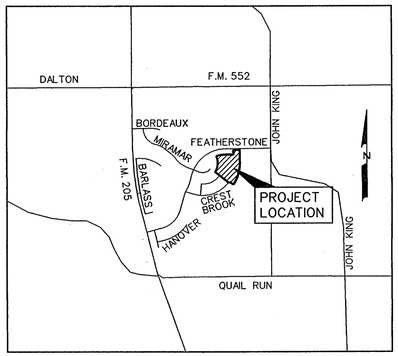
DEVELOPMENT PLANS
FOR
STONE CREEK
PHASE IIA
CITY OF ROCKWALL, TEXAS



VICINITY MAP
NOT TO SCALE

INDEX

PREPARED FOR

STONE CREEK 60'S POD, LTD.

8214 WESTCHESTER DRIVE, SUITE 710
DALLAS, TEXAS 75225
214-522-4945

CORWIN ENGINEERING, INC. — CONSULTING ENGINEERS

200 W. BELMONT, SUITE E — TBPE FIRM* 5951 — ALLEN, TEXAS 75013

STATE OF TEXAS
BRANDON DAVIDSON
87682
REGISTERED
PROFESSIONAL ENGINEER
8/16/12

The seal appearing on this document was authorized by Brandon Davidson P.E. 87682, on August 16, 2012

AS-BUILT AUGUST 2012
BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY CONTRACTORS

NOTE:

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

NO.	REVISIONS	BY	DATE
1	PER CITY COMMENTS	DS	6-1-11

JUNE 2011

LEGAL DESCRIPTION

WHEREAS, STONE CREEK 60'S POD, LTD. and STONE CREEK BALANCE, LTD., is the owner of a tract of land situated in the W.T. DeWeese Survey, Abstract No. 71 and the S. King Survey, Abstract No. 131 in the City of Rockwall, being out of a Deed as described to Stone Creek SF., LTD., as described in Clerks File No. 2007-00375398 in the Deed Records of Rockwall County, Texas, being more particularly described as follows:

BEGINNING, at a ½ inch iron rod found at the southeast corner of Lot 1 Block L, out Stone Creek Phase I, an addition to the City of Rockwall, as described in Volume G, Pages 359-365, in the Plat Records of Rockwall County, Texas, also being in the north line of Buckner Drive (50' R.O.W.), being on a curve to the left, having a radius of 420.00 feet, a central angle of 61° 05'29", and a tangent of 247.85 feet;

THENCE, along an east line of said Stone Creek Phase I and with said curve to the left, for an arc distance of 447.82 feet (Chord Bearing North 04° 23'43" East - 426.91 feet), to a ½ inch iron rod set on a curve to the right, having a radius of 810.00 feet, a central angle of 17 38'43", and a tangent of 125.72 feet;

THENCE, departing said east line and with said curve to the right for an arc distance of 249.45 feet (Chord Bearing North 80° 35'51" East - 248.47 feet), to a ½ inch iron rod set at the point of tangency;

THENCE, North 89° 25'13" East, for a distance of 235.61 feet, to a ½ inch iron rod set;

THENCE, North 00° 34'47" West, for a distance of 130.00 feet, to a ½ inch iron rod set in the south line of Feather Stone Drive (60' R.O.W.);

THENCE, North 89° 25'13" East, along the south line of said Feather Stone Drive, for a distance of 245.08 feet, to a ½ inch iron rod set;

THENCE, South 00° 35'35" East, departing said south line, for a distance of 475.08 feet, to a ½ inch iron rod set at the point of curvature of a curve to the right, having a radius of 1125.00 feet, a central angle of 31° 16'25", and a tangent of 314.88 feet;

THENCE, along said curve to the right for an arc distance of 614.05 feet (Chord Bearing South 15° 02'37" West - 606.46 feet), to a ½ inch iron rod set at the point of tangency of said curve;

THENCE, South 30° 40'49" West, for a distance of 90.28 feet, to a ½ inch iron rod set;

THENCE, North 59° 19'11" West, for a distance of 164.69 feet to a ½ inch iron rod found at the south east corner of said Stone Creek Phase I;

THENCE, North 47° 39'22" West, with the north east line of said Stone Creek Phase I, for a distance of 120.00 feet to a ½ inch iron rod found in the south line of Crestbrook Drive (50' R.O.W.), being on a curve to the left, having a radius of 910.00 feet, a central angle of 05° 33'53", and a tangent of 44.23 feet;

THENCE, along said south line of Crestbrook Drive and with said curve to the left for an arc distance of 88.38 feet (Chord Bearing North 39° 33'42" East - 88.35 feet), to a ½ inch iron found on a northeast line of said Stone Creek Phase I, being in the north line of previously referenced Buckner Drive;

THENCE, North 51° 38'48" West, along a northeast line of said Stone Creek Phase I and with the north line of said Buckner Drive, for a distance of 490.40 feet, to the POINT OF BEGINNING and containing 13.121 acres of land.

SURVEYOR CERTIFICATE

I, WARREN L. CORWIN, do hereby certify that the plat shown hereon accurately represents the results of an on-the-ground survey made under my direction and supervision and all corners are as shown thereon and there are no encroachments, conflicts, protrusions or visible utilities on the ground except as shown and said plat has been prepared in accordance with the platting rules and regulations of the City Plan Commission of the City of Rockwall, Texas.

DATED the this______day of_________, 2012.

WARREN L. CORWIN
R.P.L.S. No. 4621

THE STATE OF TEXAS
COUNTY OF COLLIN

BEFORE ME, the undersigned, a Notary Public in and for the State of Texas, on this day personally appeared WARREN L. CORWIN, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same in the capacity therein stated and for the purposes and considerations therein expressed.

WITNESS MY HAND AND SEAL OF OFFICE, this the______day of_________, 2012.

Notary Public in and for the State of Texas

Recommended for Final Approval:

Planning & Zoning Commission   Date

APPROVED

I hereby certify that the above and foregoing plat of an addition to the City of Rockwall, Texas, was approved by the City Council of the City of Rockwall on the________day of______________, 2012.

This approval shall be invalid unless the approved plat for such addition is recorded in the office of the Counrt Clerk of Rockwall, County, Texas, within one hundred eighty (180) days from said date of final approval.

WITNESS OUR HANDS, this_______day of_____________, 2012.

Mayor, City of Rockwall   City Secretary   City Engineer

OWNER'S CERTIFICATE

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS:
STATE OF TEXAS
COUNTY OF ROCKWALL
We the undersigned owner(s) of the land shown on this plat, and designated herein as the STONE CREEK PHASE IIA, subdivision to the City of Rockwall, Texas, and whose name is subscribed hereto, hereby dedicate to the use of the public forever all streets, alleys, parks, water courses, drains, easements and public places thereon shown on the purpose and consideration therein expressed. We further certify that all other parties who have a mortgage or lien interest in the STONE CREEK PHASE IIA, subdivision have been notified and signed this plat.

We understand and do hereby reserve the easement strips shown on this plat for the purposes stated and for the mutual use and accommodation of all utilities desiring to use or using same. We also understand the following;

1. No buildings shall be constructed or placed upon, over, or across the utility easements as described herein.

2. Any public utility shall have the right to remove and keep removed all or part of any buildings, fences, trees, shrubs, or other growths or improvements which in any way endanger or interfere with construction, maintenance or efficiency of their respective system on any of these easement strips; and any public utility shall at all times have the right of ingress or egress to, from and upon the said easement strips for purpose of construction, reconstruction, inspecting, patrolling, maintaining, and either adding to or removing all or part of their respective system without the necessity of, at any time, procuring the permission of anyone.

3. The City of Rockwall will not be responsible for any claims of any nature resulting from or occasioned by the establishment of grade of streets in the subdivision.

4. The developer and subdivision engineer shall bear total responsibility for storm drain improvements.

5. The developer shall be responsible for the necessary facilities to provide drainage patterns and drainage controls such that properties within the drainage area are not adversely affected by storm drainage from the development.

6. No house dwelling unit, or other structure shall be constructed on any lot in this addition by the owner or any other person until the developer and/or owner has complied with all requirements of the Subdivision Regulations of the City of Rockwall regarding improvements with respect to the entire block on the street or streets on which property abuts, including the actual installation of streets with the required base and paving, curb and gutter, water and sewer, drainage structures, storm structures, storm sewers, and alleys, all according to the specifications of the City of Rockwall; or

Until an escrow deposit, sufficient to pay for the cost of such improvements, as determined by the city's engineer and/or city administrator, computed on a private commercial rate basis, has been made with the city secretary, accompanied by an agreement signed by the developer and/or owner, authorizing the city to make such improvements at prevailing private commercial rates, or have the same made by a contractor and pay for the same out of the escrow deposit, should the developer and/or owner fail or refuse to install the required improvements within the time stated in such written agreement, but in no case shall the City be obligated to make such improvements itself. Such deposit may be used by the owner and/or developer as progress payments as the work progresses in making such improvements by making certified requisitions to the city secretary, supported by evidence of work done; or

Until the developer and/or owner files a corporate surety bond with the city secretary in a sum equal to the cost of such improvements for the designated area, guaranteeing the installation thereof within the time stated in the bond, which time shall be fixed by the city council of the City of Rockwall.

We further acknowledge that the dedications and/or exaction's made herein are proportional to the impact of the Subdivision upon the public services required in order that the development will comport with the present and future growth needs of the City; we, our successors and assigns hereby waive any claim, damage, or cause of action that we may have as a result of the dedication of exactions made herein.

STONE CREEK 60's POD, LTD.,
a Texas limited partnership
By: STONE CREEK 60's POD GP Corporation,
a Texas corporation, its General Partner

Richard M. Skorburg
President

Mortgage or Lien Interest

STATE OF TEXAS
COUNTY OF DALLAS
Before me, the undersigned authority, on this day personally appeared RICHARD M. SKORBURG, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purpose and consideration therein stated. Given upon my hand and seal of office this_______day of_______________, 2012.

Notary Public in and for the State of Texas My Commission Expires: ______________

STATE OF TEXAS
COUNTY OF DALLAS
Before me, the undersigned authority, on this day personally appeared known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purpose and consideration therein stated. Given upon my hand and seal of office this_______Day of_____________, 2012.

Notary Public in and for the State of Texas My Commission Expires:

NOTE: It shall be the policy of the City of Rockwall to withhold issuing building permits until all streets, water, sewer and storm drainage systems have been accepted by the City. The approval of a plat by the City does not constitute any representation, assurance or guarantee that any building within such plat shall be approved, authorized or permit therefore issued, nor shall such approval constitute any representation, assurance or guarantee by the City of the adequacy and availability for water for personal use and fire protection within such plat, as required under Ordinance 83-54.

STONE CREEK BALANCE, LTD.,

Richard M. Skorburg
President

Mortgage or Lien Interest

STATE OF TEXAS
COUNTY OF DALLAS
Before me, the undersigned authority, on this day personally appeared RICHARD M. SKORBURG, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purpose and consideration therein stated. Given upon my hand and seal of office this_______day of_______________, 2012.

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FINAL PLAT
OF
STONE CREEK PHASE IIA
OUT OF THE
W.T. DEWEESE SURVEY, ABSTRACT NO. 71
S. KING SURVEY, ABSTRACT NO. 131
IN THE
CITY OF ROCKWALL
ROCKWALL COUNTY, TEXAS

OWNER
STONE CREEK 60'S POD, LTD.
8214 WESTCHESTER DRIVE, SUITE 710
DALLAS, TEXAS 75225
214-522-4945

STONE CREEK BALANCE, LTD.
8214 WESTCHESTER DRIVE, SUITE 710
DALLAS, TEXAS 75225
214-522-4945

PREPARED BY
CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013
972-396-1200

JANUARY 2012   SCALE 1" = 100'

SHEET 2 OF 2

NOTES

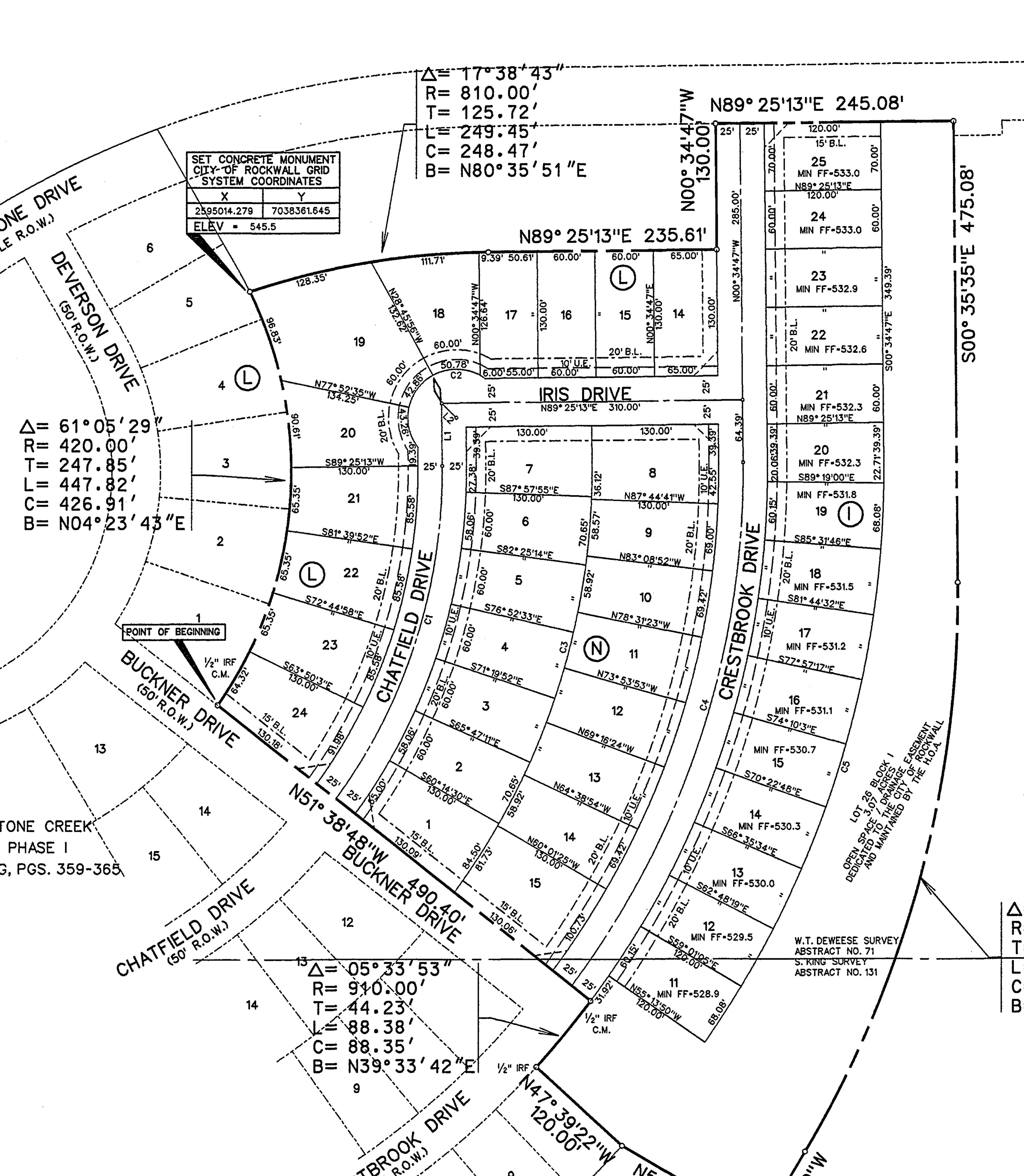
1. Bearing are referenced to Stone Creek Phase I, an addition to the City of Rockwall as described in Volume G, Pages 359-365.
2. All lot lines are radial or perpendicular to the street unless otherwise noted by bearing.
3. ½" iron rods with "CORWIN ENGR. INC." caps set at all boundary corners, block corners, points of curvature, points of tangancy, and angle points in public right-of-way unless otherwise noted.
4. B.L. - Building Line.
   U.E. - Utility Easements.
   C.M. - Controlling Monument.
   D.E. - Drainage Easement
   V.A.M.S. - Visibility, Maintenence & Sidewalk Easement
   MIN FF - Minimum Finished Floor Elevation
   H.O.A. - Homeowners Association
   ◊ - Street name change
5. All open spaces, drainage areas and other common areas shall be maintained by the Homeowners Association.
6. No building permits will be issued until all public improvments are accepted be the City.

STONE CREEK BALANCE, LTD.
CLERKS FILE NO. 2007-00375394

CURVE TABLE

CURVE NO.	DELTA	RADIUS	LENGTH	TANGENT	CHORD	BEARING
1.	36°26′29″	575.00′	365.71′	189.28′	359.58′	N17°38′27″E
2.	163°44′23″	50.00′	142.89′	----′	99.99′	N44°25′13″E
3.	36°58′14″	730.00′	471.04′	244.05′	462.91′	N17°54′20″E
4.	37°18′52″	885.00′	576.37′	298.82′	566.23′	N18°04′39″E
5.	35°20′57″	1030.00′	635.47′	328.21′	625.44′	S17°05′41″W

0 50 100 200
SCALE: 1" = 100'

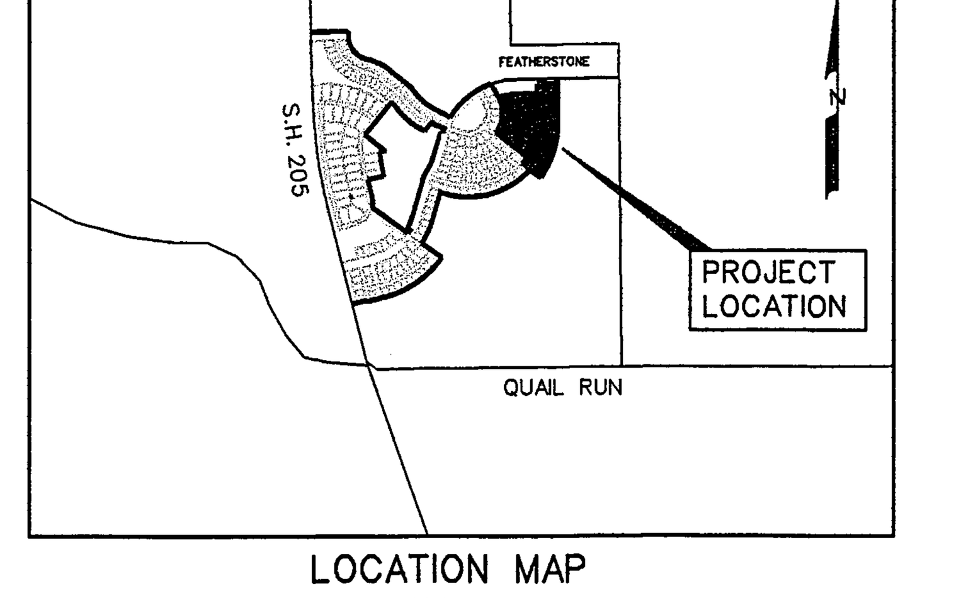


STONE CREEK BALANCE, LTD.
CLERKS FILE NO. 2007-00375394

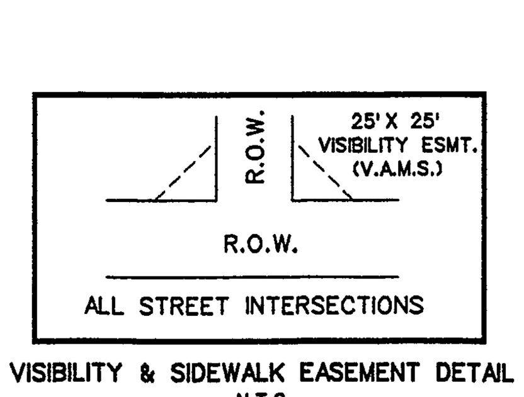
LINE TABLE

LINE NO.	BEARING	DISTANCE
1.	N 00°34′47″ W	64.39′
2.	S 45°34′47″ E	21.21′

TOTAL LOTS 41
TOTAL ACRES 13.121



LOCATION MAP
N.T.S.



VISIBILITY & SIDEWALK EASEMENT DETAIL
N.T.S.

FINAL PLAT
OF
STONE CREEK PHASE IIA
OUT OF THE
W.T. DEWEESE SURVEY, ABSTRACT NO. 71
S. KING SURVEY, ABSTRACT NO. 131
IN THE
CITY OF ROCKWALL
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CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013
972-396-1200

JANUARY 2012   SCALE 1" = 100'

SHEET 1 OF 2

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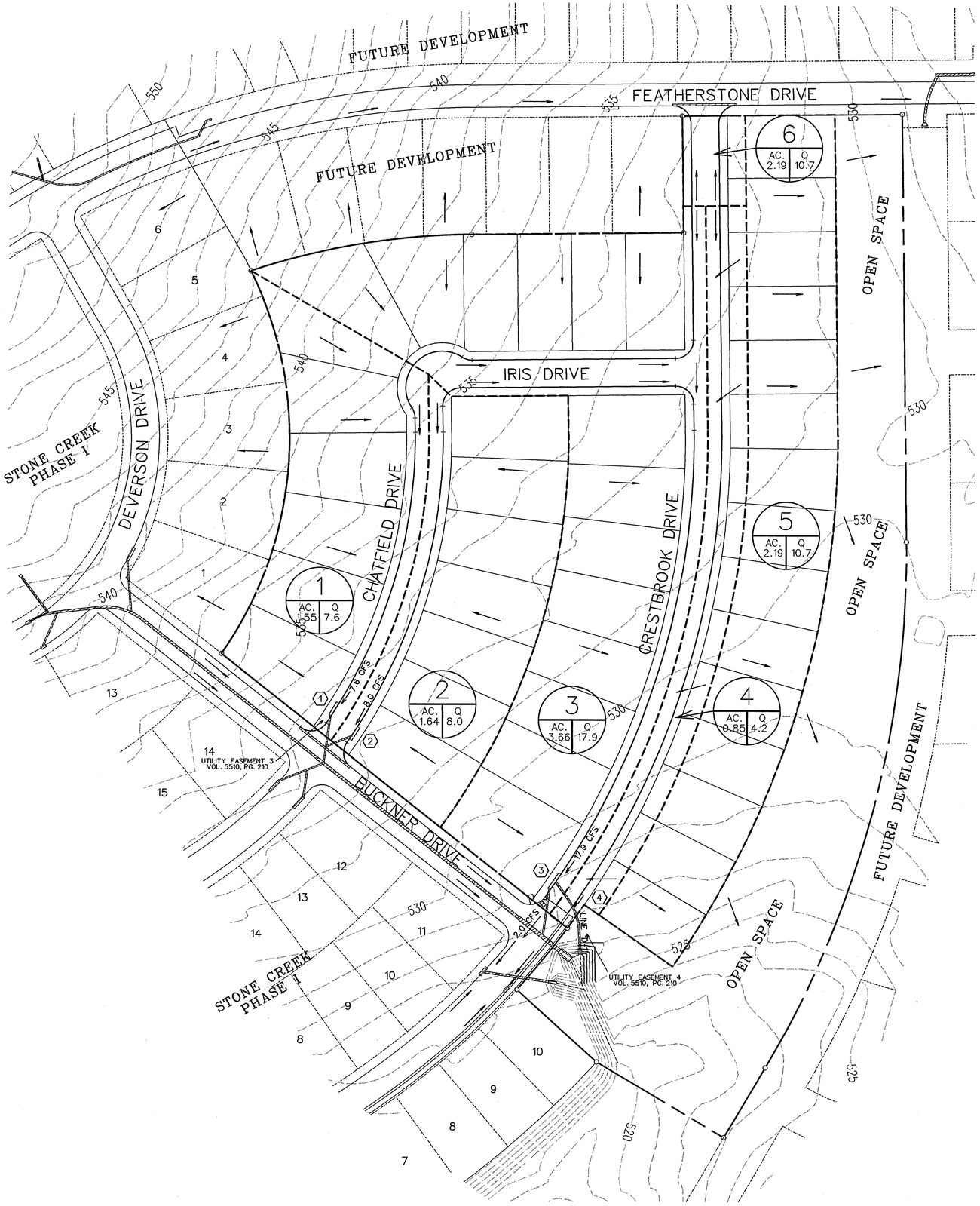
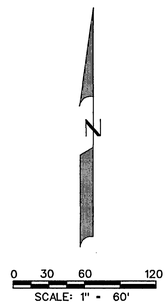




RUNOFF COMPUTATIONS

Area #	Area (sf)	Area (acres)	Runoff Coefficient	Tc (min)	I(100) (in/hr)	Q(100) (cfs)
1	67562	1.55	0.50	10	9.8	7.6
2	71266	1.64	0.50	10	9.8	8.0
3	159351	3.66	0.50	10	9.8	17.9
4	37178	0.85	0.50	10	9.8	4.2
5	95401	2.19	0.50	10	9.8	10.7
6	7041	0.16	0.50	10	9.8	0.8

INLET CALCULATIONS

Inlet #	Location Street	Station	Design Storm Frequency (yrs.)	Time of Conc. (min.)	Intensity I (in/hr)	Runoff Coeff. "C"	Area (acres)	Q (cfs)	Carry-Over from Upstream (cfs)	Gutter Flow (cfs)	Total Gutter Capacity (cfs)	Gutter Slope (ft/ft)	Crown Type	Selected Inlet Length (ft)	Selected Inlet Type	Carry-Over to Down-stream Inlet (cfs)
1	Chatfield	6+16.99	100	10	9.8	0.50	1.55	7.6	0.0	7.6	13.0	0.50%	6" pbl	15	STD.	0.0
2	Chatfield	9+06.74	100	10	9.8	0.50	1.64	8.0	0.0	8.0	13.0	0.50%	6" pbl	15	STD.	0.0
3	Crestfield	13+44.85	100	10	9.8	0.50	3.66	17.9	0.0	17.9	18.0	0.94%	6" pbl	20	STD.	2.0
4	Crestfield	13+44.85	100	10	9.8	0.50	0.85	4.2	0.0	4.2	18.0	0.94%	6" pbl	10	STD.	0.0

LEGEND

- PROP. STORM SEWER
- PROP. CURB INLETS
- PROP. CONC. HEADWALL
- EXIST. STORM SEWER
- DRAINAGE AREA DIVIDE
- FLOW ARROW
- XX / AC. 2.90 Q 14.2 — DRAINAGE AREA NO.

AS-BUILT AUGUST 2012
BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY CONTRACTORS

STATE OF TEXAS
BRANDON DAVIDSON
87682
REGISTERED PROFESSIONAL ENGINEER

The seal appearing on this document was authorized by Brandon Davidson P.E. 87682, on August 16, 2012

NO.	REVISIONS	BY	DATE
1	ADDED LINE 'D-4', INLET • 4	DS	6-1-11

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

DEVELOPMENT PLANS FOR
STONE CREEK PHASE IIA
ROCKWALL, TEXAS

DRAINAGE AREA MAP

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
	CEI	CEI	3 OF 11
JOB NUMBER 11009	DATE MARCH 2011	SCALE: 1"=60'	

DETENTION CALCULATIONS - SOUTH TRIBUTARY UPSTREAM POND - INTERIM DESIGN

ALL CALCULATIONS ARE BASED ON THE POND BUILT IN STONE CREEK PHASE I. NO MODIFICATIONS TO THE EXISTING POND OR OUTFALL ARE NECESSARY BASED ON THESE CALCULATIONS.

ALLOWABLE RELEASE RATE CALCULATIONS

South Tributary Upstream Pond

2-Year Storm

Undeveloped Runoff Calculations

	Area	Area	Existing Runoff	Tc - Existing	Rainfall Intensity	Q - Undeveloped
Area #	(sf)	(acres)	Coefficient	(min)	(in/hr)	(cfs)
3	2951648	67.76	0.35	20	3.9	92.5
		67.76				**92.5**

Post-Development Runoff Calculations

	Area	Area	Existing Runoff	Tc - Existing	Rainfall Intensity	Q - Post Development	Difference between Pre and Post Development Conditions
Area #	(sf)	(acres)	Coefficient	(min)	(in/hr)	(cfs)	
7	3017581	69.3	0.41	10	5.3	149.4	
		69.27				**149.4**	**56.9**

10-Year Storm

Undeveloped Runoff Calculations

	Area	Area	Existing Runoff	Tc - Existing	Rainfall Intensity	Q - Undeveloped
Area #	(sf)	(acres)	Coefficient	(min)	(in/hr)	(cfs)
3	2951648	67.76	0.35	20	5.9	139.9
						139.9

Post-Development Runoff Calculations

	Area	Area	Existing Runoff	Tc - Existing	Rainfall Intensity	Q - Post Development	Difference between Pre and Post Development Conditions
Area #	(sf)	(acres)	Coefficient	(min)	(in/hr)	(cfs)	
7	3017581	69.3	0.41	10	7.1	200.1	
						200.1	**60.2**

25-Year Storm

Undeveloped Runoff Calculations

	Area	Area	Existing Runoff	Tc - Existing	Rainfall Intensity	Q - Undeveloped
Area #	(sf)	(acres)	Coefficient	(min)	(in/hr)	(cfs)
3	2951648	67.76	0.35	20	6.6	156.5
						156.5

Post-Development Runoff Calculations

	Area	Area	Existing Runoff	Tc - Existing	Rainfall Intensity	Q - Post Development	Difference between Pre and Post Development Conditions
Area #	(sf)	(acres)	Coefficient	(min)	(in/hr)	(cfs)	
4 (offsite)	892204	20.48	0.35	20	6.6	47.3	
7	3017581	69.3	0.41	10	8.3	233.9	
						281.2	**124.7**

50-Year Storm

Undeveloped Runoff Calculations

	Area	Area	Existing Runoff	Tc - Existing	Rainfall Intensity	Q - Undeveloped
Area #	(sf)	(acres)	Coefficient	(min)	(in/hr)	(cfs)
3	2951648	67.76	0.35	20	7.5	177.9
						177.9

Post-Development Runoff Calculations

	Area	Area	Existing Runoff	Tc - Existing	Rainfall Intensity	Q - Post Development	Difference between Pre and Post Development Conditions
Area #	(sf)	(acres)	Coefficient	(min)	(in/hr)	(cfs)	
7	3017581	69.3	0.41	10	9	253.6	
						253.6	**75.8**

100-Year Storm

Undeveloped Runoff Calculations

	Area	Area	Existing Runoff	Tc - Existing	Rainfall Intensity	Q - Undeveloped
Area #	(sf)	(acres)	Coefficient	(min)	(in/hr)	(cfs)
3	2951648	67.76	0.35	20	8.3	196.8
						196.8

Post-Development Runoff Calculations

	Area	Area	Existing Runoff	Tc - Existing	Rainfall Intensity	Q - Post Development	Difference between Pre and Post Development Conditions
Area #	(sf)	(acres)	Coefficient	(min)	(in/hr)	(cfs)	
7	3017581	69.3	0.41	10	9.8	276.2	
						276.2	**79.3**

DETENTION STORAGE REQUIREMENTS

DETENTION CALCULATIONS - 2 Year

Storm	Inflow	Area	Future	Future	Future	Rainfall	Inflow	Volume	Volume	Volume	Volume	Outflow
Duration	Duration	(AC.)	"C"	"Kf"	"CA"	intensity	(cfs)	(cubic ft.)	(cubic ft.)	(cubic ft.)	(acre-ft.)	(cfs)
10	20	69.27	0.41	1.00	28.18	5.30	149.4	89614	53843	**35771**	**0.82**	89.7
20	30	69.27	0.41	1.00	28.18	3.90	109.9	131885	80765	**51121**	**1.17**	89.7
30	40	69.27	0.41	1.00	28.18	3.30	93.0	167393	107686	**59707**	**1.37**	89.7
40	50	69.27	0.41	1.00	28.18	2.60	73.3	175847	134608	**41239**	**0.95**	89.7
50	60	69.27	0.41	1.00	28.18	2.30	64.8	194448	161530	**32917**	**0.76**	89.7
60	70	69.27	0.41	1.00	28.18	1.90	53.5	192756	188451	**4304**	**0.10**	89.7
70	80	69.27	0.41	1.00	28.18	1.80	50.7	213046	215373	**-2327**	**-0.05**	89.7
80	90	69.27	0.41	1.00	28.18	1.70	47.9	229954	242294	**-12340**	**-0.28**	89.7
90	100	69.27	0.41	1.00	28.18	1.60	45.1	243481	269216	**-25735**	**-0.59**	89.7

DETENTION CALCULATIONS - 10 Year

Storm	Inflow	Area	Future	Future	Future	Rainfall	Inflow	Volume	Volume	Volume	Volume	Outflow
Duration	Duration	(AC.)	"C"	"Kf"	"CA"	intensity	(cfs)	(cubic ft.)	(cubic ft.)	(cubic ft.)	(acre-ft.)	(cfs)
10	20	69.27	0.41	1.00	28.18	7.10	200.1	120050	58989	**61061**	**1.40**	98.3
20	30	69.27	0.41	1.00	28.18	5.90	166.3	199519	88483	**111036**	**2.55**	98.3
30	40	69.27	0.41	1.00	28.18	4.80	135.3	243481	117978	**125503**	**2.88**	98.3
40	50	69.27	0.41	1.00	28.18	4.00	112.7	270534	147472	**123062**	**2.83**	98.3
50	60	69.27	0.41	1.00	28.18	3.50	98.6	295897	176966	**118930**	**2.73**	98.3
60	70	69.27	0.41	1.00	28.18	3.00	84.5	304351	206461	**97890**	**2.25**	98.3
70	80	69.27	0.41	1.00	28.18	2.80	78.9	331404	235955	**95449**	**2.19**	98.3
80	90	69.27	0.41	1.00	28.18	2.60	73.3	351694	265450	**86245**	**1.98**	98.3
90	100	69.27	0.41	1.00	28.18	2.50	70.5	380439	294944	**85495**	**1.96**	98.3
100	110	69.27	0.41	1.00	28.18	2.30	64.8	388893	324439	**64454**	**1.48**	98.3

DETENTION CALCULATIONS - 25 Year

Storm	Inflow	Area	Future	Future	Future	Rainfall	Inflow	Volume	Volume	Volume	Volume	Outflow
Duration	Duration	(AC.)	"C"	"Kf"	"CA"	intensity	(cfs)	(cubic ft.)	(cubic ft.)	(cubic ft.)	(acre-ft.)	(cfs)
10	20	69.27	0.41	1.00	28.18	8.30	233.9	140340	93698	**46642**	**1.07**	156.2
20	30	69.27	0.41	1.00	28.18	6.60	186.0	223191	140547	**82644**	**1.90**	156.2
30	40	69.27	0.41	1.00	28.18	5.50	155.0	278988	187395	**91593**	**2.10**	156.2
40	50	69.27	0.41	1.00	28.18	4.60	129.6	311114	234244	**76870**	**1.76**	156.2
50	60	69.27	0.41	1.00	28.18	4.00	112.7	338168	281093	**57075**	**1.31**	156.2
60	70	69.27	0.41	1.00	28.18	3.50	98.6	355076	327942	**27134**	**0.62**	156.2
70	80	69.27	0.41	1.00	28.18	3.30	93.0	390584	374791	**15793**	**0.36**	156.2
80	90	69.27	0.41	1.00	28.18	3.10	87.4	419328	421640	**-2312**	**-0.05**	156.2
90	100	69.27	0.41	1.00	28.18	2.90	81.7	441309	468489	**-27180**	**-0.62**	156.2
100	110	69.27	0.41	1.00	28.18	2.70	76.1	456526	515337	**-58811**	**-1.35**	156.2

DETENTION CALCULATIONS - 50 Year

Storm	Inflow	Area	Future	Future	Future	Rainfall	Inflow	Volume	Volume	Volume	Volume	Outflow
Duration	Duration	(AC.)	"C"	"Kf"	"CA"	intensity	(cfs)	(cubic ft.)	(cubic ft.)	(cubic ft.)	(acre-ft.)	(cfs)
10	20	69.27	0.41	1.00	28.18	9.00	253.6	152175	103425	**48750**	**1.12**	172.4
20	30	69.27	0.41	1.00	28.18	7.50	211.4	253626	155138	**98488**	**2.26**	172.4
30	40	69.27	0.41	1.00	28.18	6.10	171.9	309423	206851	**102572**	**2.35**	172.4
40	50	69.27	0.41	1.00	28.18	5.20	146.5	351694	258564	**93131**	**2.14**	172.4
50	60	69.27	0.41	1.00	28.18	4.50	126.8	380439	310276	**70162**	**1.61**	172.4
60	70	69.27	0.41	1.00	28.18	3.90	109.9	395656	361989	**33667**	**0.77**	172.4
70	80	69.27	0.41	1.00	28.18	3.70	104.3	437927	413702	**24225**	**0.56**	172.4
80	90	69.27	0.41	1.00	28.18	3.50	98.6	473435	465415	**8020**	**0.18**	172.4
90	100	69.27	0.41	1.00	28.18	3.30	93.0	502179	517127	**-14948**	**-0.34**	172.4
100	110	69.27	0.41	1.00	28.18	3.00	84.5	507252	568840	**-61589**	**-1.41**	172.4

DETENTION CALCULATIONS - 100 Year

Storm	Inflow	Area	Future	Future	Future	Rainfall	Inflow	Volume	Volume	Volume	Volume	Outflow	
Duration	Duration	(AC.)	"C"	"Kf"	"CA"	intensity	(cfs)	(cubic ft.)	(cubic ft.)	(cubic ft.)	(acre-ft.)	(cfs)	
10	20	69.27	0.41	1.00	28.18	9.80	276.2	165702	117867	**47836**	**1.10**	196.4	
20	30	69.27	0.41	1.00	28.18	8.30	233.9	280679	176800	**103879**	**2.38**	196.4	
30	40	69.27	0.41	1.00	28.18	6.90	194.4	350004	235733	**114270**	**2.62**	196.4	←MAXIMUM STORAGE REQUIRED
40	50	69.27	0.41	1.00	28.18	5.80	163.4	392275	294666	**97608**	**2.24**	196.4	
50	60	69.27	0.41	1.00	28.18	5.00	140.9	422710	353600	**69110**	**1.59**	196.4	
60	70	69.27	0.41	1.00	28.18	4.50	126.8	456526	412533	**43994**	**1.01**	196.4	
70	80	69.27	0.41	1.00	28.18	4.00	112.7	473435	471466	**1969**	**0.05**	196.4	
80	90	69.27	0.41	1.00	28.18	3.70	104.3	500488	530399	**-29911**	**-0.69**	196.4	
90	100	69.27	0.41	1.00	28.18	3.50	98.6	532614	589333	**-56719**	**-1.30**	196.4	

DETENTION POND RELEASE RATE CALCULATIONS

Elevation Calculations Based on Actual Release Rate

Event	Maximum Actual Release Rate	Storage Requirement	Occurs at Elevation
2-year	89.7	59707	515.63
10-year	98.3	125503	517.80
25-year	156.2	91593	516.81
50-year	172.4	102572	517.06
100-year	196.4	114270	517.43

Release Rate Calculations Based on Above Table - 9' Weir

Stage	H	Weir Length	Discharge	Allowable Discharge	Above (Below)	
513.00	0.00	8.00	0.0			
514.00	1.00	8.00	21.0			
515.00	2.00	8.00	59.5			
515.63	2.63	8.00	89.7	92.5	(2.75)	2-year
515.80	2.79	8.00	98.3	139.9	(41.61)	10-year
516.00	3.00	8.00	109.3			
516.81	3.80	8.00	156.2	156.5	(0.36)	25-year
517.06	4.06	8.00	172.4	177.9	(5.50)	50-year
517.43	4.43	8.00	196.4	196.8	(0.40)	100-year
518.00	5.00	8.00	235.2			
519.00	6.00	8.00	309.2			

AS-BUILT AUGUST 2012
BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY CONTRACTORS

STATE OF TEXAS
BRANDON DAVIDSON
87682
REGISTERED PROFESSIONAL ENGINEER
8/16/12

The seal appearing on this document was authorized by Brandon Davidson P.E. 87682, on August 16, 2012

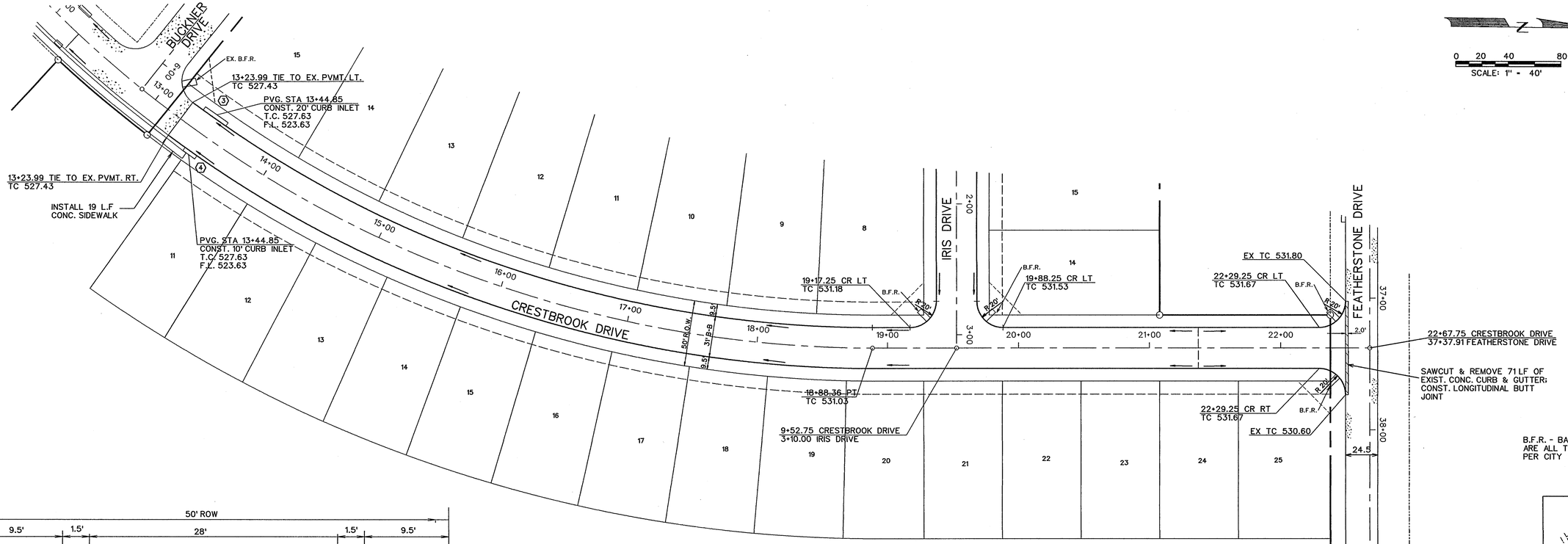
NO.	REVISIONS	BY	DATE

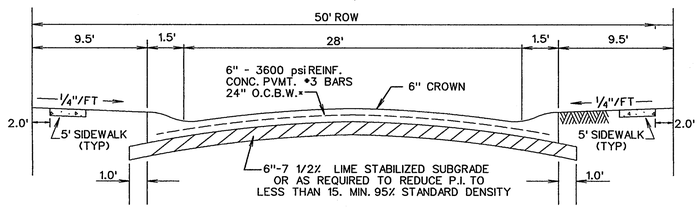
CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972) 396-1200

CONSTRUCTION PLANS FOR
STONE CREEK
PHASE IIA
ROCKWALL, TEXAS

DETENTION CALCULATIONS

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
BDD	BDD	BDD	4 OF 11
JOB NUMBER	DATE	SCALE:	
11009	APRIL 2011	NTS	

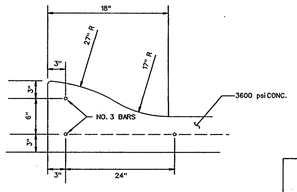




TYPICAL PAVEMENT SECTION - LAYDOWN CURB

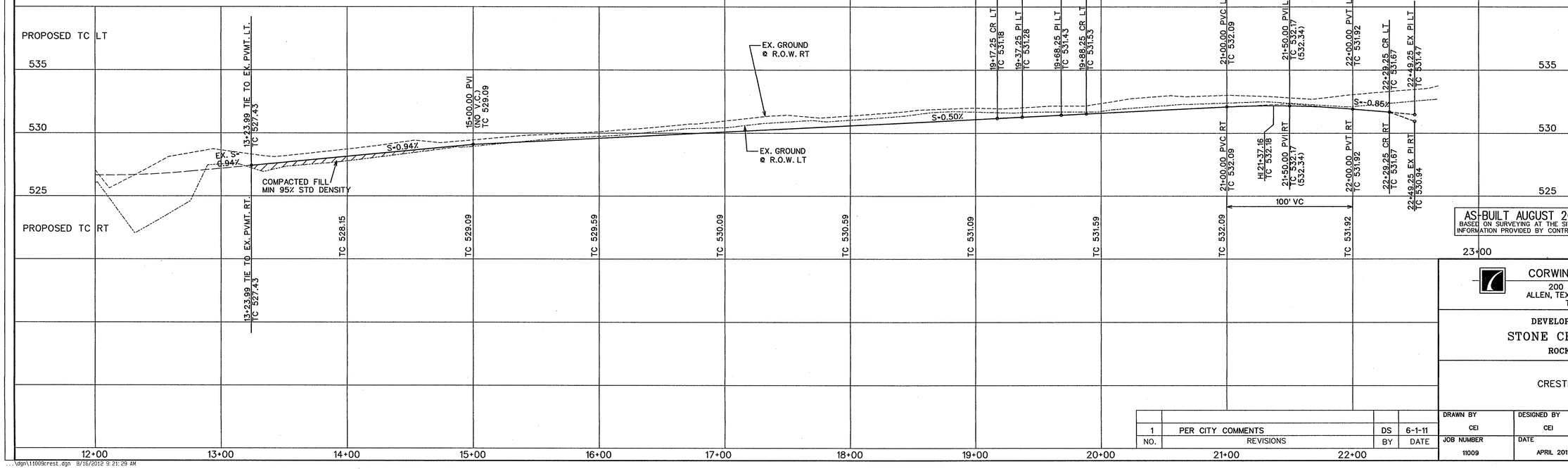
N.T.S.

*MIN. 6 1/2 SACK MIX IF HAND PLACED



MONOLITHIC CURB

N.T.S.



AS-BUILT AUGUST 2012
BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY CONTRACTORS

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BRANDON DAVIDSON
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PROFESSIONAL ENGINEER
8/16/12

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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 IIA

ROCKWALL, TEXAS

CRESTBROOK DRIVE

NO.	REVISIONS	BY	DATE
1	PER CITY COMMENTS	DS	6-1-11

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
CEI	CEI	CEI	5 OF 11
JOB NUMBER	DATE	SCALE: 1"=4' V, 1"=40' H	
11009	APRIL 2011		

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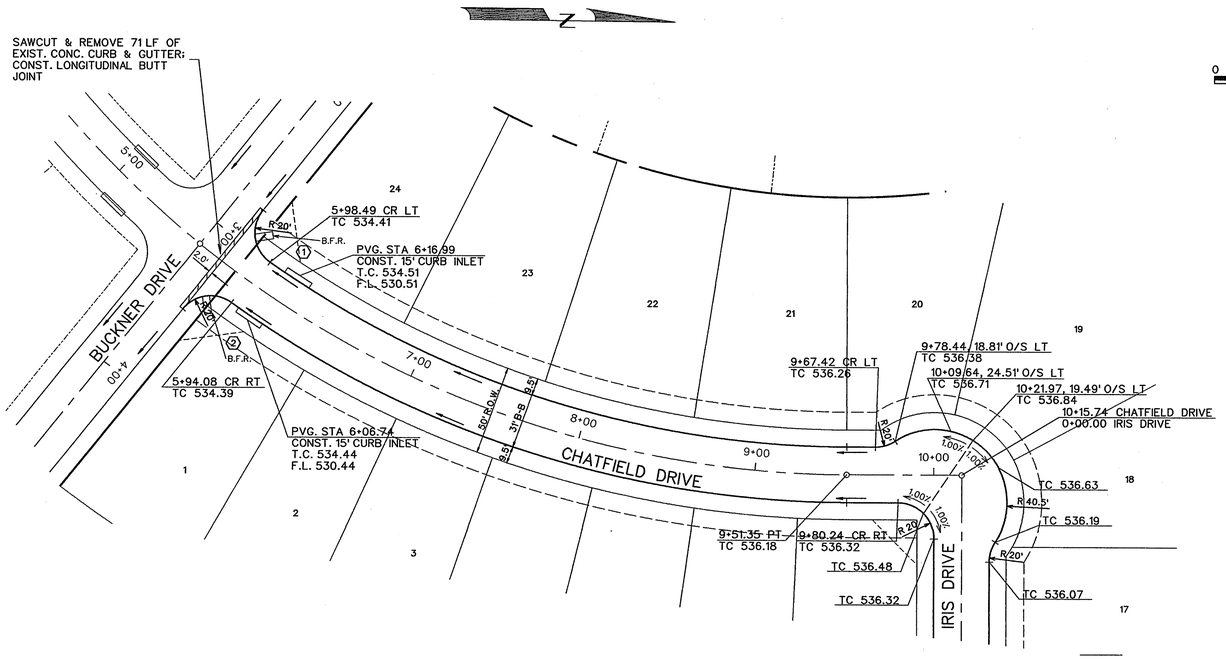
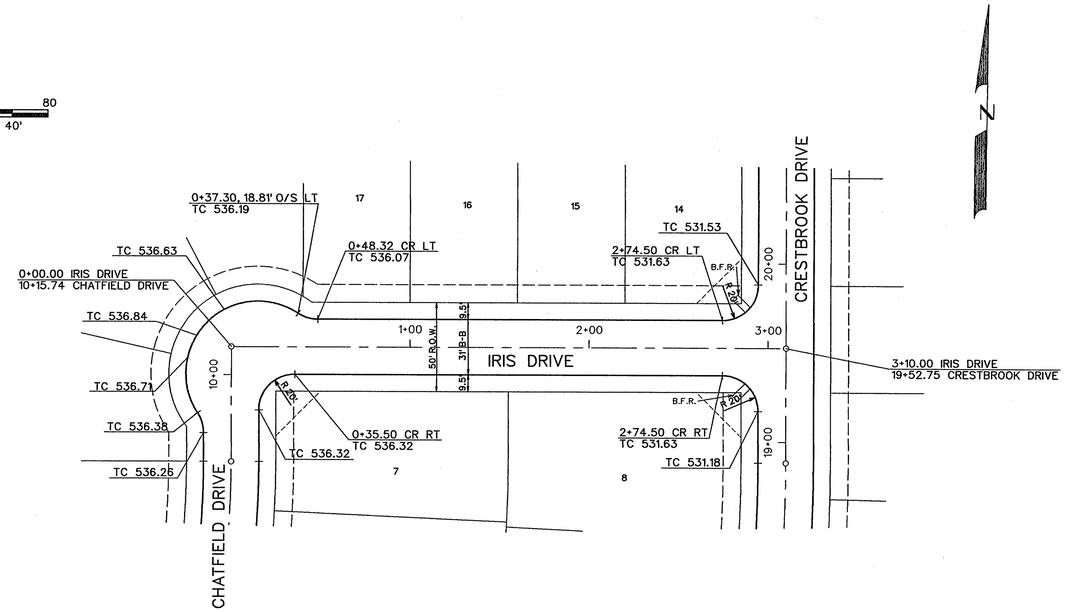
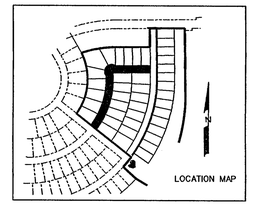


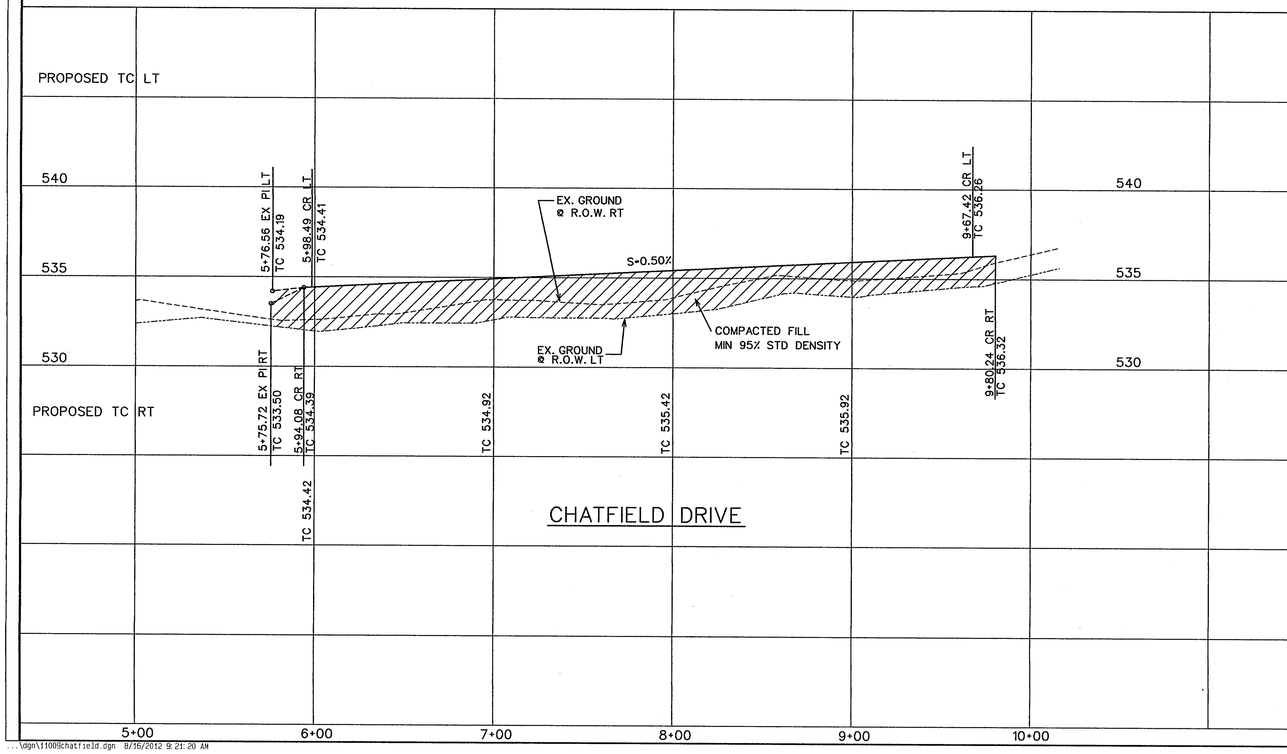
CHATFIELD DRIVE



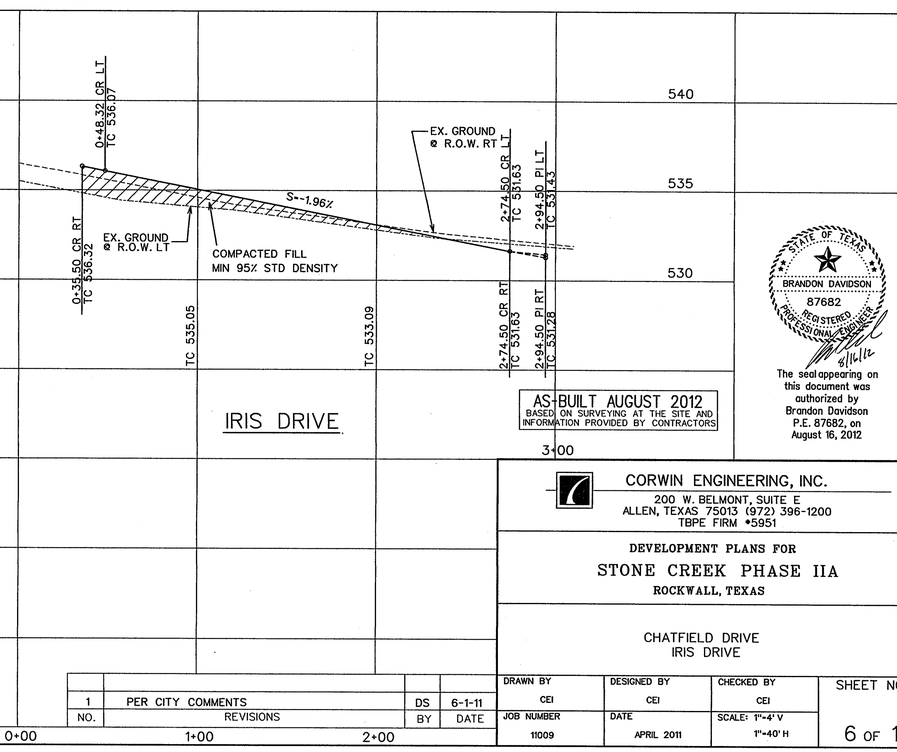
IRIS DRIVE

B.F.R. - BARRIER FREE RAMPS ARE ALL TRUNCATED DOME PLATES PER CITY SPECIFICATIONS





CHATFIELD DRIVE



IRIS DRIVE

AS-BUILT AUGUST 2012
BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY CONTRACTORS

STATE OF TEXAS
BRANDON DAVIDSON
87682
REGISTERED
PROFESSIONAL ENGINEER

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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 IIA
ROCKWALL, TEXAS

CHATFIELD DRIVE
IRIS DRIVE

NO.	REVISIONS	BY	DATE
1	PER CITY COMMENTS	DS	6-1-11

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
CEI	CEI	CEI	6 OF 11
JOB NUMBER	DATE	SCALE: 1"=4' V 1"=40' H	
11009	APRIL 2011		

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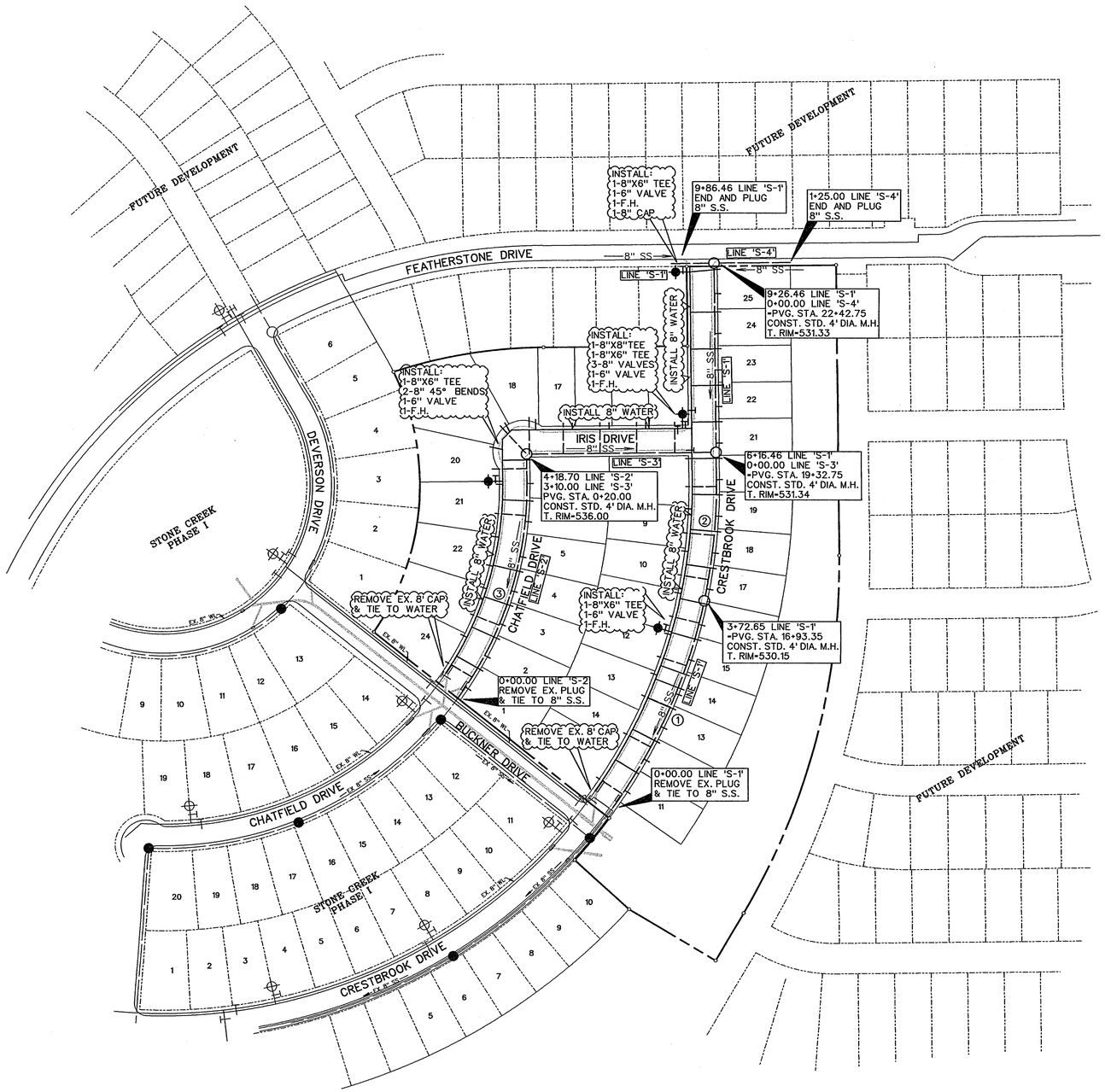


0 50 100 200
SCALE: 1" = 100'

N

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.

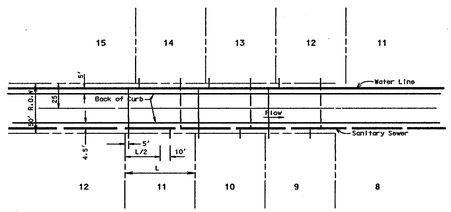
INSTALL BLUE "EMS" DISK ON WATER LINE AT EVERY
CHANGE IN DIRECTION, VALVE, AND SERVICE.

INSTALL GREEN "EMS" DISK ON SANITARY SEWER
LINE AT EVERY CHANGE IN DIRECTION, MANHOLE,
CLEANOUT, AND SERVICE.

ALL MANHOLES TO BE RAVEN EPOXY LINED 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



TYPICAL WATER & SEWER
SERVICE LAYOUT
N.T.S.

	SANITARY SEWER CURVE DATA		
CURVE NO.	①	②	③
Δ	21° 20'33"	14° 52'32"	36° 30'54"
R	905.00'	905.00'	595.00'
T	170.53'	118.14'	196.29'
L	337.11'	234.96'	338.03'

SERVICE SCHEDULE		
TYPE	SIZE	NO.
SANITARY	4"	41
WATER	1"	41

AS-BUILT AUGUST 2012
BASED ON SURVEYING AT THE SITE AND
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8/16/12

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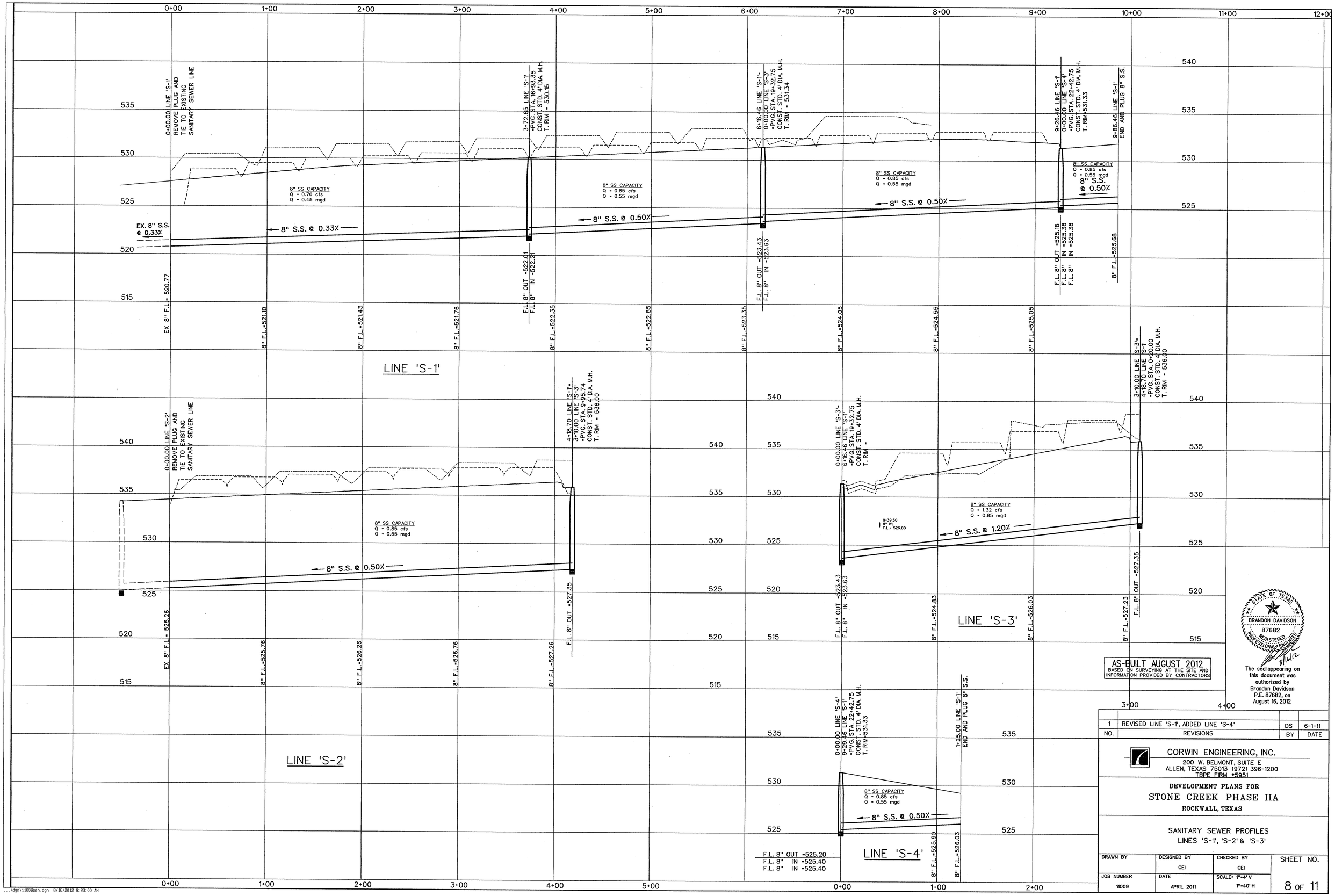
NO.	REVISIONS	BY	DATE
1	REVISED LINE S'-1', ADDED LINE 'S-4'	DS	6-1-11

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

CONSTRUCTION PLANS FOR
STONE CREEK
PHASE IIA
ROCKWALL, TEXAS

WATER AND SANITARY SEWER PLAN

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
CMF	WLC	WLC	7 OF 11
JOB NUMBER	DATE	SCALE:	
11009	APRIL 2011	1"=100'	



AS-BUILT AUGUST 2012
BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY CONTRACTORS

STATE OF TEXAS
BRANDON DAVIDSON
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REGISTERED PROFESSIONAL ENGINEER
8/16/12

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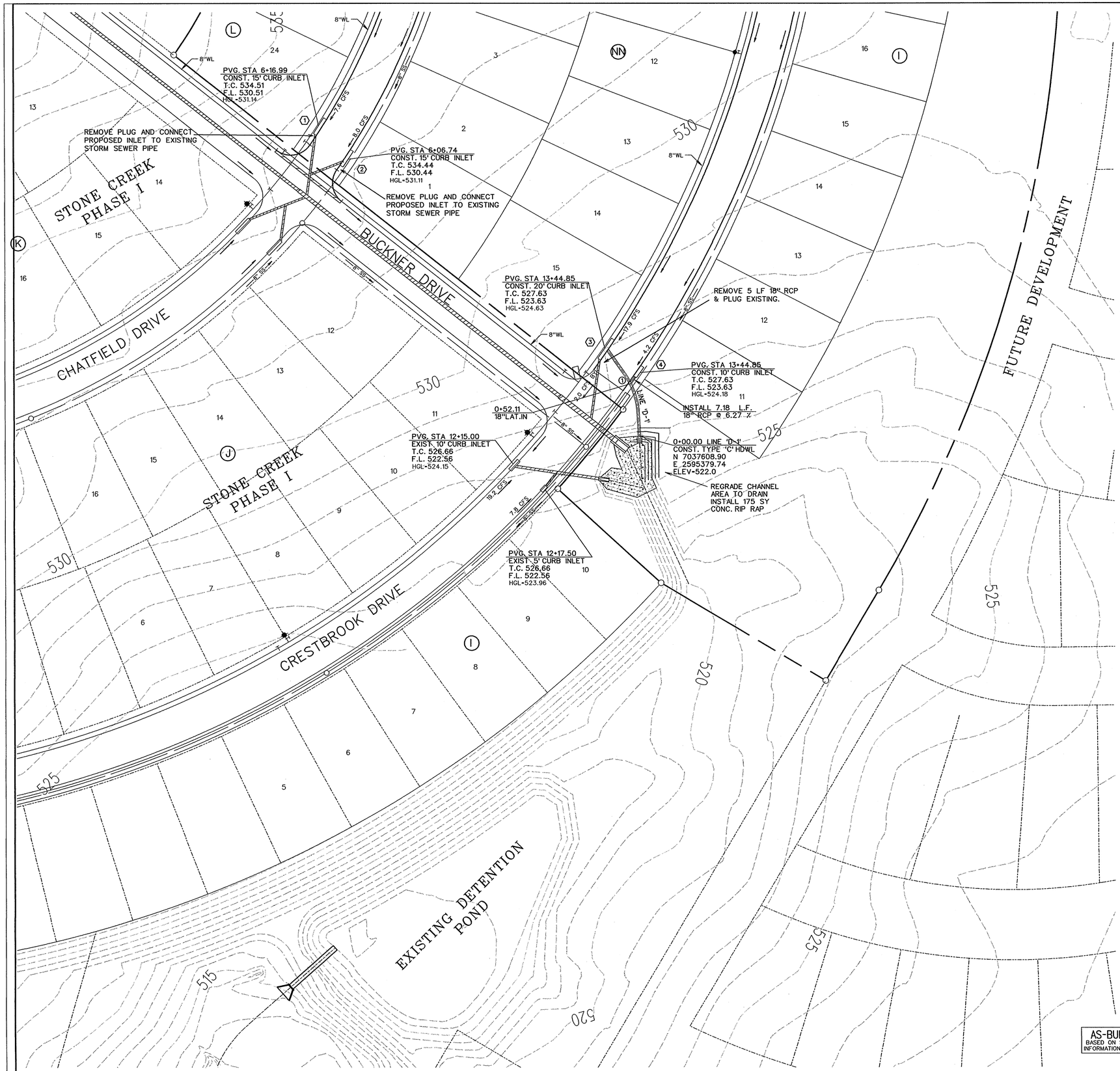
NO.	REVISIONS	BY	DATE
1	REVISED LINE 'S-1', ADDED LINE 'S-4'	DS	6-1-11

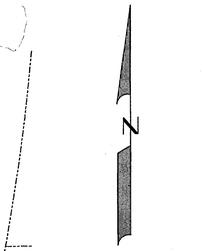
CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972) 396-1200
TBPE FIRM #5951

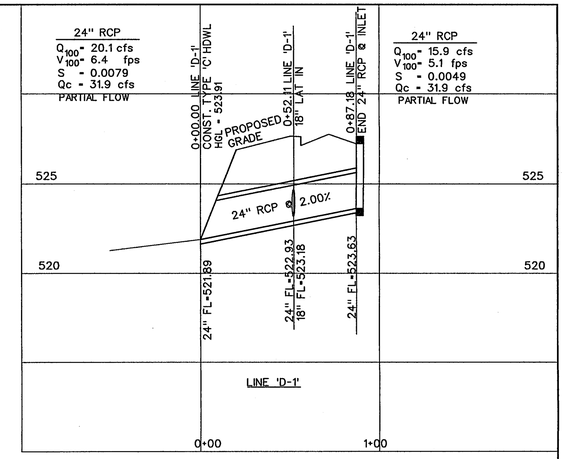
DEVELOPMENT PLANS FOR
STONE CREEK PHASE IIA
ROCKWALL, TEXAS

SANITARY SEWER PROFILES
LINES 'S-1', 'S-2' & 'S-3'

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
	CEI	CEI	
JOB NUMBER	DATE	SCALE: 1"=4' V	
11009	APRIL 2011	1"=40' H	8 OF 11







	STORM SEWER CURVE DATA		
CURVE NO.	①	②	③
Δ	32° 26'28"	° ' "	° ' "
R	65.00'	'	'
T	18.91'	'	'
L	36.80'	'	'

LEGEND

- (B) - BLOCK LABEL
- (19) - INLET NUMBER
- —o— - SANITARY SEWER
- - WATER
- ZZZZZZ - EXISTING STORM SEWER

AS-BUILT AUGUST 2012
BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY CONTRACTORS

STATE OF TEXAS
BRANDON DAVIDSON
87682
REGISTERED PROFESSIONAL ENGINEER
8/16/12

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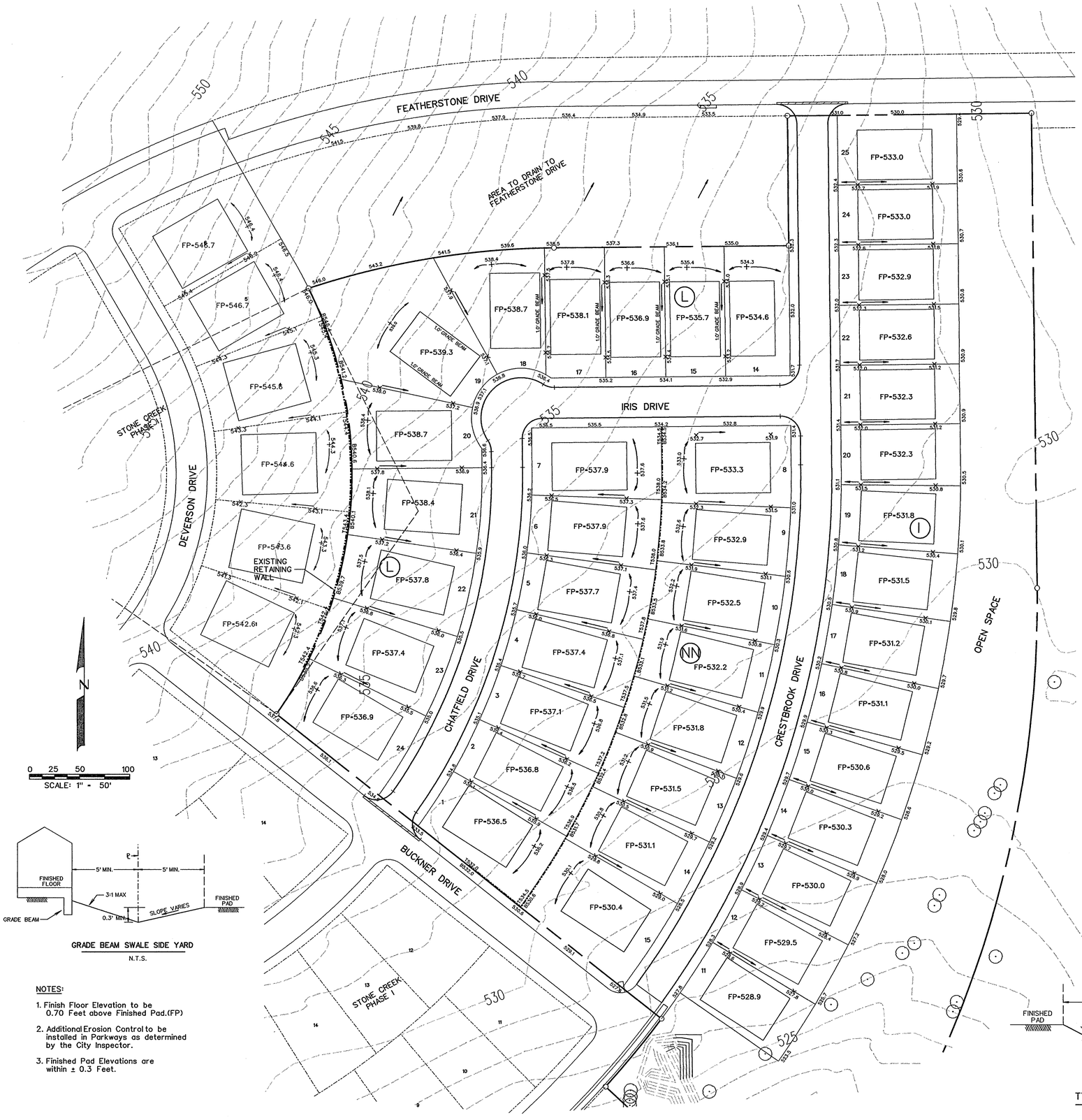
NO.	REVISIONS	BY	DATE
1	ADDED LINE 'D-1', ADDED HGL	DS	6-1-11

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

DEVELOPMENT PLANS FOR
STONE CREEK PHASE IIA
ROCKWALL, TEXAS

STORM SEWER PLAN

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
	CEI	CEI	
JOB NUMBER	DATE	SCALE: 1"=4' V	
11009	APRIL 2011	1"=40' H	9 OF 11

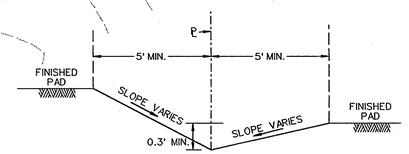


GRADE BEAM SWALE SIDE YARD

N.T.S.

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.



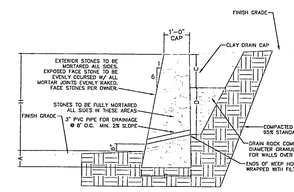
TYPICAL SWALE SIDE YARD

N.T.S.

GENERAL NOTES

1. TYPE S MORTAR REQUIRED.
2. CONTROL JOINTS AT 25' MAXIMUM SPACING.
3. EXPOSED FACE STONES TO BE MINIMUM 10" WIDTH.
4. OWNER / CONTRACTOR RESPONSIBLE FOR RELOCATION OF ANY UTILITY CONFLICTS.
5. MINIMUM TOE SLOPE OF 2% AND MAXIMUM OF 4:1 AT FINISHED GRADE.
6. CONTRACTOR SHALL INSTALL FENCE POST SLEEVES ALONG WALL AS REQUIRED.
7. NO STRUCTURAL SURCHARGE IS ANTICIPATED FOR STRUCTURES LOCATED 1.5H FROM WALL.
8. DESIGN BASED ON CORWIN ENGINEERING, INC. GRADING PLANS PROVIDED BY CONTRACTOR AND TYPICAL SOILS CLASSIFIED AS CLAY (CH) CHARACTERISTICS. PLANS ONLY APPLY FOR THE SITE CONDITIONS AND RETAINED HEIGHTS AS SHOWN.
9. ALL WALLS TO BE BEDDED ON UNDISTURBED SOIL OR ROCK TO MINIMUM DEPTH AS SHOWN.
10. ENGINEER WILL BE NOTIFIED IMMEDIATELY IF SITE CONDITIONS CONFLICT WITH CONSTRUCTION OF WALL.

WALL DIMENSION SCHEDULE - BASED ON CLAY (CH) SOIL						
HEIGHT (H)	1'	2'	3'	4'	5'	6'
BASE DEPTH (A)	6"	6"	9"	12"	15"	18"
BASE WIDTH (B)	12"	14"	18"	20"	28"	36"
CAP DEPTH (C)	FULL	FULL	FULL	24"	24"	24"
GRAVEL DEPTH (D)	N / A	N / A	N / A	24"	24"	24"
BATTER	2"	4"	6"	8"	10"	12"



RETAINING WALL DESIGNED TO BE CONSTRUCTED ON LOTS WITHIN STONE CREEK PH IIA, ROCKWALL, TX

6' MAX HEIGHT GRAVITY RETAINING WALL DETAIL

N.T.S.

STATE OF TEXAS
MICHAEL A. MARSHALL
110099
LICENSED PROFESSIONAL ENGINEER

2-20-12

RETAINING WALL PLAN (6' MAX.)					DIRT SAVERS
STONE CREEK PH IIA, ROCKWALL, TX					824 Mullinary Dr
DRAWN BY	SCALE	DATE	PROJ. NO.	SHEET NO.	Coppell, TX 75019
M.M	N.T.S.	2/20/2012	RPMX-3	1 OF 1	Phone: 469.834.7446

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.

T - GRADE AT TOP OF WALL
B - GRADE AT BOTTOM OF WALL

RETAINING WALL

EXIST. TREE

AS-BUILT AUGUST 2012
BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY CONTRACTORS

STATE OF TEXAS
BRANDON DAVIDSON
87682
REGISTERED PROFESSIONAL ENGINEER
8/24/12

The seal appearing on this document was authorized by Brandon Davidson P.E. 87682, on August 24, 2012

NO.	REVISIONS	BY	DATE
1	PER CITY COMMENTS	DS	6-1-11

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

DEVELOPMENT PLANS FOR
STONE CREEK PHASE IIA
ROCKWALL, TEXAS

GRADING PLAN

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
	CEI	CEI	10 OF 11
JOB NUMBER	DATE	SCALE:	
11009	MARCH 2011	1"=50'	

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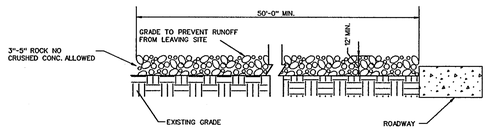
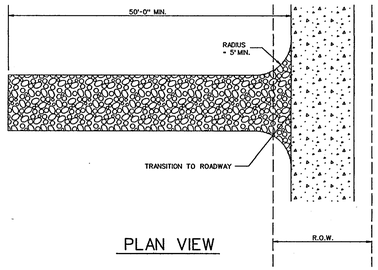


PROFILE

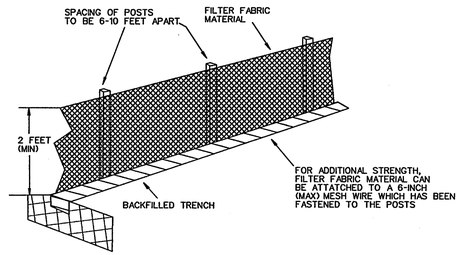


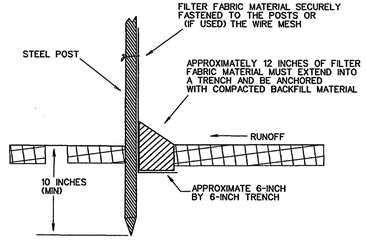
PLAN VIEW

STABILIZED ENTRANCE DETAIL

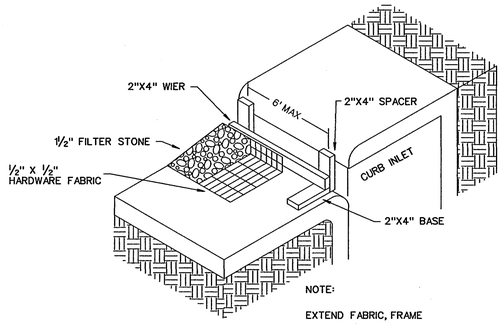
CONSTRUCTION SEQUENCE

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.



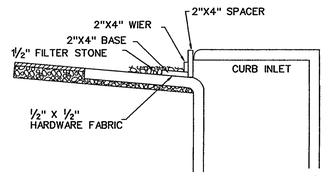


FILTER FABRIC FENCE DETAIL



NOTE:
EXTEND FABRIC, FRAME AND FILTER STONE 12' BEYOND END OF INLET ON BOTH ENDS.

TYPE B CURB INLET PROTECTION



INLET SECTION

LEGEND

SILT FENCE (BEFORE CONSTRUCTION)

INLET PROTECTION

AS-BUILT AUGUST 2012
BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY CONTRACTORS

NO.	REVISIONS	BY	DATE

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

CONSTRUCTION PLANS FOR
STONE CREEK
PHASE IIA
ROCKWALL, TEXAS

POLLUTION PREVENTION PLAN

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
CMF	CEI	CEI	11 OF 11
JOB NUMBER	DATE	SCALE:	
11009	APRIL 2011	1"=100'	

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