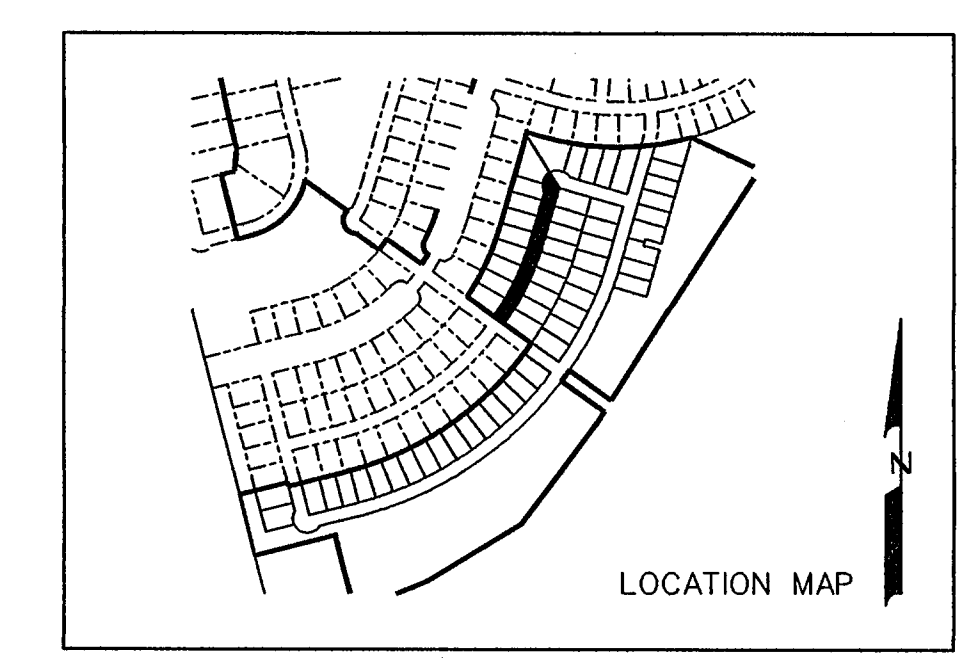
DEVELOPMENT PLANS FOR
STONE CREEK PHASE IV
ROCKWALL, TEXAS

DRAINAGE AREA MAP

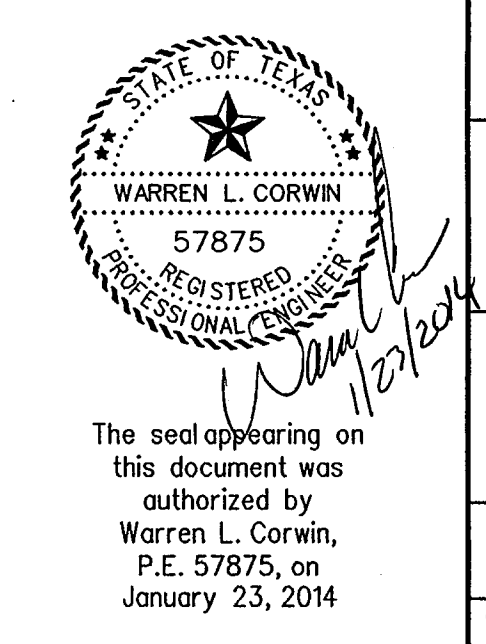
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JOB NUMBER	DATE	SCALE:	3 OF 18
12033	FEBRUARY 2013	1"=100'	



TYPICAL PAVEMENT SECTION - LAYDOWN CURB
N.T.S.
*MIN. 6 1/2 SACK MIX IF HAND PLACED



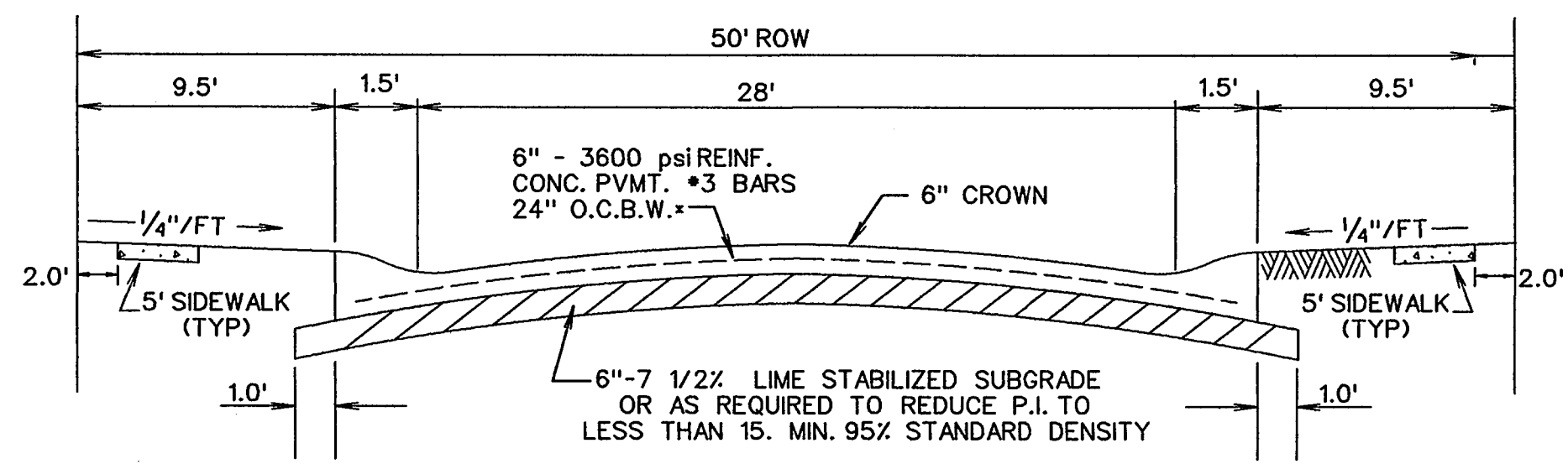
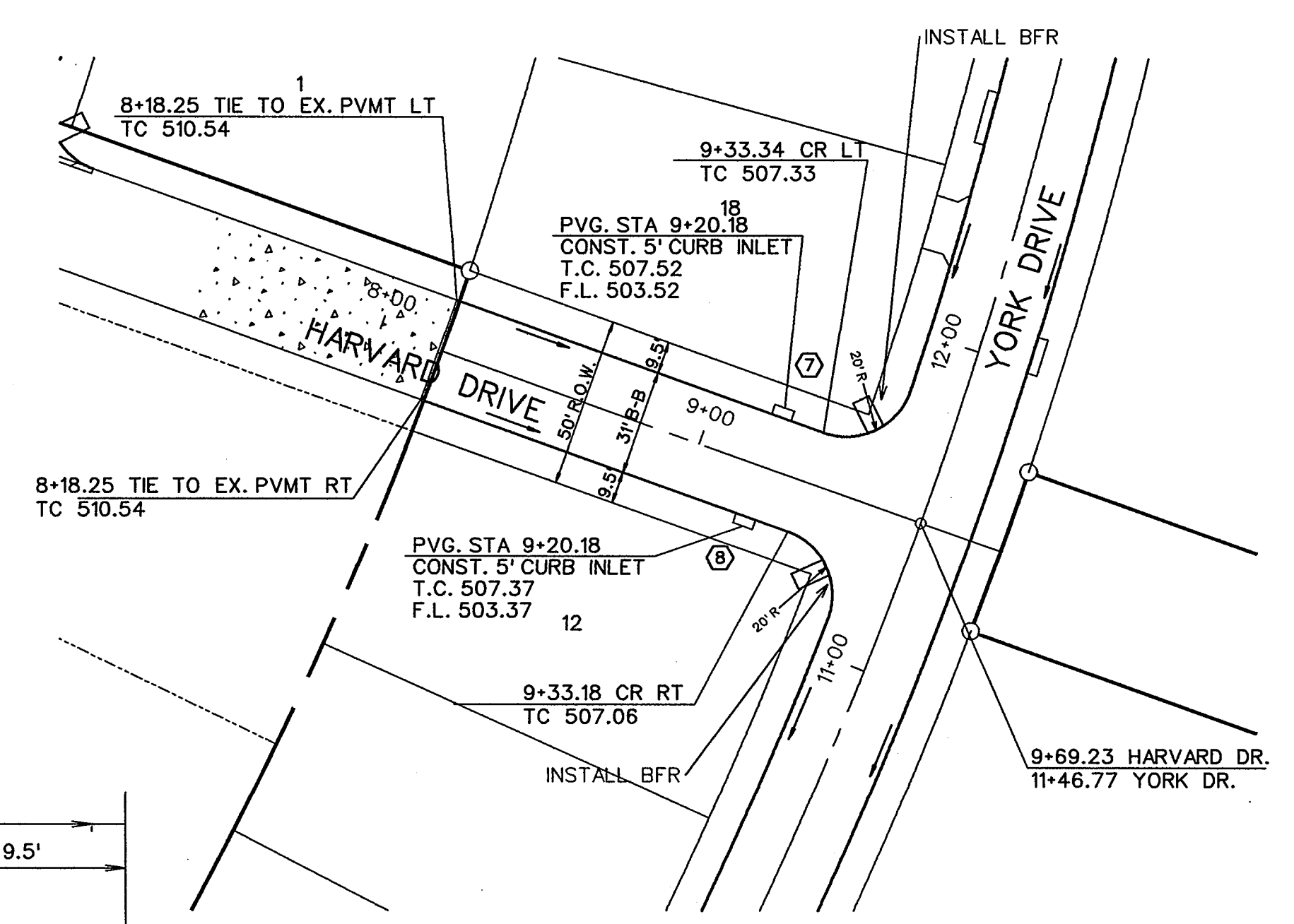
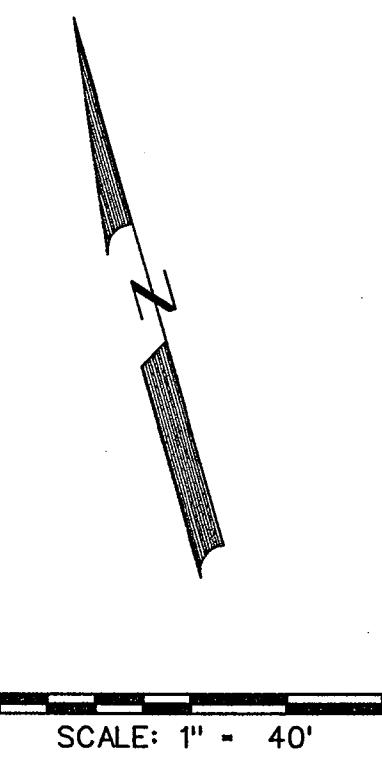
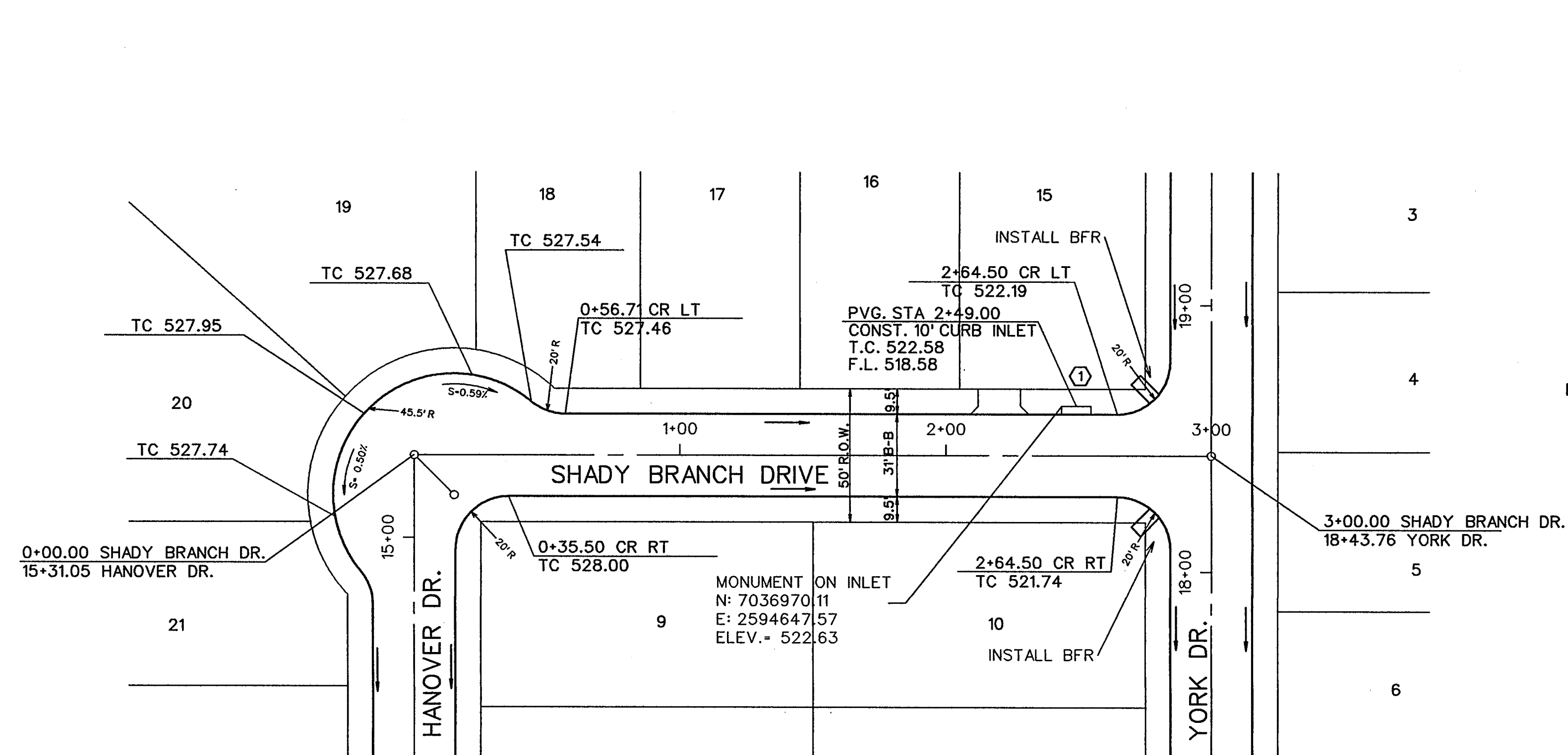
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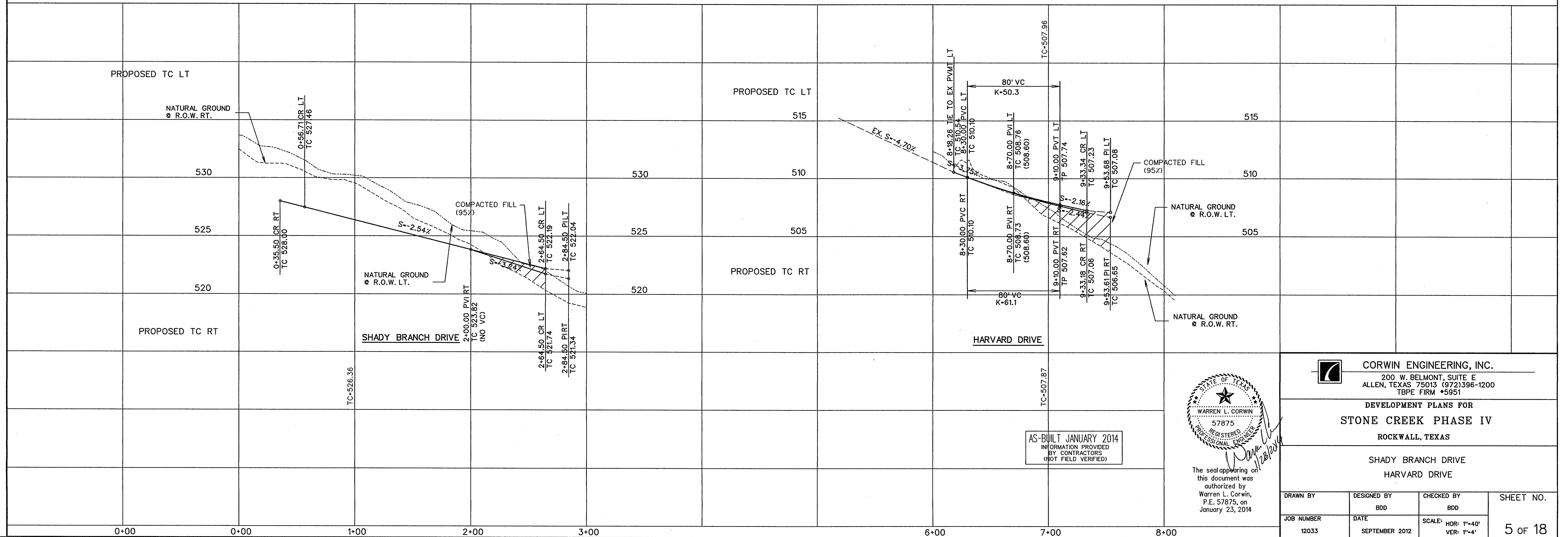
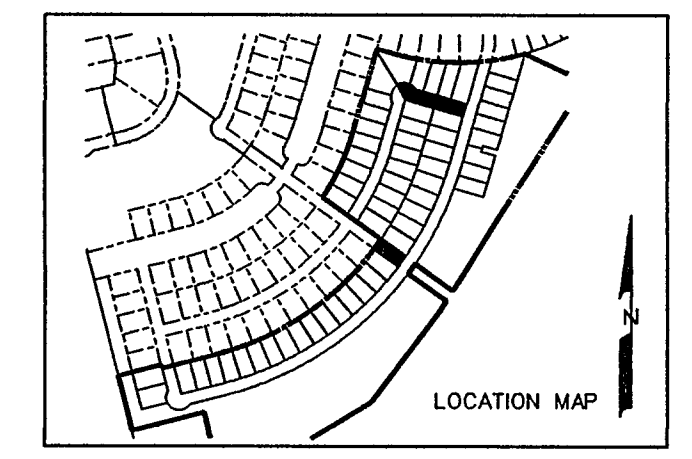
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TBPE FIRM #5951

DEVELOPMENT PLANS FOR
STONE CREEK PHASE IV
ROCKWALL, TEXAS

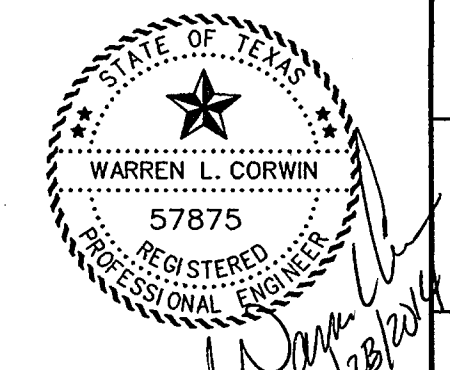
HANOVER DRIVE			
DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
	BDD	BDD	
JOB NUMBER	DATE	SCALE:	4 OF 18
12033	SEPTEMBER 2012	HOR: 1"=40' VER: 1"=4'	



TYPICAL PAVEMENT SECTION - LAYDOWN CURB
N.T.S.
*MIN. 6 1/2 SACK MIX IF HAND PLACED



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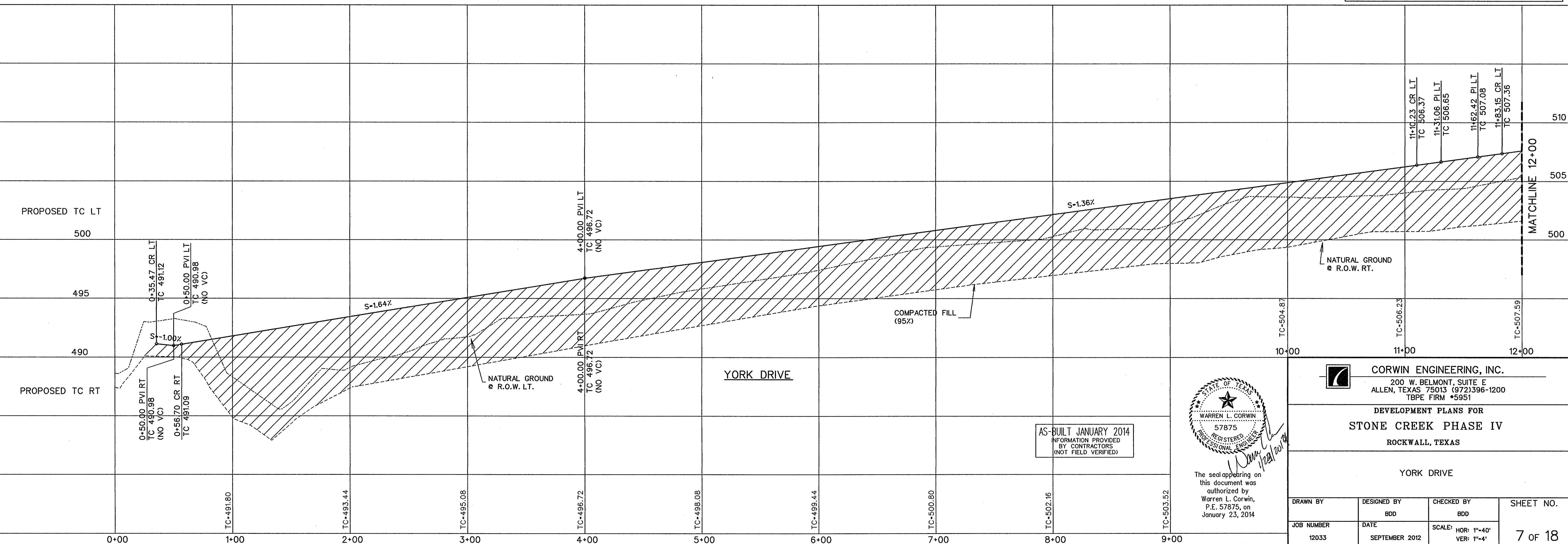
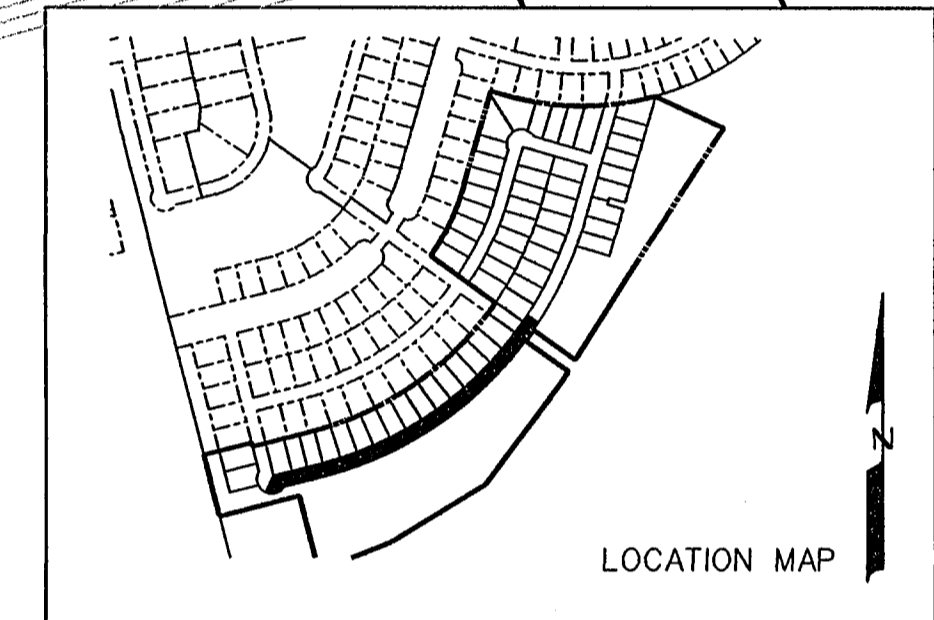
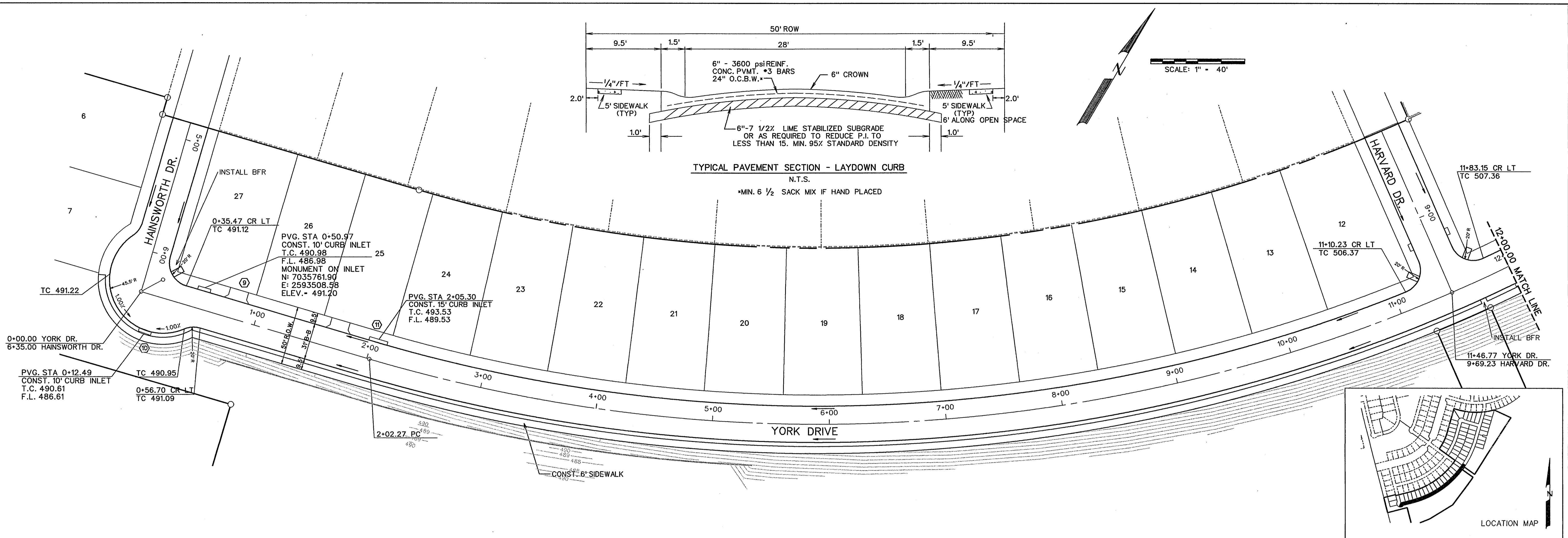
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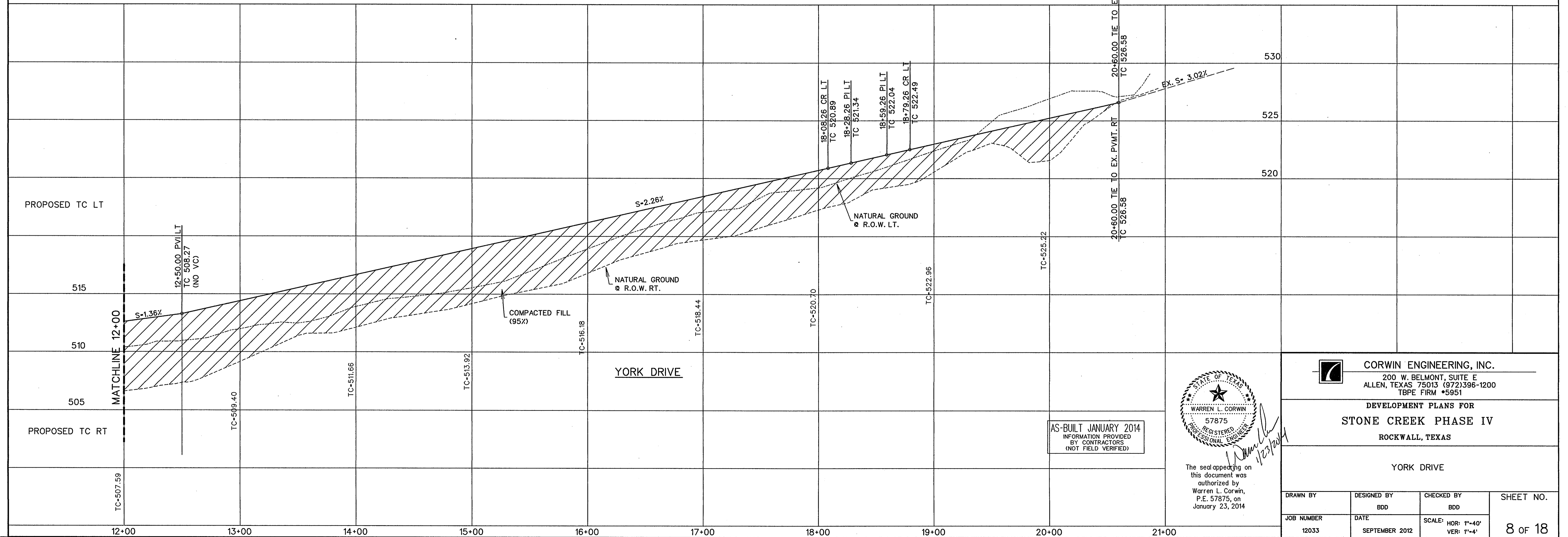
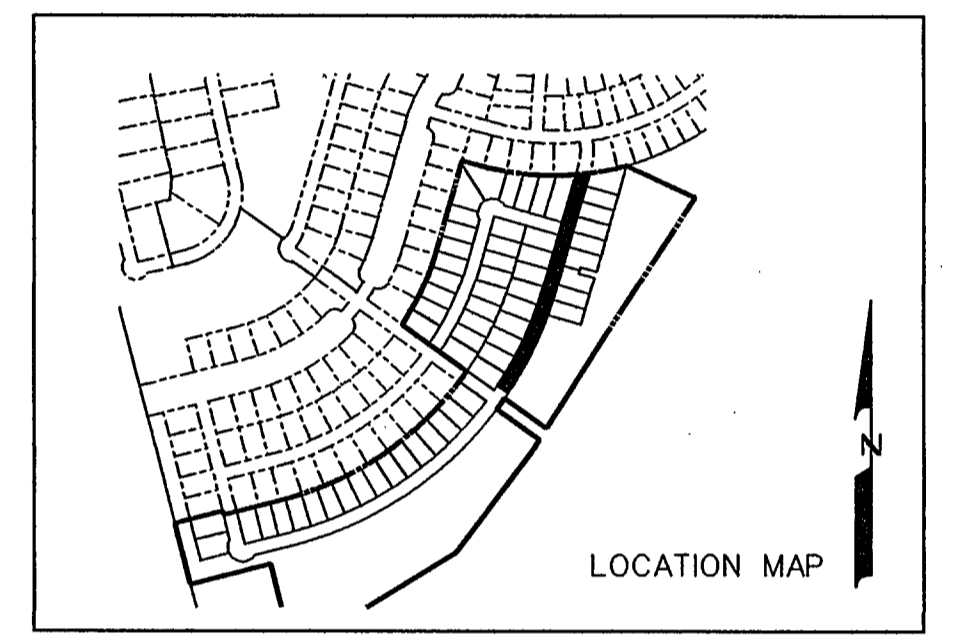
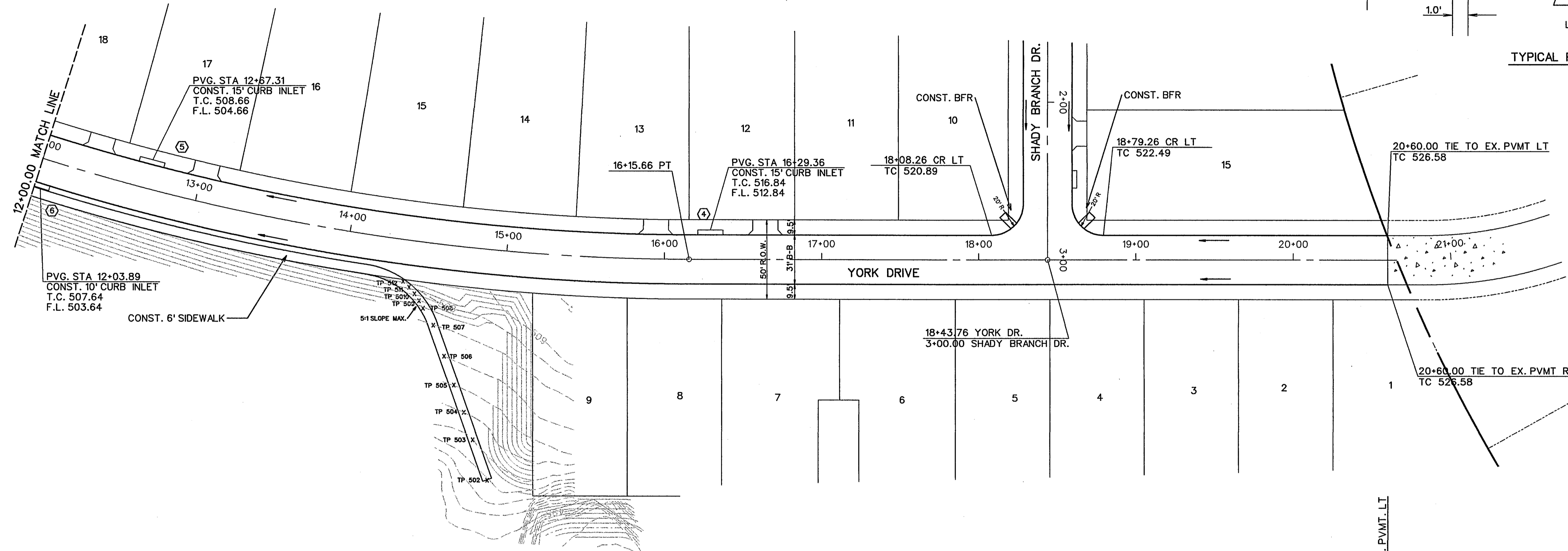
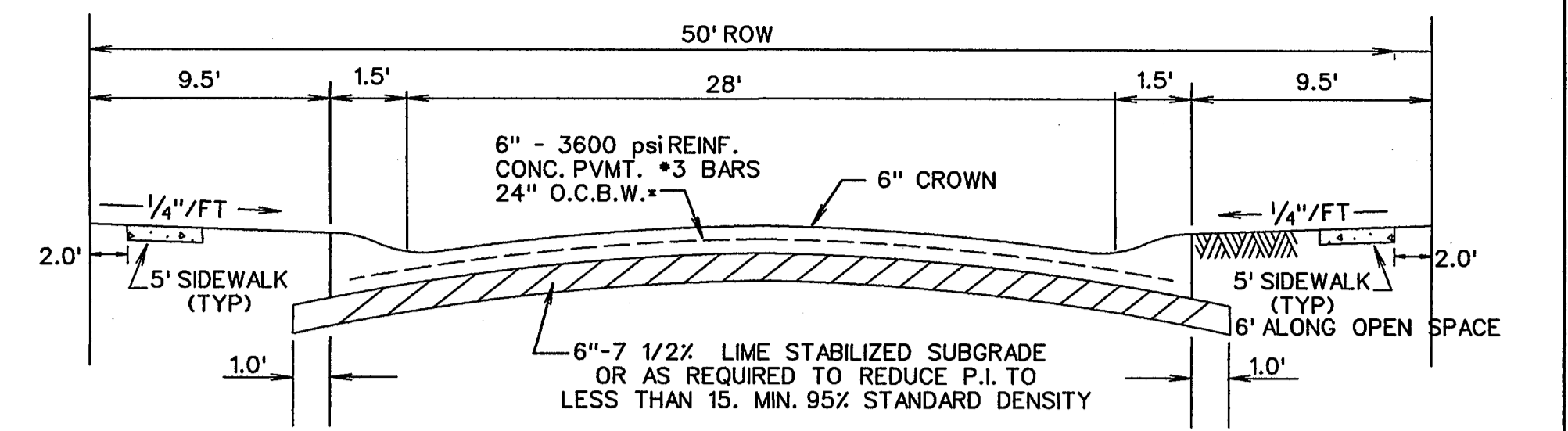
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DEVELOPMENT PLANS FOR
STONE CREEK PHASE IV
ROCKWALL, TEXAS

SHADY BRANCH DRIVE
HARVARD DRIVE

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
	BDD	BDD	
JOB NUMBER	DATE	SCALE:	5 OF 18
12033	SEPTEMBER 2012	HOR: 1"=40' VER: 1"=4'	





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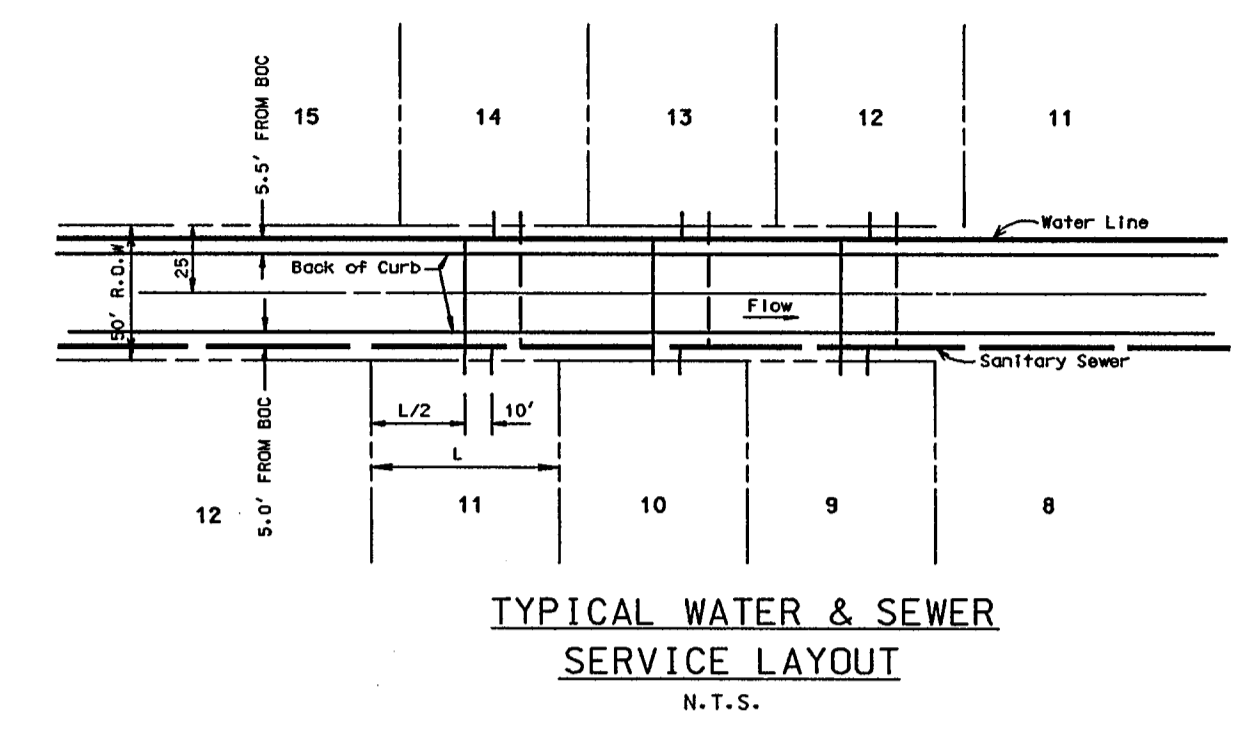
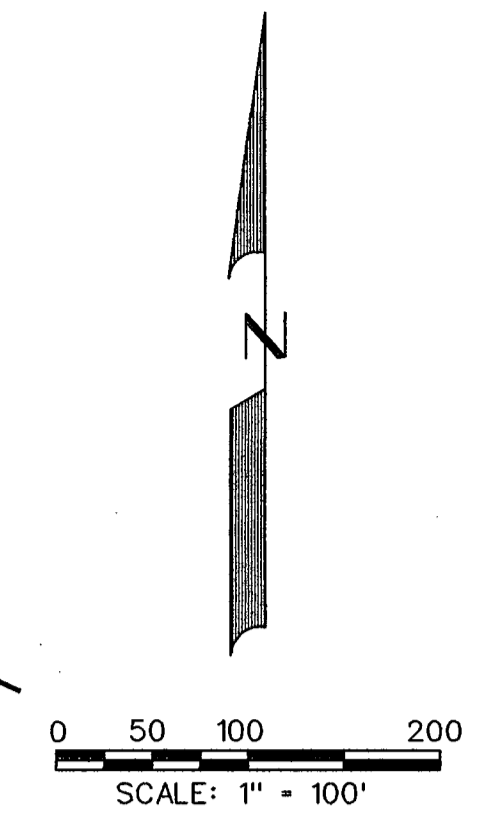
DEVELOPMENT PLANS FOR
STONE CREEK PHASE IV
ROCKWALL, TEXAS

YORK DRIVE

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
	BDD	BDD	
JOB NUMBER	DATE	SCALE:	8 OF 18
12033	SEPTEMBER 2012	HOR: 1"=40' VER: 1"=4'	

SERVICE SCHEDULE		
TYPE	SIZE	NO.
SANITARY	4"	59
WATER	1"	59

NOTE:
CONTRACTOR TO VERIFY ALL EXISTING UTILITIES
FOR LOCATION AND ELEVATION PRIOR TO CONSTRUCTION.

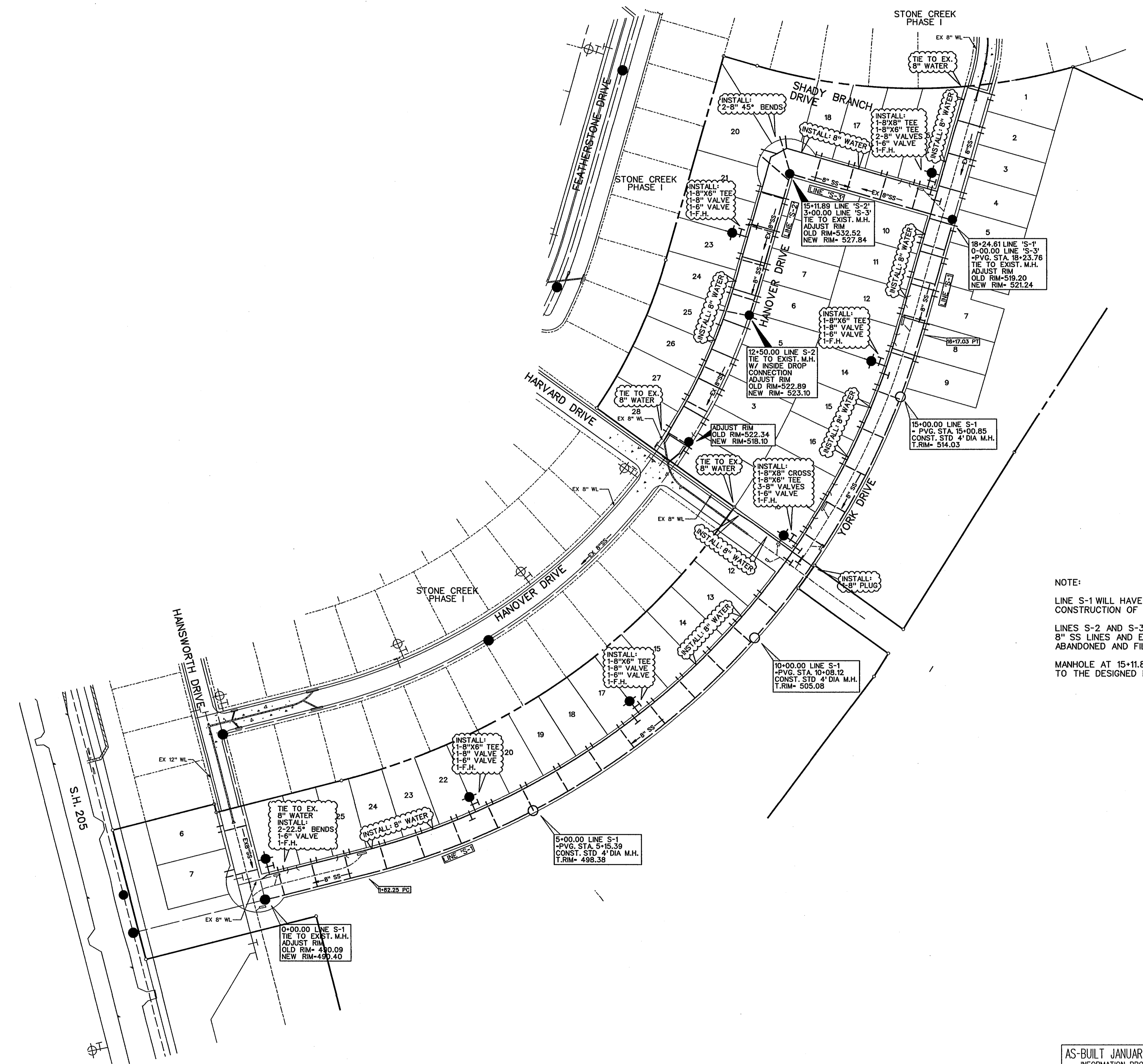


NOTE:
ALL WATER LINES TO BE CLASS 200 PIPE SDR 14.
ALL SANITARY SEWER PIPE TO BE SDR 35
FOR 5'-10' DEEP AND SDR 26 FOR 10' AND GREATER.
10" SANITARY SEWER TO BE SDR 26.
INSTALL BLUE "EMS" DISK ON WATER LINE AT EVERY
CHANGE IN DIRECTION, VALVE, AND SERVICE.
INSTALL GREEN "EMS" DISK ON SANITARY SEWER
LINE AT EVERY CHANGE IN DIRECTION, MANHOLE,
CLEANOUT, AND SERVICE.
ALL MANHOLES TO BE RAVEN EPOXY LINED (OR
APPROVED EQUAL) AND SEALED IF LOCATED IN
STREET PAVEMENT.

LEGEND

- PROP. WATER LINE
- PROP. FIRE HYDRANT AND VALVE
- PROP. GATE VALVE
- PROP. FLUSH VALVE
- EXIST. WATER LINE
- EXIST. FIRE HYDRANT AND VALVE
- PROP. SANITARY SEWER
- PROP. MANHOLE
- PROP. CLEANOUT
- EXIST. SANITARY SEWER
- EXIST. MANHOLE
- PROP. STORM SEWER
- PROP. CURB INLETS
- PROP. CONC. HEADWALL

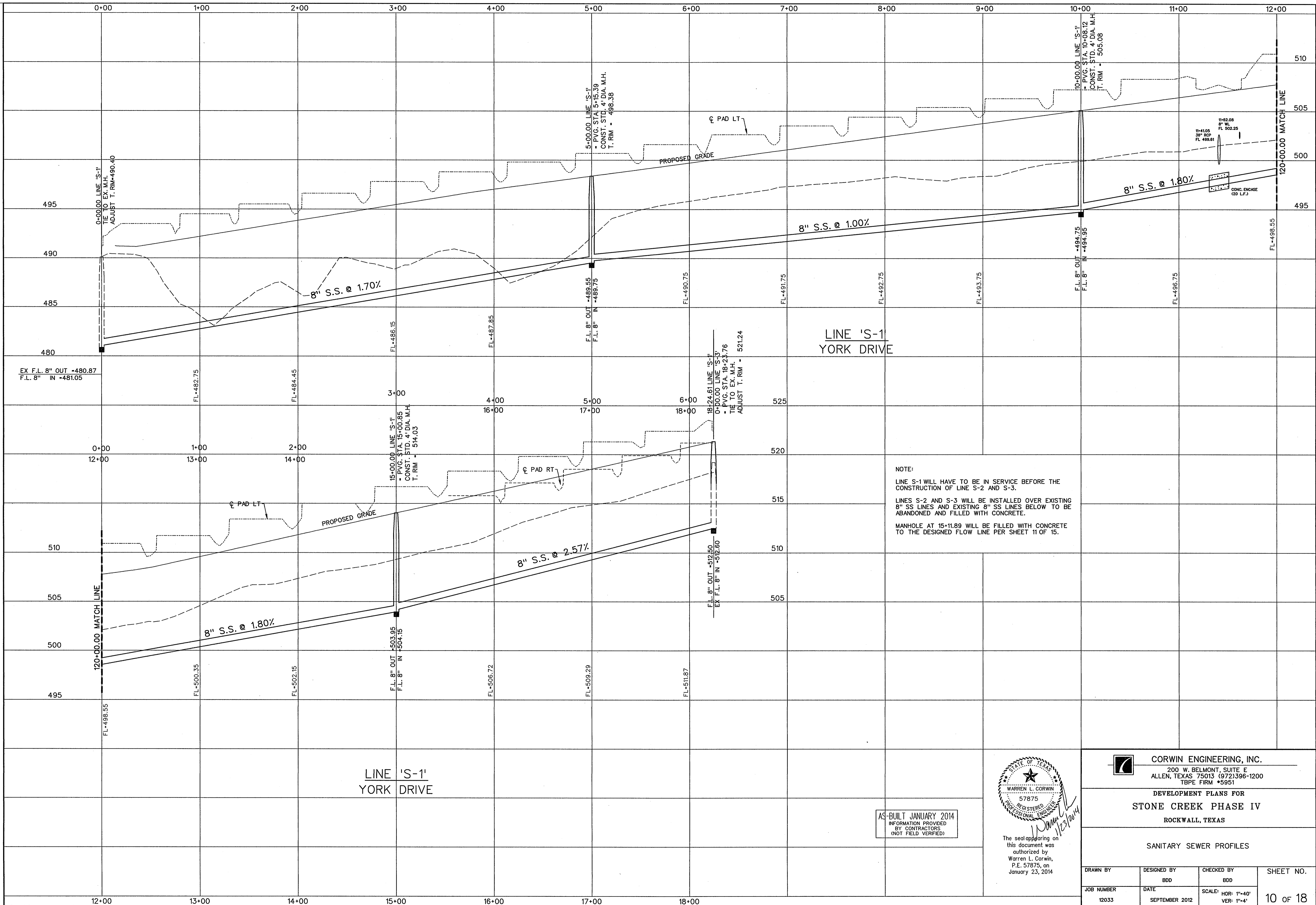
NOTE:
LINE S-1 WILL HAVE TO BE IN SERVICE BEFORE THE
CONSTRUCTION OF LINE S-2 AND S-3.
LINES S-2 AND S-3 WILL BE INSTALLED OVER EXISTING
8" SS LINES AND EXISTING 8" SS LINES BELOW TO BE
ABANDONED AND FILLED WITH CONCRETE.
MANHOLE AT 15+11.89 WILL BE FILLED WITH CONCRETE
TO THE DESIGNED FLOW LINE PER SHEET 11 OF 15.



AS-BUILT JANUARY 2014
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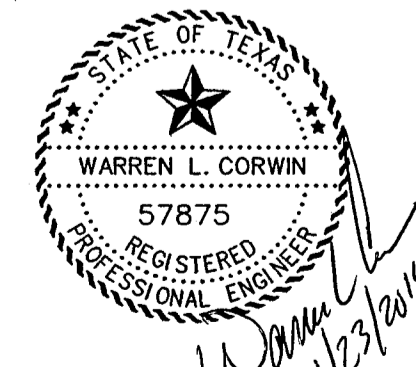
STATE OF TEXAS
WARREN L. CORWIN
57875
REGISTERED PROFESSIONAL ENGINEER
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this document was
authorized by
Warren L. Corwin,
P.E. 57875, on
January 23, 2014

CORWIN ENGINEERING, INC. 200 W. BELMONT, SUITE E ALLEN, TEXAS 75013 (972)396-1200 TBPE FIRM #5951			
DEVELOPMENT PLANS FOR STONE CREEK PHASE IV ROCKWALL, TEXAS			
WATER & SANITARY SEWER PLAN			
DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER	DATE	SCALE:	9 OF 18
12033	FEBRUARY 2013	1"=100'	



NOTE:
 LINE S-1 WILL HAVE TO BE IN SERVICE BEFORE THE CONSTRUCTION OF LINE S-2 AND S-3.
 LINES S-2 AND S-3 WILL BE INSTALLED OVER EXISTING 8" SS LINES AND EXISTING 8" SS LINES BELOW TO BE ABANDONED AND FILLED WITH CONCRETE.
 MANHOLE AT 15+11.89 WILL BE FILLED WITH CONCRETE TO THE DESIGNED FLOW LINE PER SHEET 11 OF 15.

AS-BUILT JANUARY 2014
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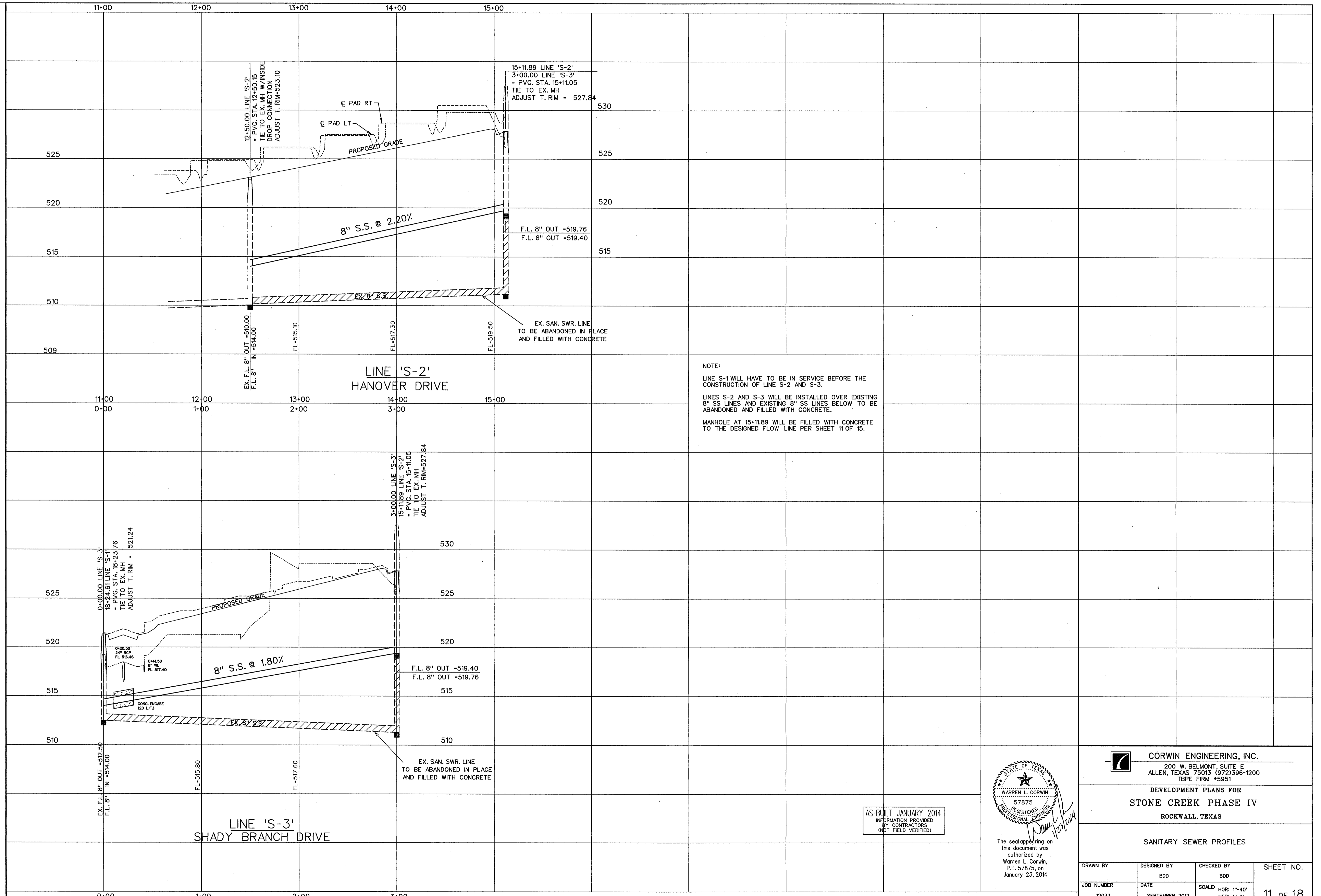
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 TYPE FIRM #5951

DEVELOPMENT PLANS FOR
STONE CREEK PHASE IV
 ROCKWALL, TEXAS

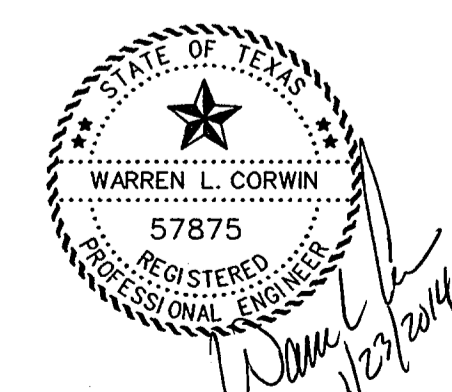
SANITARY SEWER PROFILES

DRAWN BY BDD	DESIGNED BY BDD	CHECKED BY BDD	SHEET NO. 10 of 18
JOB NUMBER 12033	DATE SEPTEMBER 2012	SCALE: HOR: 1"=40' VER: 1"=4'	



NOTE:
 LINE S-1 WILL HAVE TO BE IN SERVICE BEFORE THE CONSTRUCTION OF LINE S-2 AND S-3.
 LINES S-2 AND S-3 WILL BE INSTALLED OVER EXISTING 8" SS LINES AND EXISTING 8" SS LINES BELOW TO BE ABANDONED AND FILLED WITH CONCRETE.
 MANHOLE AT 15+11.89 WILL BE FILLED WITH CONCRETE TO THE DESIGNED FLOW LINE PER SHEET 11 OF 15.

AS-BUILT JANUARY 2014
 INFORMATION PROVIDED
 BY CONTRACTORS
 (NOT FIELD VERIFIED)



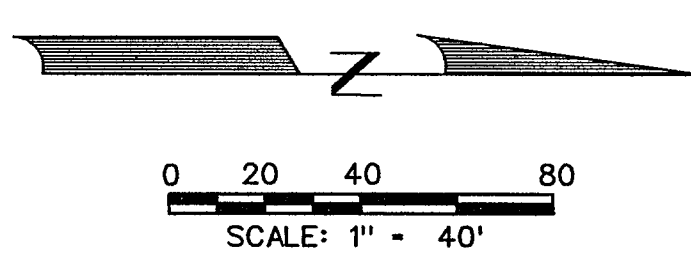
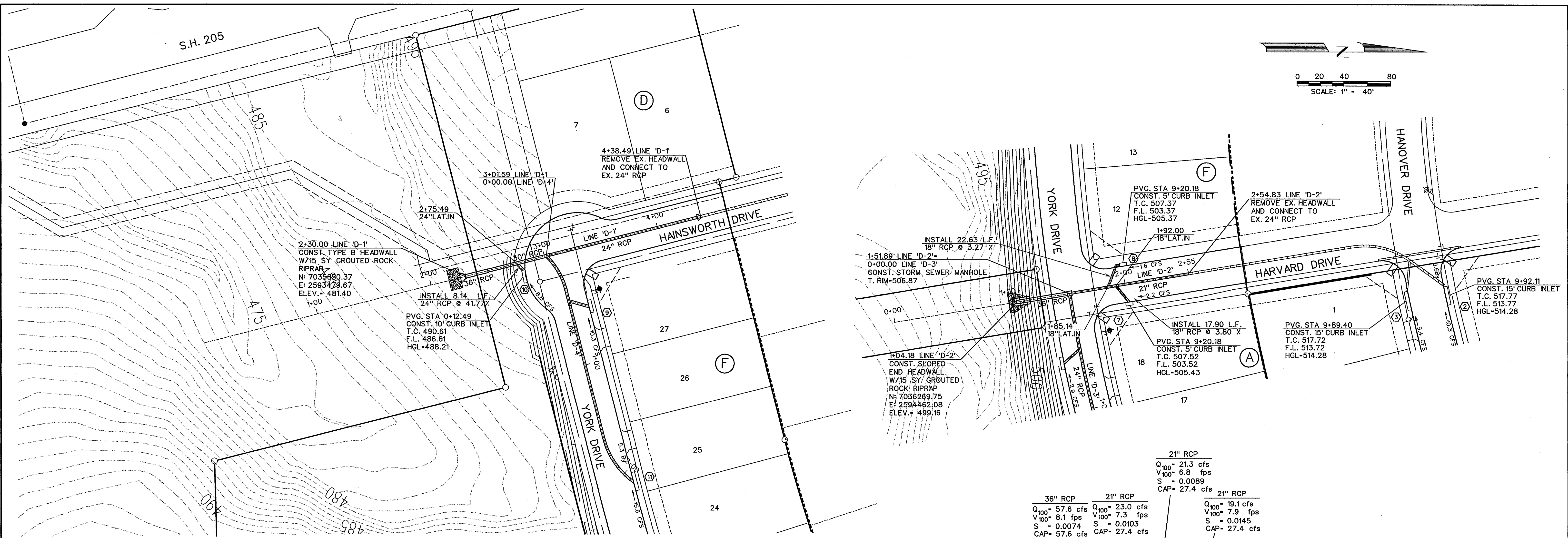
The seal appearing on this document was authorized by
 Warren L. Corwin,
 P.E. 57875, on
 January 23, 2014

CORWIN ENGINEERING, INC.
 200 W. BELMONT, SUITE E
 ALLEN, TEXAS 75013 (972)396-1200
 TBPE FIRM #5951

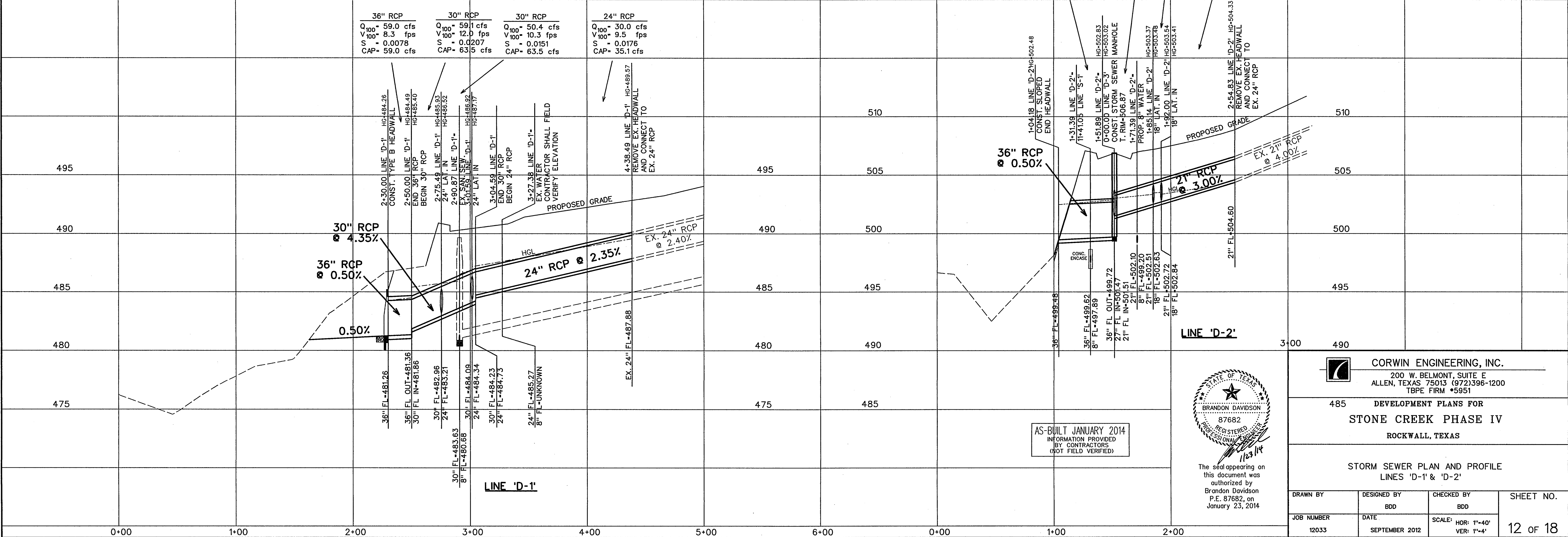
DEVELOPMENT PLANS FOR
STONE CREEK PHASE IV
 ROCKWALL, TEXAS

SANITARY SEWER PROFILES

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
	BDD	BDD	
JOB NUMBER	DATE	SCALE:	11 OF 18
12033	SEPTEMBER 2012	HOR: 1"=40' VER: 1"=4'	



36" RCP		21" RCP		21" RCP	
Q ₁₀₀	57.6 cfs	Q ₁₀₀	23.0 cfs	Q ₁₀₀	19.1 cfs
V ₁₀₀	8.1 fps	V ₁₀₀	7.3 fps	V ₁₀₀	7.9 fps
S	0.0078	S	0.0103	S	0.0145
CAP	57.6 cfs	CAP	27.4 cfs	CAP	27.4 cfs



AS-BUILT JANUARY 2014
INFORMATION PROVIDED
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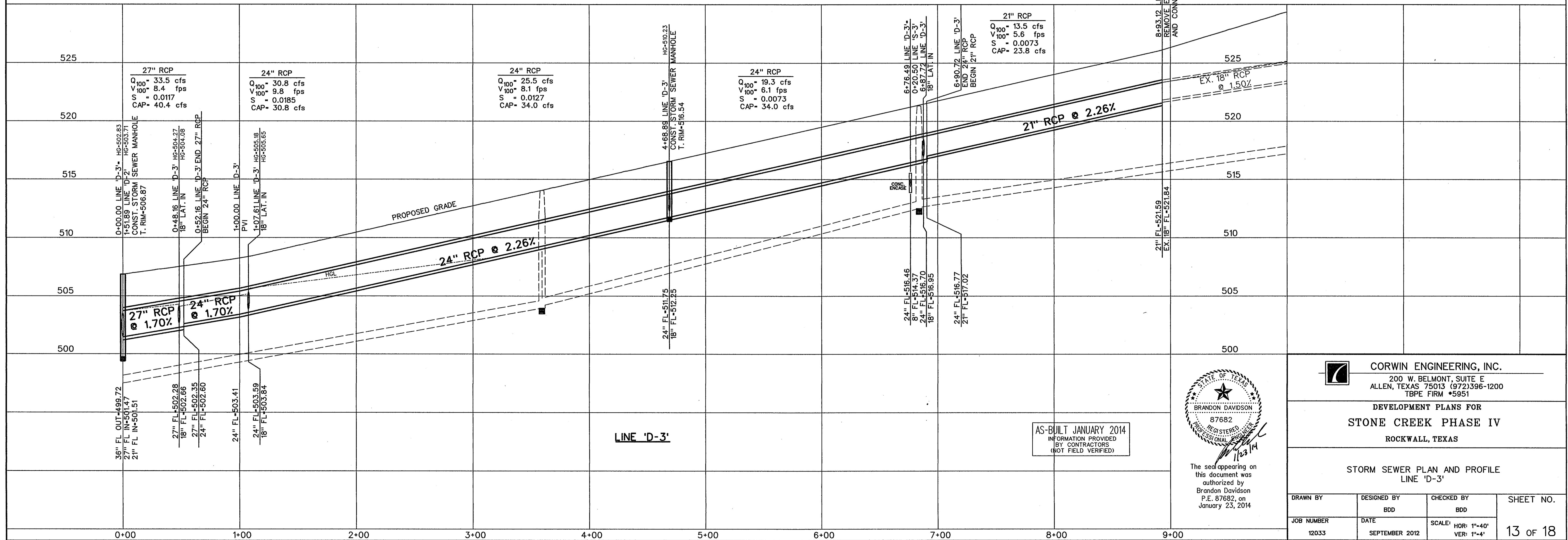
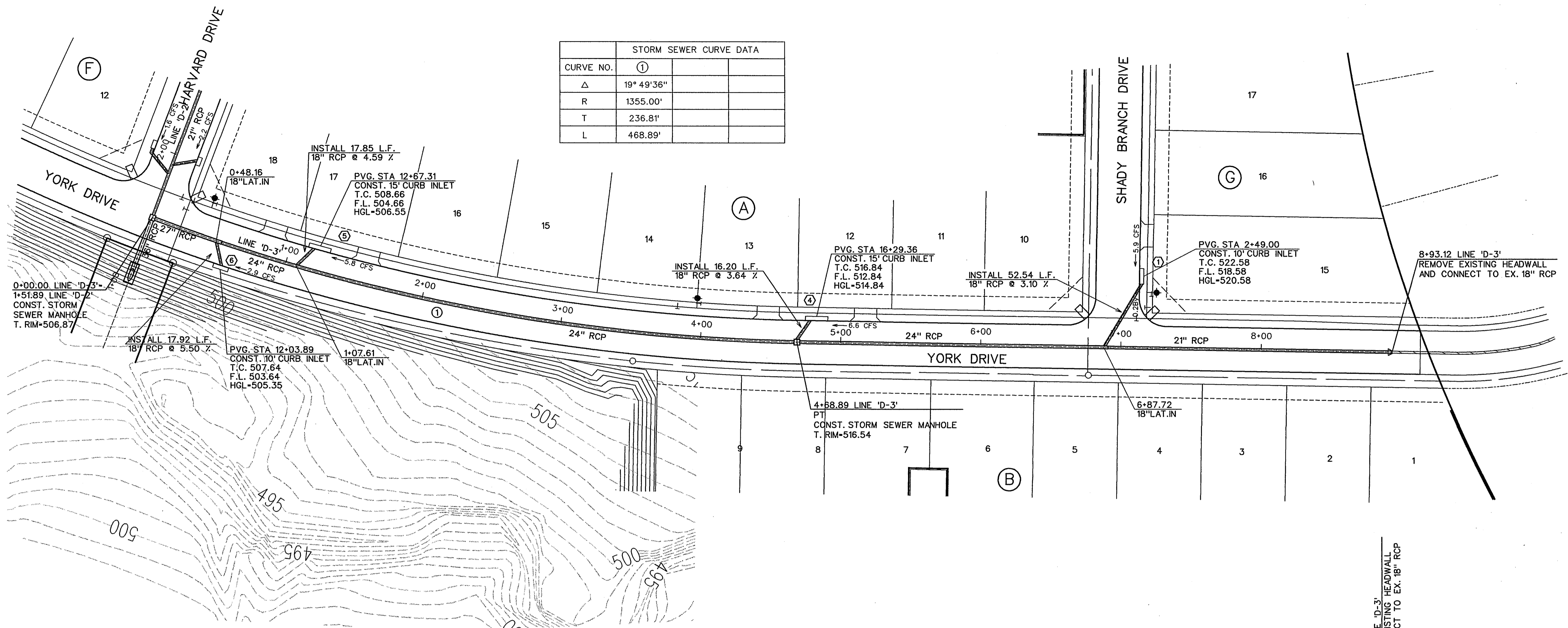
CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

485 DEVELOPMENT PLANS FOR
STONE CREEK PHASE IV
ROCKWALL, TEXAS

STORM SEWER PLAN AND PROFILE
LINES 'D-1' & 'D-2'

DRAWN BY 12033	DESIGNED BY BDD	CHECKED BY BDD	SHEET NO. 12 OF 18
JOB NUMBER 12033	DATE SEPTEMBER 2012	SCALE: HOR: 1"=40' VER: 1"=4'	

STORM SEWER CURVE DATA	
CURVE NO.	①
Δ	19° 49' 36"
R	1355.00'
T	236.81'
L	468.89'



Station	Flow	Velocity	Slope	Capacity
0+00	33.5 cfs	8.4 fps	0.0117	40.4 cfs
1+00	30.8 cfs	9.8 fps	0.0185	30.8 cfs
2+00	25.5 cfs	8.1 fps	0.0127	34.0 cfs
3+00	19.3 cfs	6.1 fps	0.0073	34.0 cfs
4+00	13.5 cfs	5.6 fps	0.0073	23.8 cfs

LINE 'D-3'

AS-BUILT JANUARY 2014
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)



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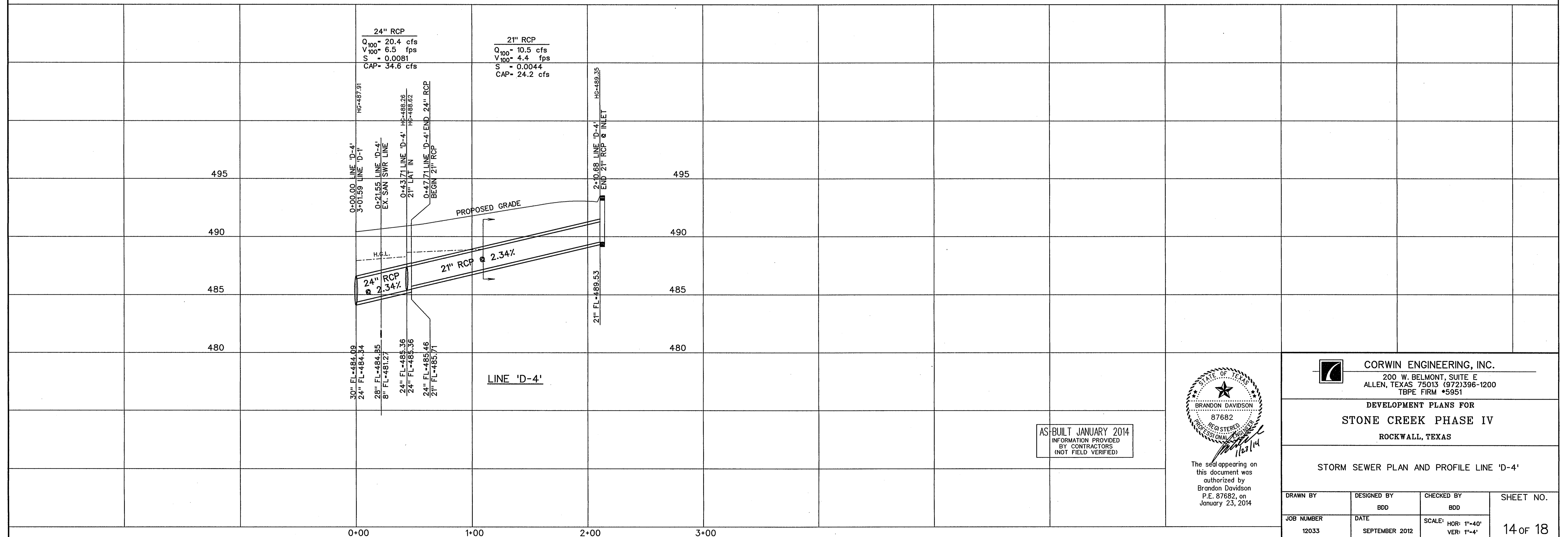
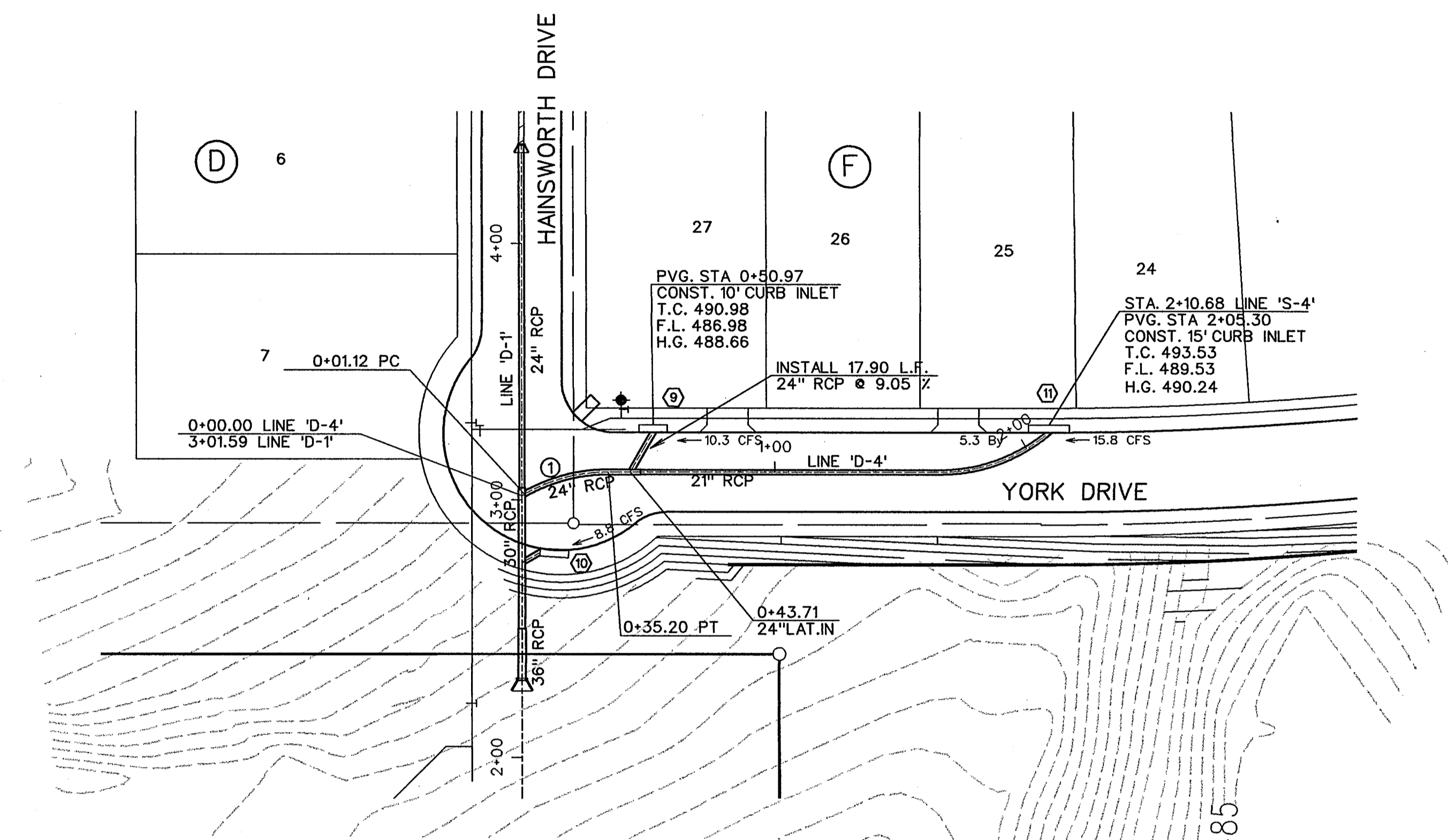
CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
STONE CREEK PHASE IV
ROCKWALL, TEXAS

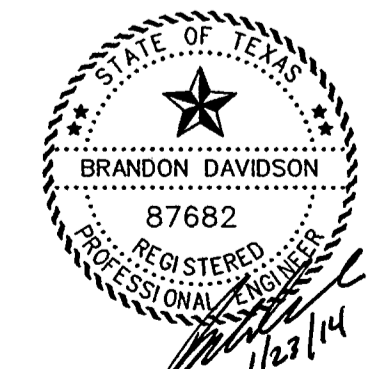
STORM SEWER PLAN AND PROFILE
LINE 'D-3'

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
	BDD	BDD	
JOB NUMBER	DATE	SCALE:	13 of 18
12033	SEPTEMBER 2012	HOR: 1"=40' VER: 1"=4'	

CURVE DATA			
CURVE NO.	①	②	③
Δ	30° 02' 28"	° ' "	° ' "
R	65.00'	'	'
T	17.44'	'	'
L	34.08'	'	'



AS-BUILT JANUARY 2014
 INFORMATION PROVIDED
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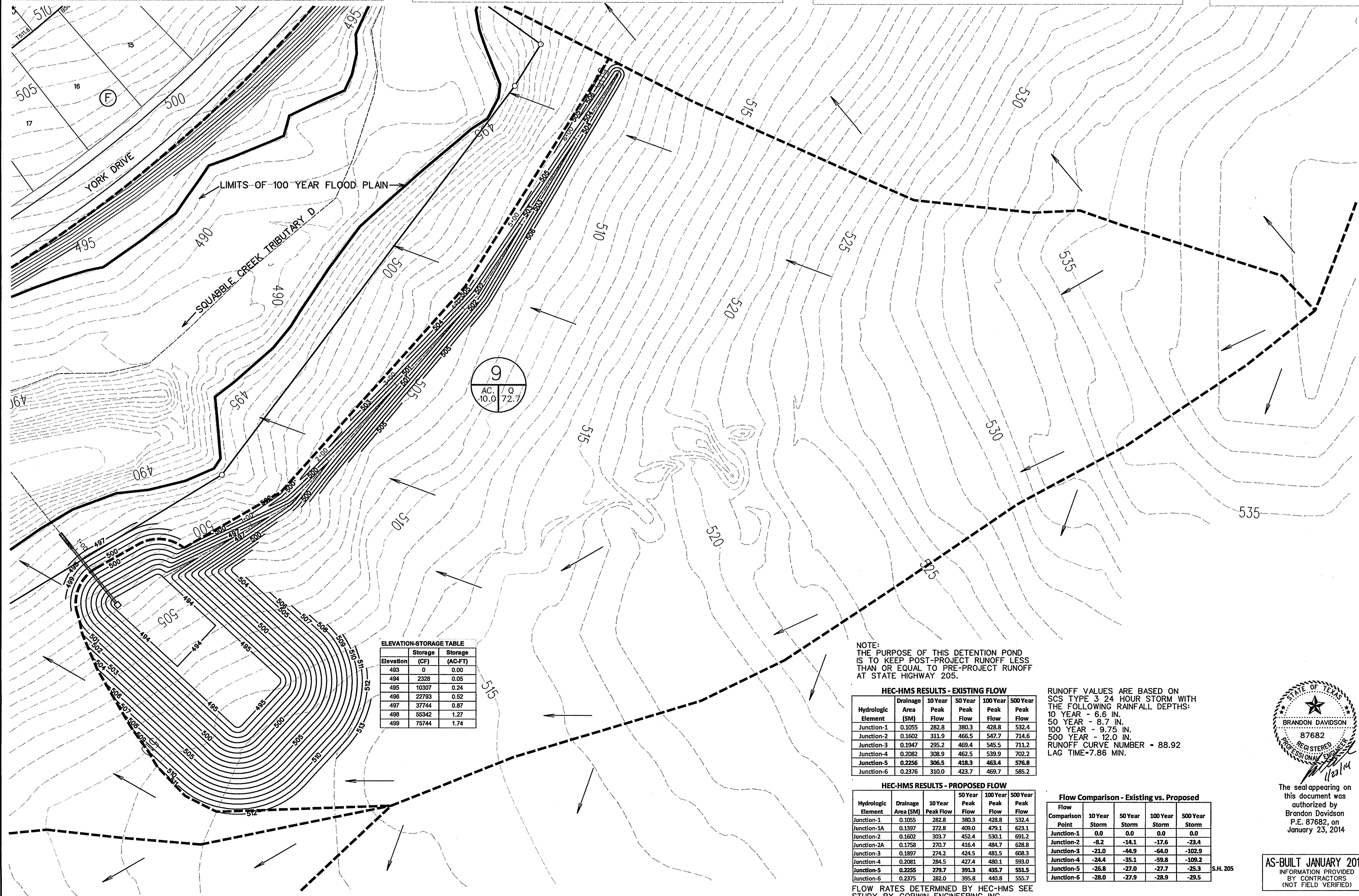
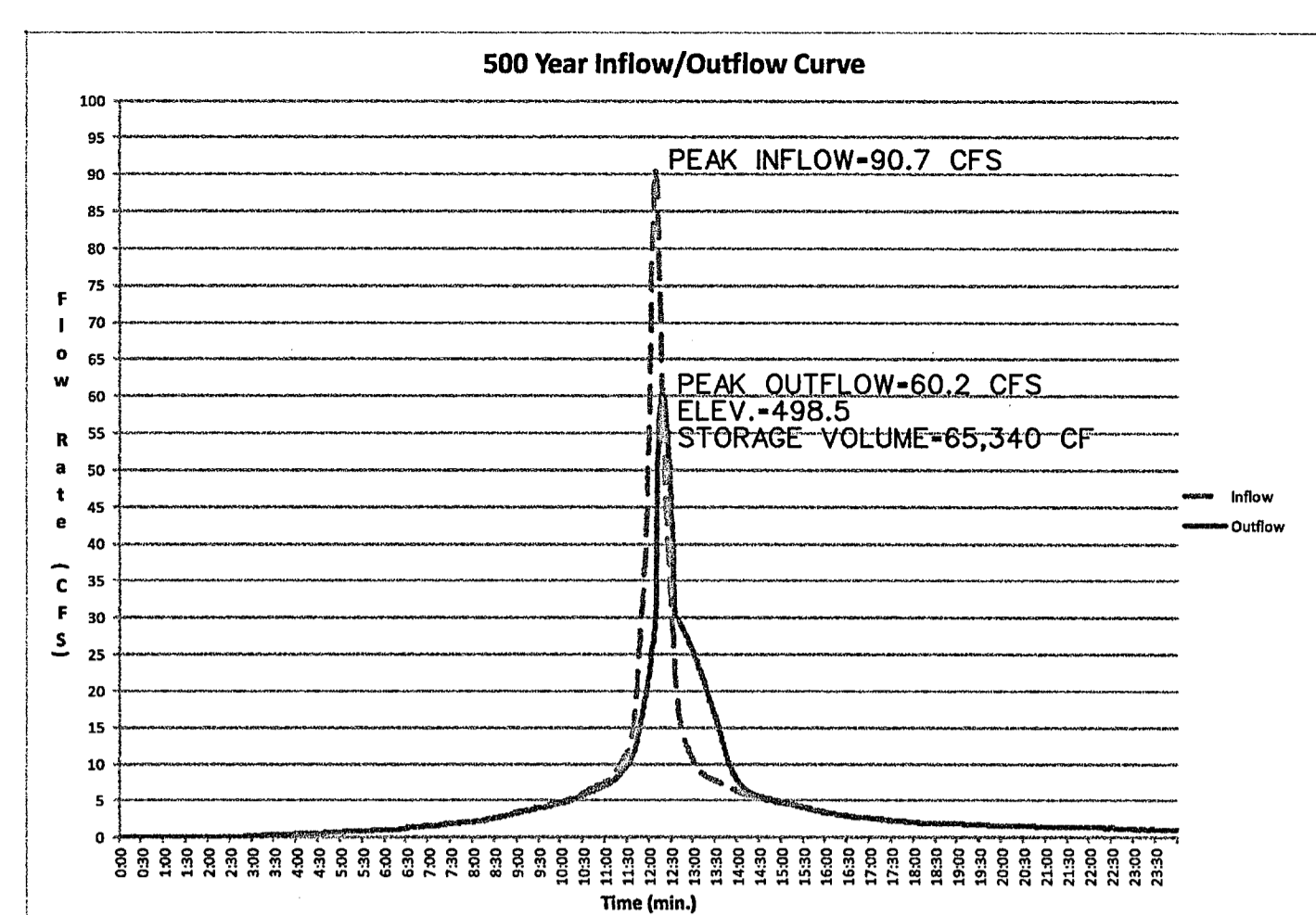
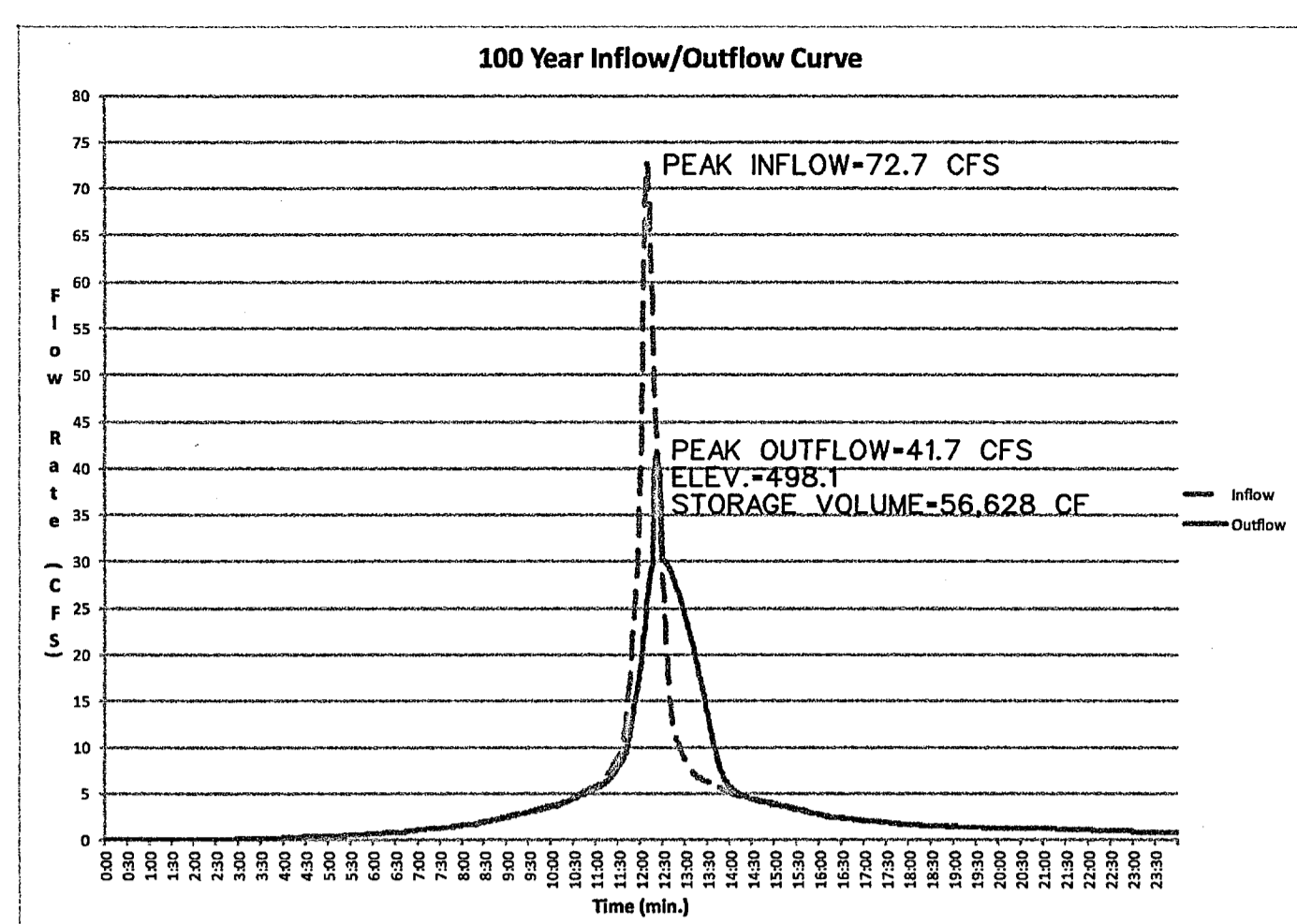
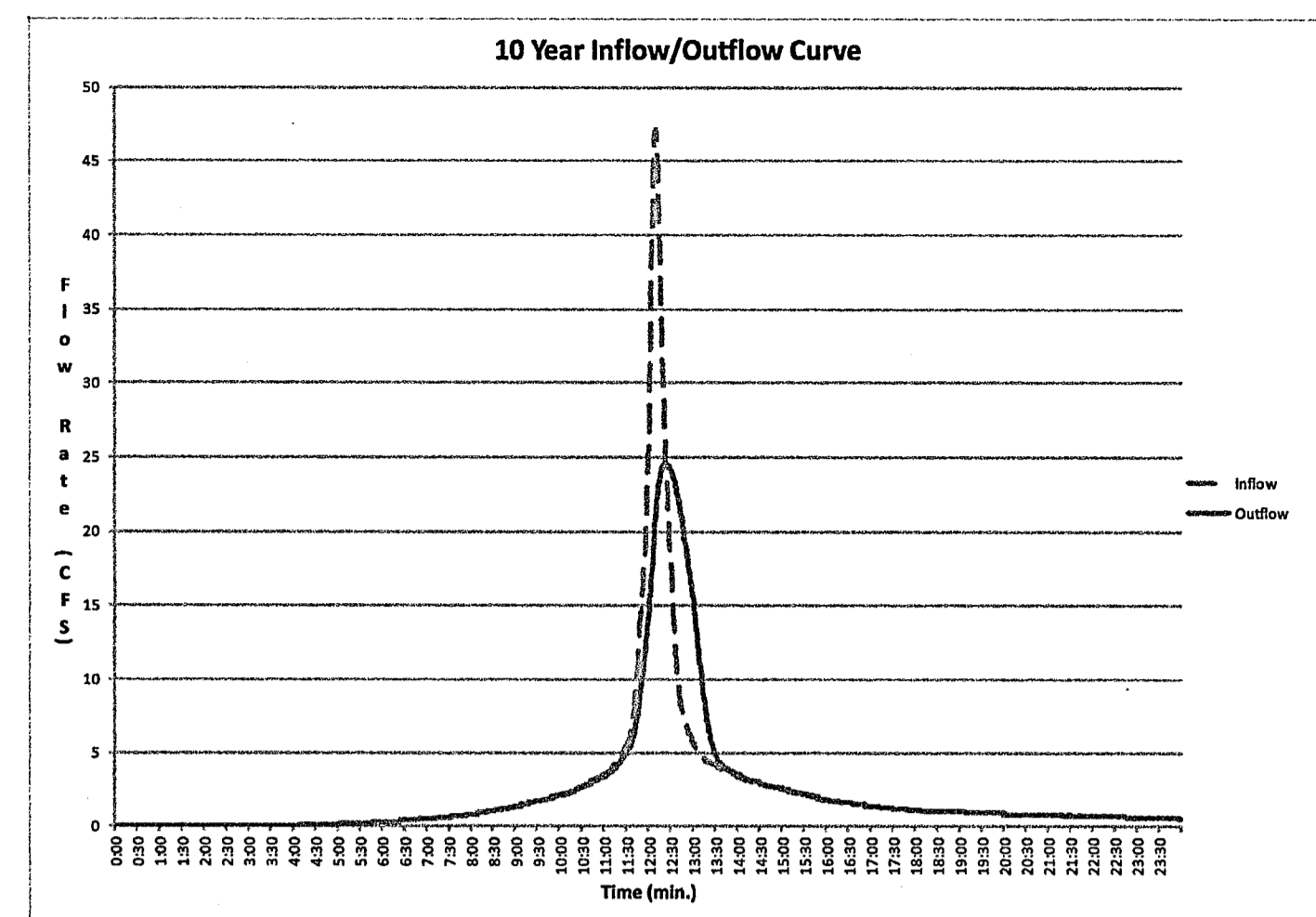
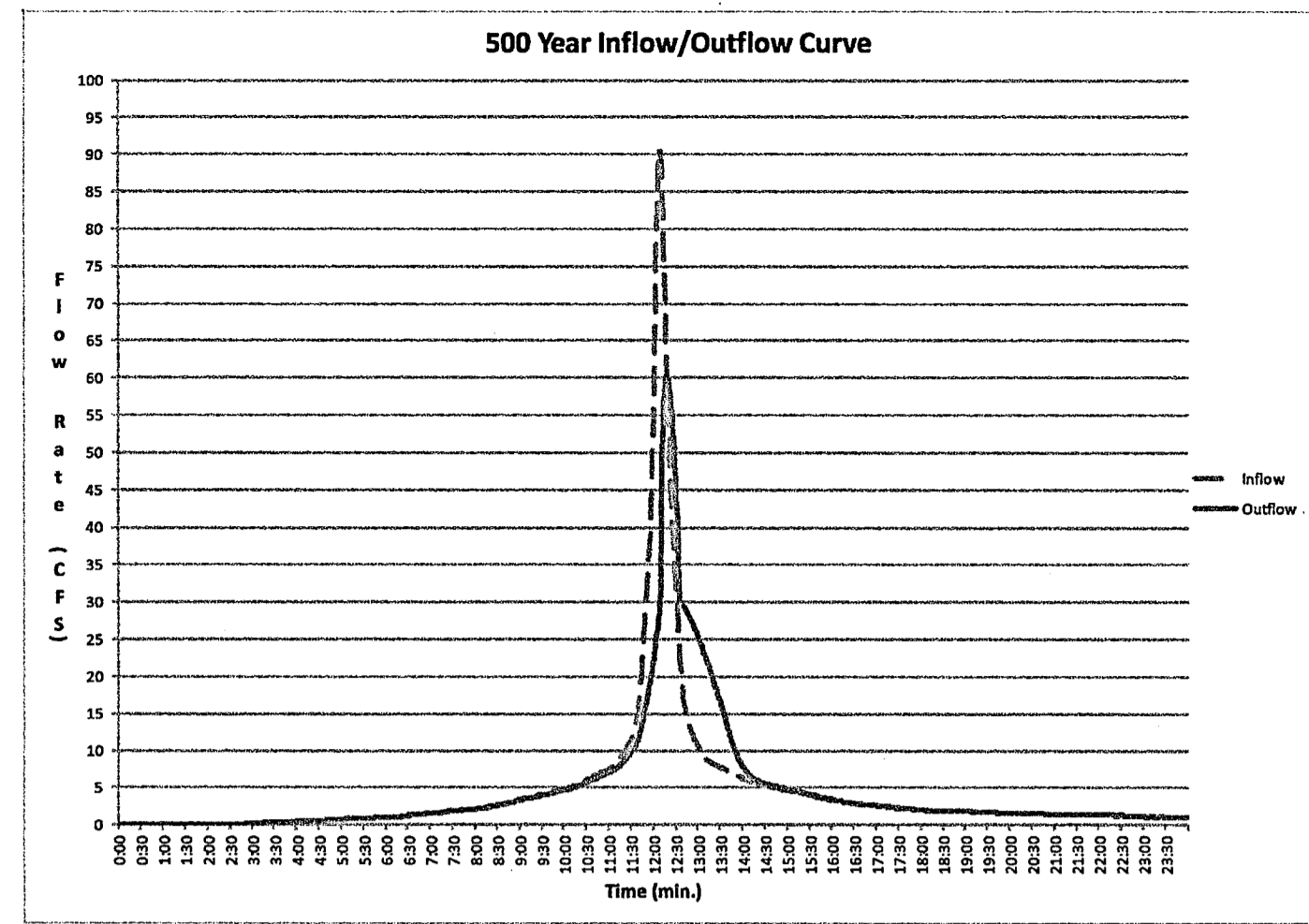
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CORWIN ENGINEERING, INC.
 200 W. BELMONT, SUITE E
 ALLEN, TEXAS 75013 (972)396-1200
 TBPE FIRM #5951

DEVELOPMENT PLANS FOR
STONE CREEK PHASE IV
 ROCKWALL, TEXAS

STORM SEWER PLAN AND PROFILE LINE 'D-4'

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
	BDD	BDD	
JOB NUMBER	DATE	SCALE	14 OF 18
12033	SEPTEMBER 2012	HOR: 1"=40' VER: 1"=4'	



ELEVATION-STORAGE TABLE

Elevation (CF)	Storage (AC-F)
489	0.00
494	2328 0.05
495	10307 0.24
496	22793 0.52
497	37744 0.87
498	55342 1.27
499	75744 1.74

NOTE: THE PURPOSE OF THIS DETENTION POND IS TO KEEP POST-PROJECT RUNOFF LESS THAN OR EQUAL TO PRE-PROJECT RUNOFF AT STATE HIGHWAY 205.

HEC-HMS RESULTS - EXISTING FLOW

Hydrologic Element	Drainage Area (SQM)	10 Year Peak Flow	50 Year Peak Flow	100 Year Peak Flow	500 Year Peak Flow
Junction-1	0.1055	282.8	380.3	428.8	532.4
Junction-2	0.1602	311.9	466.5	547.7	714.6
Junction-3	0.1947	325.2	469.4	545.5	711.2
Junction-4	0.2082	308.9	462.5	539.9	702.2
Junction-5	0.2256	306.5	418.3	463.4	576.8
Junction-6	0.2376	310.0	423.7	469.7	585.2

HEC-HMS RESULTS - PROPOSED FLOW

Hydrologic Element	Drainage Area (SQM)	10 Year Peak Flow	50 Year Peak Flow	100 Year Peak Flow	500 Year Peak Flow
Junction-1	0.1055	282.8	380.3	428.8	532.4
Junction-1A	0.1397	272.8	409.0	479.1	623.1
Junction-2	0.1602	303.7	452.4	530.1	691.2
Junction-2A	0.1758	270.7	416.4	484.7	628.8
Junction-3	0.1897	274.2	424.5	481.5	608.3
Junction-4	0.2081	284.5	427.4	480.1	593.0
Junction-5	0.2255	279.7	391.3	435.7	551.5
Junction-6	0.2375	282.0	395.8	440.8	555.7

RUNOFF VALUES ARE BASED ON SCS TYPE 3 24 HOUR STORM WITH THE FOLLOWING RAINFALL DEPTHS:
10 YEAR - 6.6 IN.
50 YEAR - 8.7 IN.
100 YEAR - 9.75 IN.
500 YEAR - 12.0 IN.
RUNOFF CURVE NUMBER = 88.92
LAG TIME=7.86 MIN.

Flow Comparison - Existing vs. Proposed

Flow Comparison Point	10 Year Storm	50 Year Storm	100 Year Storm	500 Year Storm
Junction-1	0.0	0.0	0.0	0.0
Junction-2	-8.2	-34.1	-17.6	-23.4
Junction-3	-21.0	-44.9	-64.0	-102.9
Junction-4	-34.4	-35.1	-59.8	-109.2
Junction-5	-36.8	-27.0	-27.7	-25.3
Junction-6	-28.0	-27.9	-28.9	-29.5

LEGEND

- PROP. STORM SEWER
- PROP. CURB INLETS
- PROP. CONC. HEADWALL
- EXIST. STORM SEWER
- DRAINAGE AREA DIVIDE
- FLOW ARROW
- AC. Q DRAINAGE AREA NO.



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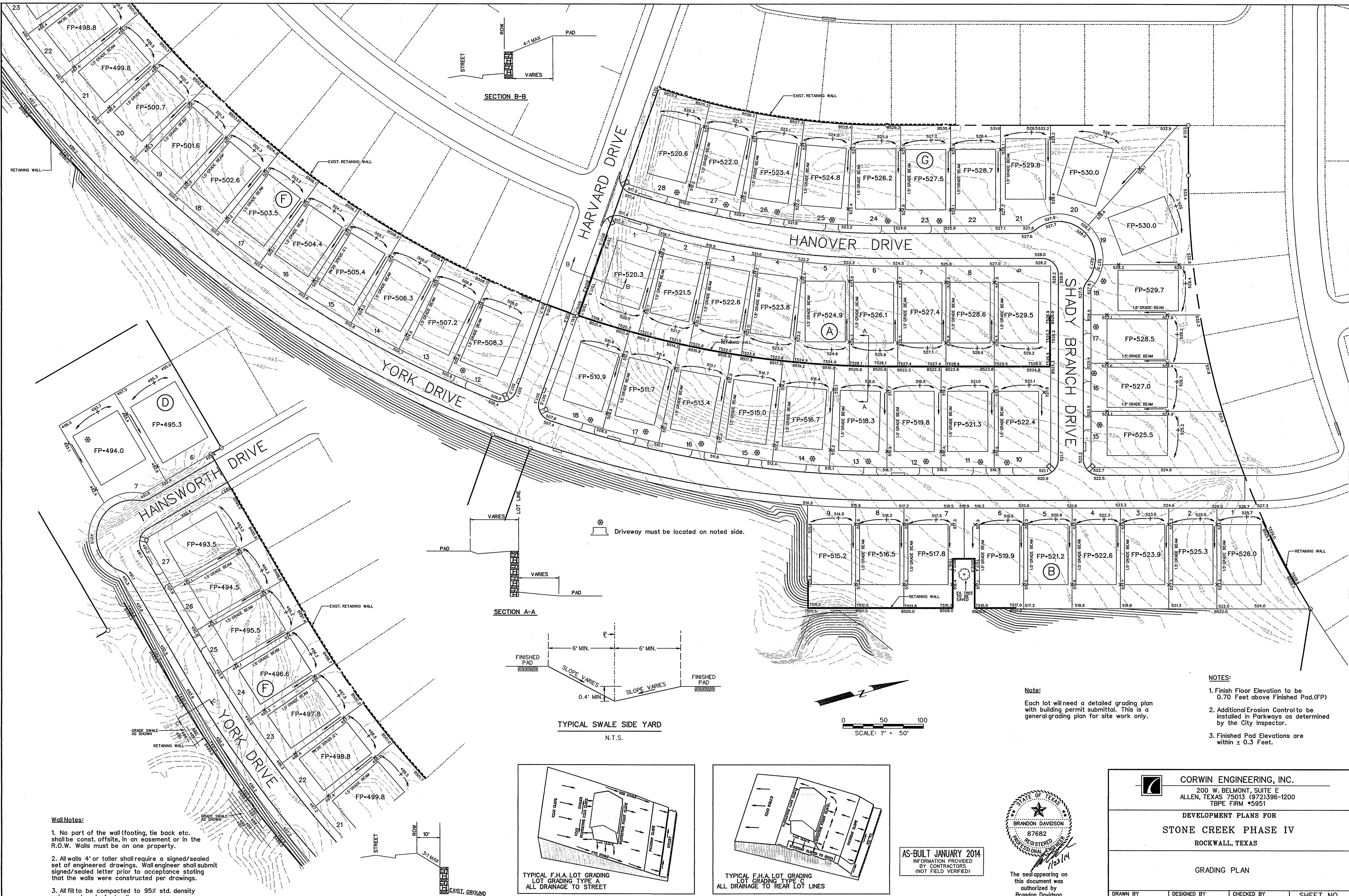
AS-BUILT JANUARY 2014
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)

CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

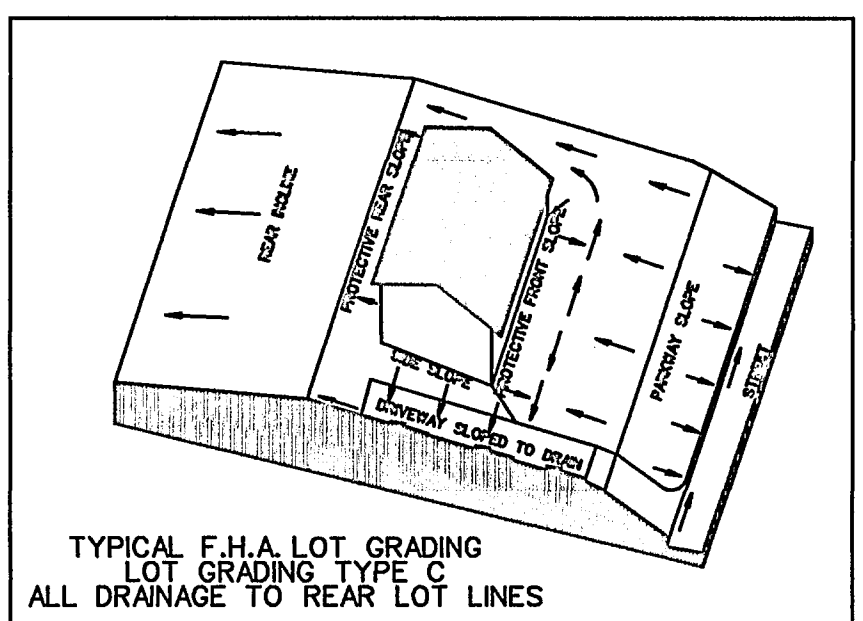
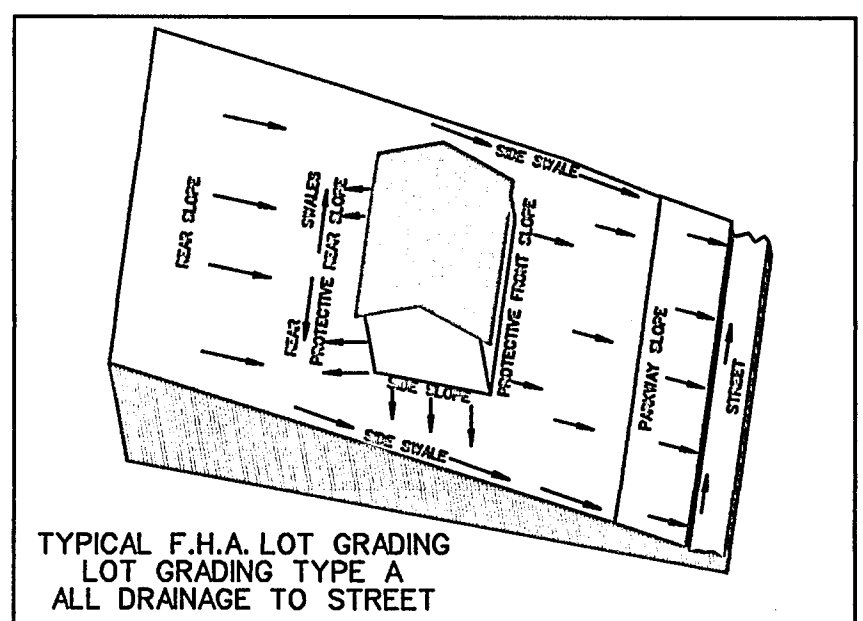
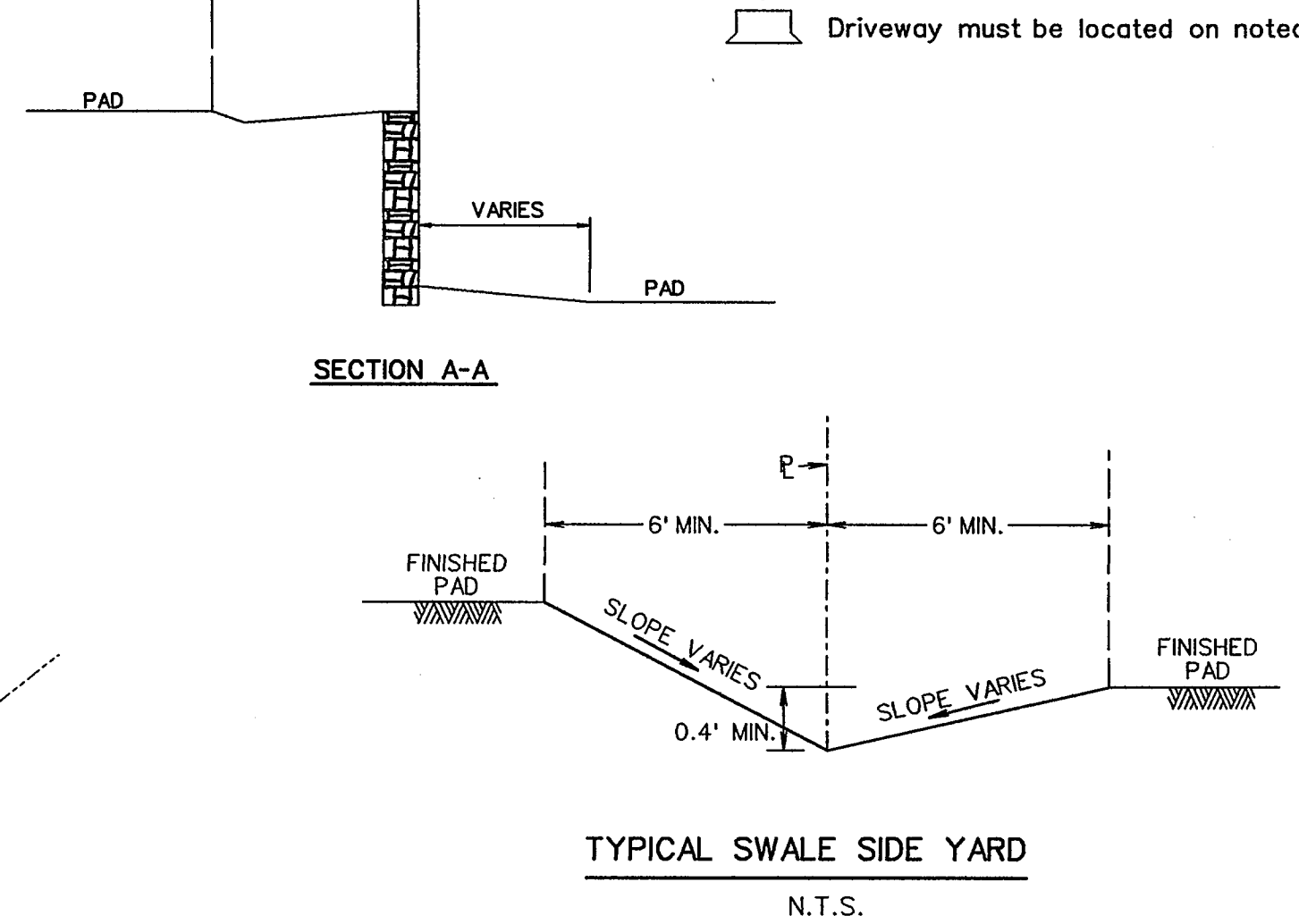
DEVELOPMENT PLANS FOR
STONE CREEK PHASE IV
ROCKWALL, TEXAS

DETENTION POND PLAN

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER	DATE	SCALE:	16 OF 18
12033	FEBRUARY 2013		



- Wall Notes:**
1. No part of the wall (footing, tie back etc. shall be const. offsite, in an easement or in the R.O.W. Walls must be on one property.
 2. All walls 4' or taller shall require a signed/sealed set of engineered drawings. Wall engineer shall submit signed/sealed letter prior to acceptance stating that the walls were constructed per drawings.
 3. All fill to be compacted to 95% std. density using a sheep's foot roller.



AS-BUILT JANUARY 2014
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)

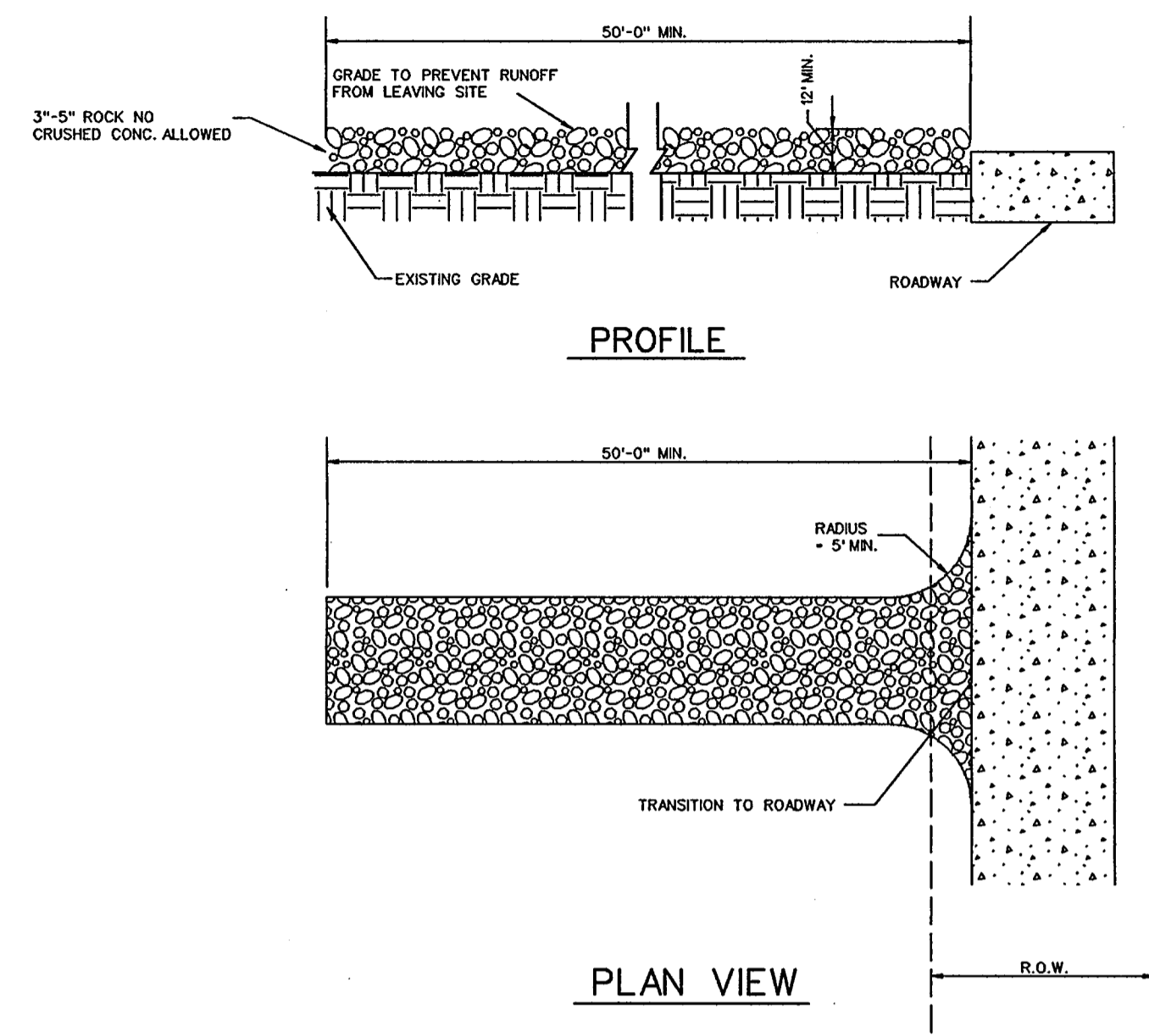


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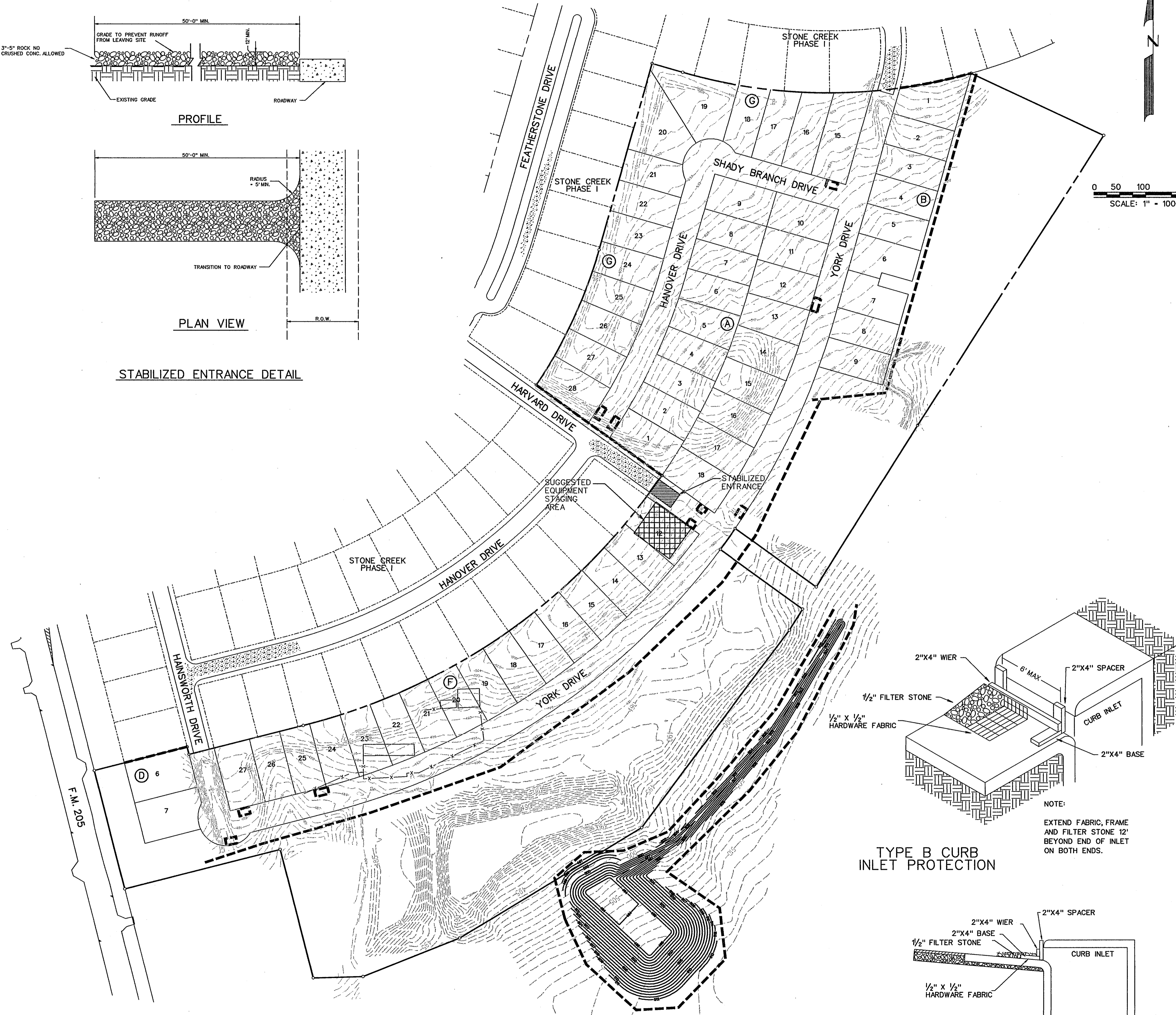
Note:
Each lot will need a detailed grading plan with building permit submittal. This is a general grading plan for site work only.

- NOTES:**
1. Finish Floor Elevation to be 0.70 Feet above Finished Pad.(FP)
 2. Additional Erosion Control to be installed in Parkways as determined by the City Inspector.
 3. Finished Pad Elevations are within ± 0.3 Feet.

<p>CORWIN ENGINEERING, INC. 200 W. BELMONT, SUITE E ALLEN, TEXAS 75013 (972)396-1200 TBP E FIRM #5951</p>			
<p>DEVELOPMENT PLANS FOR STONE CREEK PHASE IV ROCKWALL, TEXAS</p>			
<p>GRADING PLAN</p>			
DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
J2033			17 OF 18

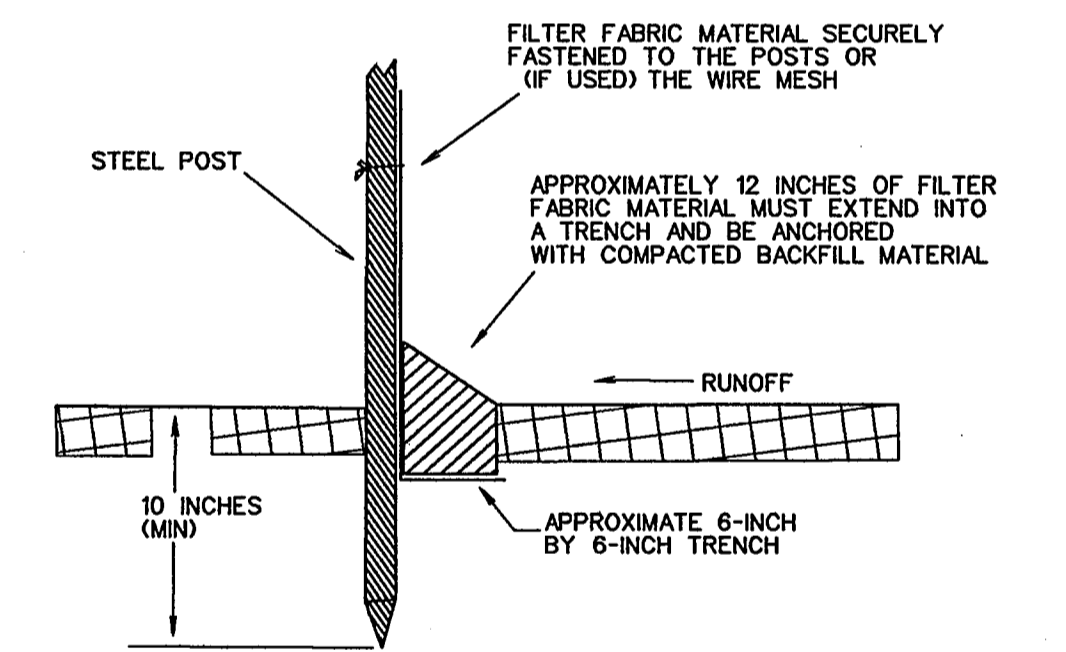
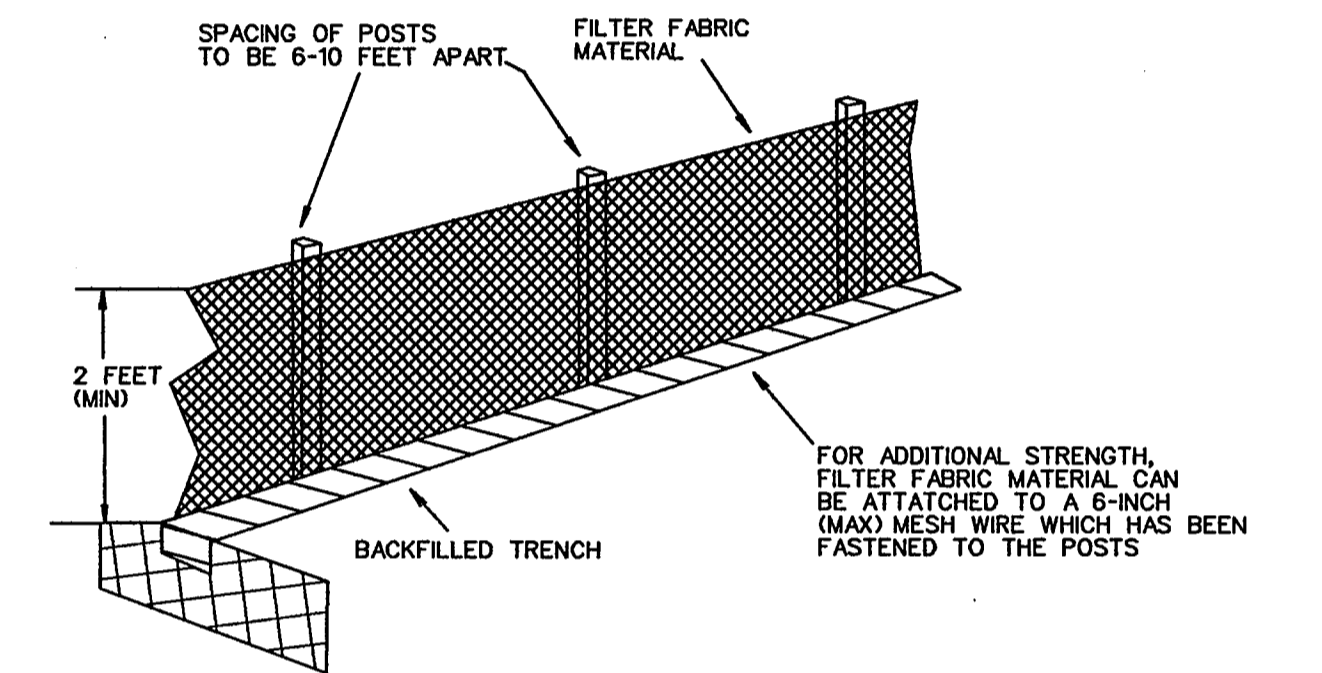


STABILIZED ENTRANCE DETAIL



CONSTRUCTION SEQUENCE

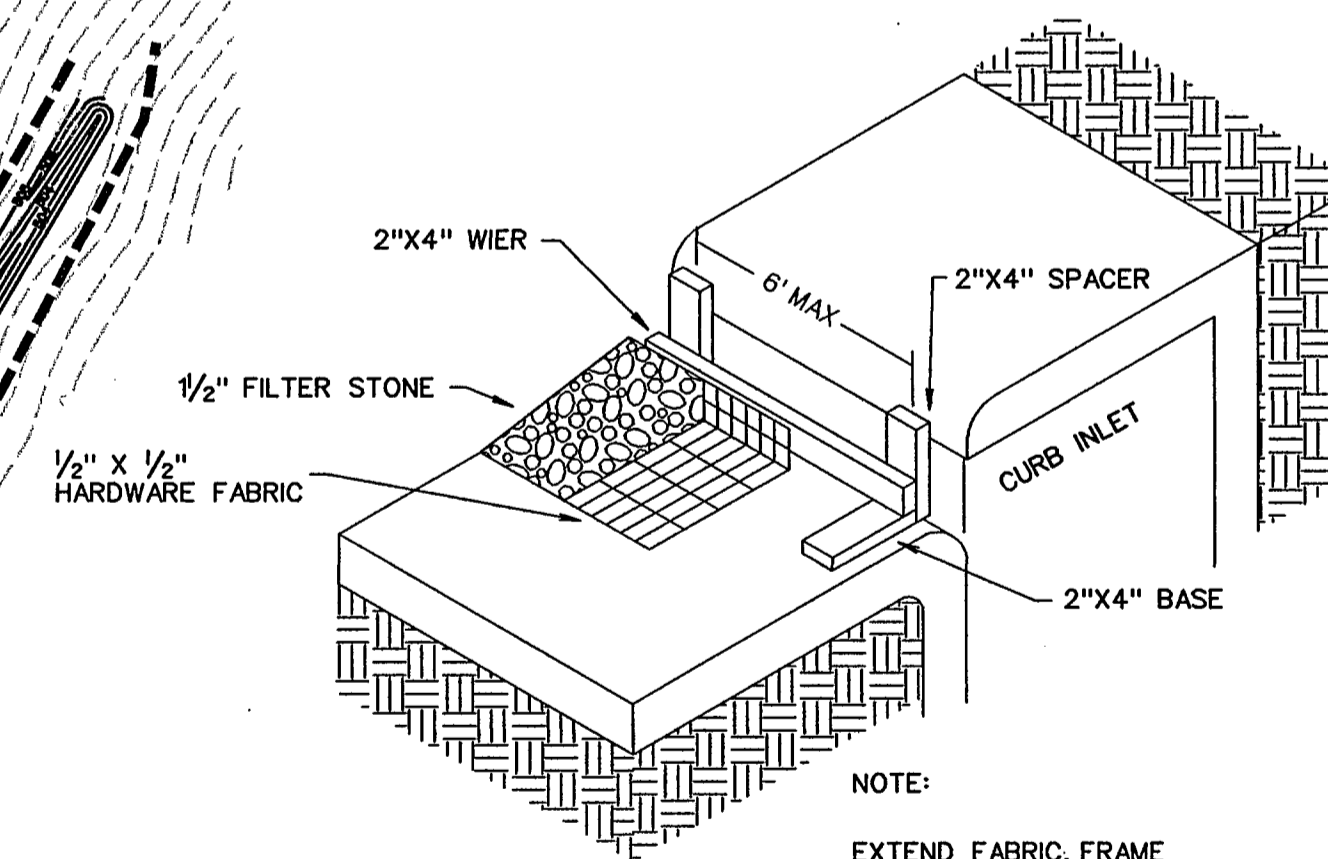
1. GRADING CONTRACTOR TO INSTALL TEMPORARY STABILIZED ENTRANCE.
2. INSTALL SILT FENCE AS SHOWN, (TS-600 POLY FELT) PER C.O.G. SPECIFICATIONS.
3. PERFORM GRADING AND UTILITY CONSTRUCTION.
4. AFTER THE INLET BOTTOMS ARE CONSTRUCTED, THE INLETS SHALL BE FILLED WITH STONE AND COVERED WITH A FILTER FABRIC (TS-600 POLY FELT OR EQUIVALENT) BY UTILITY CONTRACTOR.
5. PRIOR TO CITY RELEASING PAVING, SOD OR SEEDED CURLEX SHALL BE INSTALLED ON SIDES AND BOTTOM OF ALL DETENTION PONDS.
6. AFTER PAVING AND COMPLETION OF INLETS, INLET FILTERS SHALL BE INSTALLED IN ALL INLETS AND MAINTAINED UNTIL RE-VEGETATION HAS BEEN COMPLETED BY PAVING CONTRACTOR.
7. SILT FENCE SHALL REMAIN IN PLACE UNTIL RE-VEGETATION HAS BEEN COMPLETED.
8. PAVING CONTRACTOR SHALL REMOVE TEMPORARY STABILIZED ENTRANCE.
9. PRIOR TO CITY ACCEPTANCE THE PAVING CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ANY MUD OR SILT WHICH COLLECTS ON THE EXISTING AND NEW PAVEMENT.
10. PRIOR TO ACCEPTANCE, SILT FENCE TO BE INSTALLED AT BACK OF CURB AND EDGE OF ALLEY TO PREVENT EROSION INTO STREETS.
11. 75%-80% OF ALL DISTURBED AREA TO HAVE A MIN. 1" TALL GRASS PRIOR TO ENGINEERING ACCEPTANCE.



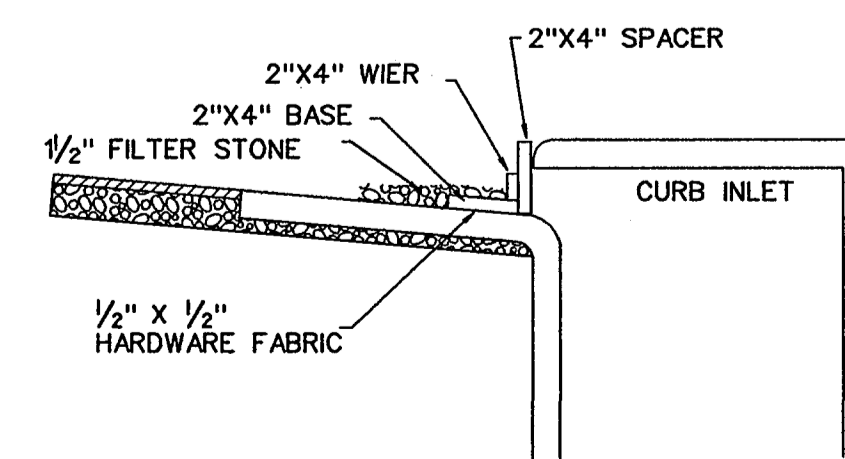
FILTER FABRIC FENCE DETAIL

LEGEND

- SILT FENCE (BEFORE CONSTRUCTION) - - - - -
- INLET PROTECTION [Symbol]



TYPE B CURB INLET PROTECTION



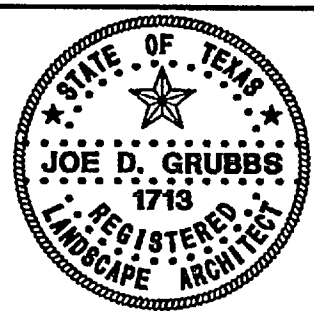
INLET SECTION

NO.	REVISIONS	BY	DATE
<p>CORWIN ENGINEERING, INC. 200 W. BELMONT, SUITE E ALLEN, TEXAS 75013 (972)396-1200 TBPE FIRM #5951</p>			
<p>DEVELOPMENT PLANS FOR STONE CREEK PHASE IV ROCKWALL, TEXAS</p>			
<p>EROSION CONTROL PLAN</p>			
DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER	DATE	SCALE:	18 OF 18
12033	FEBRUARY 2013	1"=100'	



TREE ID NO.	TREE CALIPER SIZE	TREE TYPE COMMON NAME	CONDITION OF TREE	SAVED OR REMOVED	MITIGATION CALCULATIONS	MITIGATION REQUIRED
588	24"	PECAN	GOOD	REMOVED	MITIGATION REQUIRED 1:1 RATIO	24 INCHES
591	22"	PECAN	GOOD	REMOVED	MITIGATION REQUIRED 1:1 RATIO	22 INCHES
592	28"	PECAN	GOOD	REMOVED	MITIGATION REQUIRED 1:1 RATIO	28 INCHES
593	24"	PECAN	GOOD	REMOVED	MITIGATION REQUIRED 1:1 RATIO	24 INCHES
594	19"	PECAN	GOOD	REMOVED	MITIGATION REQUIRED 1:1 RATIO	19 INCHES
595	24"	HACKBERRY	GOOD	SAVED		
596	5"	HERCULES CLUB	GOOD	REMOVED	NONE	0
597	11" MT.	HACKBERRY	GOOD	REMOVED	MITIGATION REQUIRED 1/2 OF 1:1 RATIO	5.5 INCHES
601	6"	HERCULES CLUB	GOOD	REMOVED	NONE	0
602	12"	HACKBERRY	GOOD	REMOVED	MITIGATION REQUIRED 1/2 OF 1:1 RATIO	6 INCHES
603	11"	HACKBERRY	GOOD	REMOVED	MITIGATION REQUIRED 1/2 OF 1:1 RATIO	5.5 INCHES
605	12"	HACKBERRY	GOOD	REMOVED	MITIGATION REQUIRED 1/2 OF 1:1 RATIO	6 INCHES
606	12"	HACKBERRY	GOOD	REMOVED	MITIGATION REQUIRED 1/2 OF 1:1 RATIO	6 INCHES
607	12"	HACKBERRY	GOOD	REMOVED	MITIGATION REQUIRED 1/2 OF 1:1 RATIO	6 INCHES
608	11"	HACKBERRY	GOOD	REMOVED	MITIGATION REQUIRED 1/2 OF 1:1 RATIO	5.5 INCHES
609	11"	HACKBERRY	GOOD	REMOVED	MITIGATION REQUIRED 1/2 OF 1:1 RATIO	5.5 INCHES
611	11" MT.	HACKBERRY	GOOD	REMOVED	MITIGATION REQUIRED 1/2 OF 1:1 RATIO	5.5 INCHES
612	23"	PECAN	SOME DIEBACK	REMOVED	MITIGATION REQUIRED 1:1 RATIO	23 INCHES
613	21"	PECAN	GOOD	SAVED		
614	7"	HERCULES CLUB	GOOD	SAVED		
615	24"	PECAN	GOOD	SAVED		
616	29"	PECAN	GOOD	REMOVED	MITIGATION REQUIRED 1:1 RATIO	29 INCHES
617	34"	HACKBERRY	GOOD	REMOVED	MITIGATION REQUIRED 1/2 OF 1:1 RATIO	17 INCHES
622	24"	HACKBERRY	GOOD	REMOVED	MITIGATION REQUIRED 1/2 OF 1:1 RATIO	12 INCHES
623	19"	HACKBERRY	GOOD	REMOVED	MITIGATION REQUIRED 1/2 OF 1:1 RATIO	9 INCHES
624	28"	HACKBERRY	GOOD	REMOVED	MITIGATION REQUIRED 1/2 OF 1:1 RATIO	14 INCHES
626	25"	PECAN	GOOD	REMOVED	MITIGATION REQUIRED 1:1 RATIO	25 INCHES
628	36"	PECAN	GOOD (LIGHTNING)	REMOVED	MITIGATION REQUIRED 2:1 RATIO	12 INCHES
631	20"	HACKBERRY	DISEASED & DIEBACK	REMOVED	MITIGATION REQUIRED 1/2 OF 1:1 RATIO	10 INCHES
633	23"	HACKBERRY	GOOD	SAVED		
634	11"	HACKBERRY	GOOD	SAVED		
636	5"	HERCULES CLUB	GOOD	REMOVED	NONE	0
TOTAL MITIGATION REQUIRED						374 INCHES

NEW TREES BEING INSTALLED ON LOTS (2) 3" CAL. TREES PER LOT PLUS ADDITIONAL (2) 3" CAL. TREES PER CORNER LOTS 402 INCHES



**Stone Creek
Phase 4**
Rockwall, Texas

Issued For:
CONSTRUCTION
Job No.
12119.00
Scale
1" = 80'-0"
Drawn By:
JDS
Date
2-22-2013

Sheet Title:
**Tree Survey &
Mitigation Plan**

Sheet Number:
TS1
of TS1 Sheets