

STORM WATER SEWER #520

LOTS 13 - 36 BLOCK 1

LOTS 7 - 51 BLOCK 2

LINDSAY'S ORCHARD ADDITION

PROJECT NO. 468-82944

INDEX CODE 751276

GENERAL NOTES

Rubble from the removal of miscellaneous structures and excess excavation which is to be wasted shall be disposed of on sites to be provided by the Contractor. These sites shall be approved by the Engineer as to suitability, appearance and site location. Locations that, in the opinion of the Engineer, will leave an unsightly appearance will not be approved.

All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiled or disposed of in a flood plain would require a Kansas State Board of Agriculture permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps permitting regulations. Any material buried or stockpiled beyond approved of Engineers construction limits would require additional archeological investigations unless buried in a previously approved borrow location.

The Contractor shall notify pipeline companies at least 24 hours in advance of any work being performed across and/or adjacent to pipelines.

Trees and shrubs in public right-of-way which are in direct conflict with proposed new construction shall be removed by the Contractor with the Engineer's approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage.

The Contractor shall give all property owners and/or tenants of developed property directly abutting the construction of this project a minimum of ten (10) days advance notice prior to start of construction.

The Contractor shall be responsible for preserving property irons. The Contractor will be required to re-establish any property irons which are damaged or destroyed by his construction operations. Such irons shall be re-established by a licensed land surveyor in accordance with state laws.

Contractor will be required to provide a minimum advance notice of twenty-four (24) hours to utility companies prior to starting any excavation as follows:

Kansas One-Call 687-2470

The Contractor must notify the following in case of an emergency:

Cablevision	262-4270 or 263-2061
K.G.&E. Gas	383-8650
K.G.&E. Electric	383-8600
Peoples Natural Gas Company	942-8350 or 263-8161
Southwestern Bell Telephone Company	1-571-2011
City of Wichita Water Department	268-4808
City of Wichita Sewer Maintenance	268-4071

Two lane traffic shall be maintained on Maize Road at all times during construction.

All areas disturbed by this project are to be seeded with Fescue, Fertilized and mulched per City of Wichita Standard specifications.

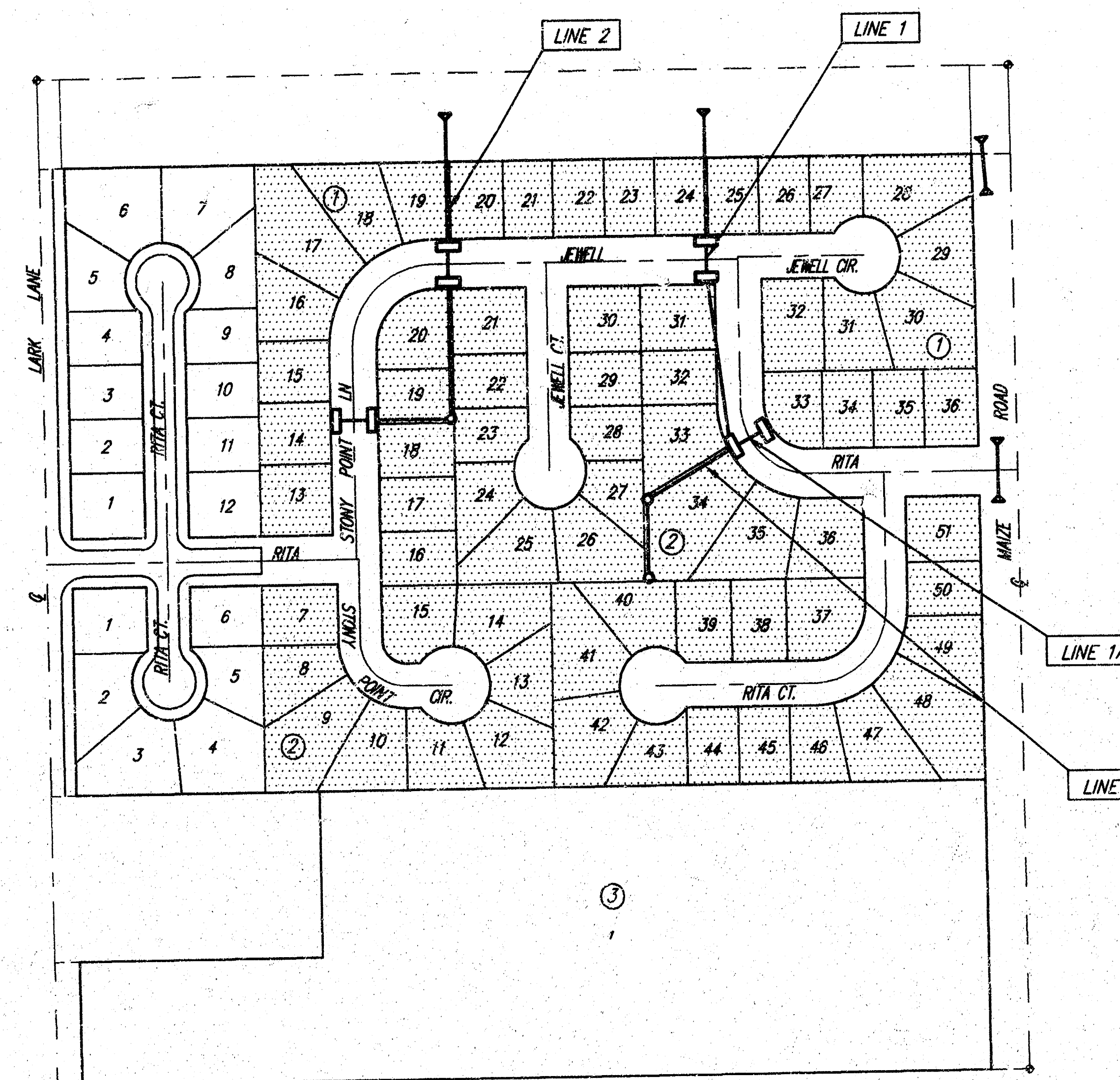
Haybale sediment barriers are to be installed around all curb inlets and manholes constructed with this project. Haybale sediment barriers and silt fence shall be incidental to the bid item for erosion control.

BENCH MARKS

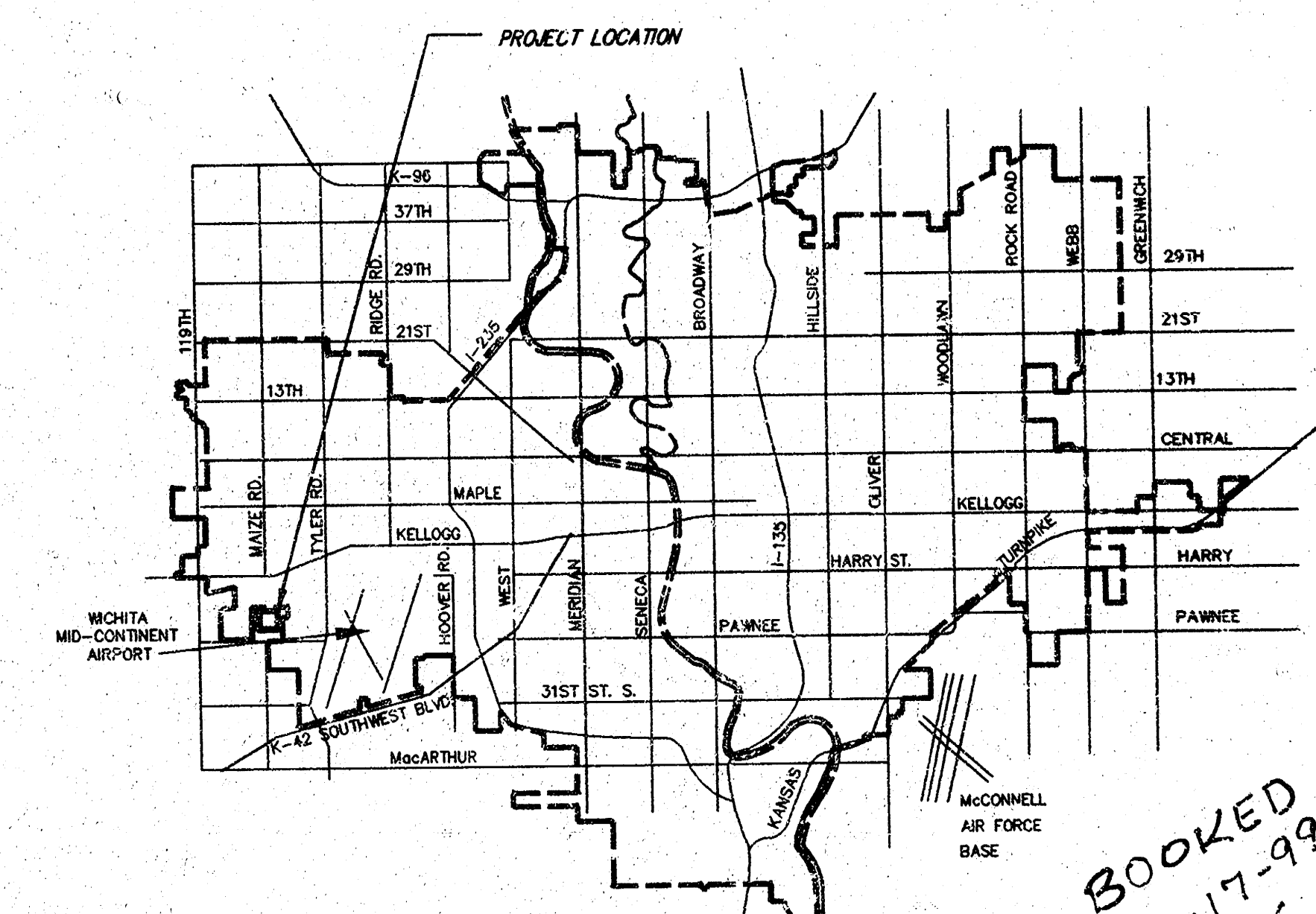
BM #1 - COW BENCH MARK, NORTH END, WEST HEADWALL RCBC UNDER LARK LANE, 1/2 MILE NORTH OF PAWNEE
ELEV.=139.20

INDEX OF SHEETS

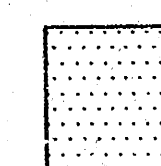
1. TITLE SHEET
- 2-5. PLAN AND PROFILE
6. DITCH GRADING
7. STANDARD TYPE 1A DETAILS
8. SHALLOW TYPE P MANHOLE DETAILS
9. MISCELLANEOUS SWS DETAILS
10. PLAT COPY



SCALE 1" = 150'

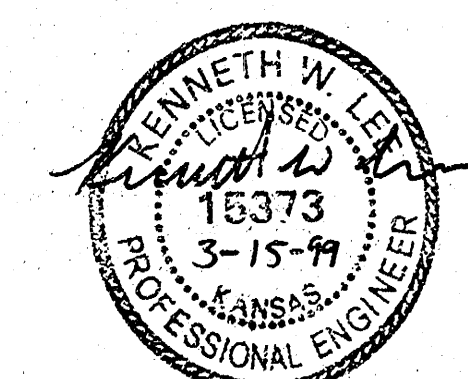


VICINITY MAP



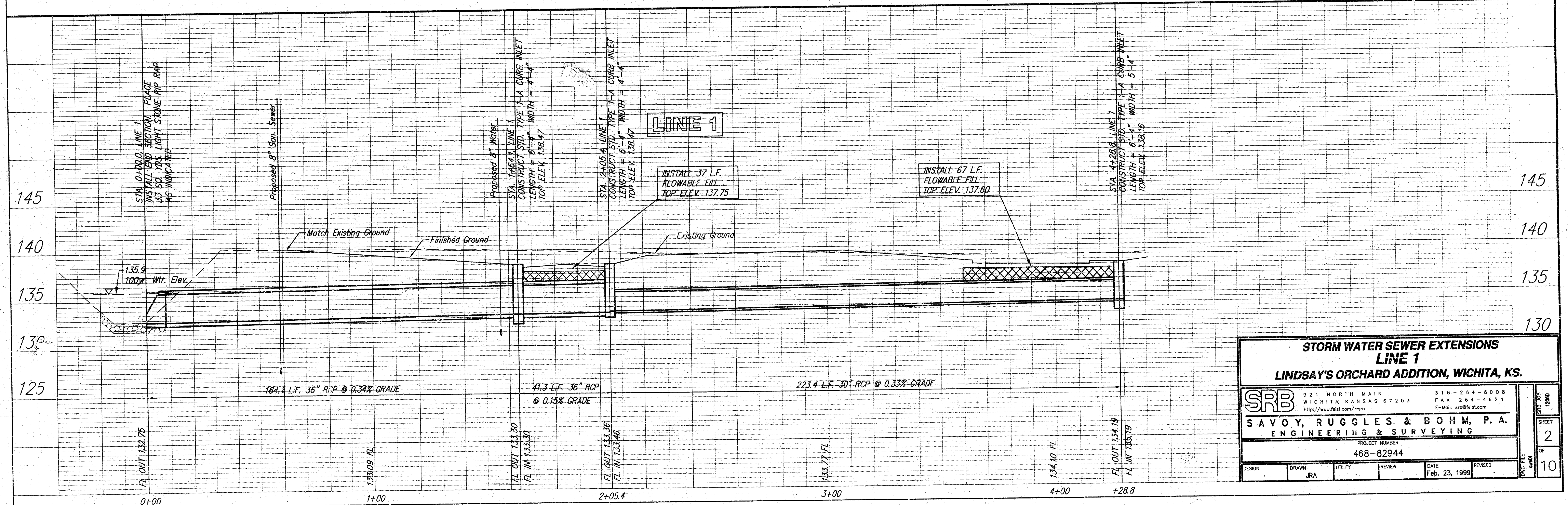
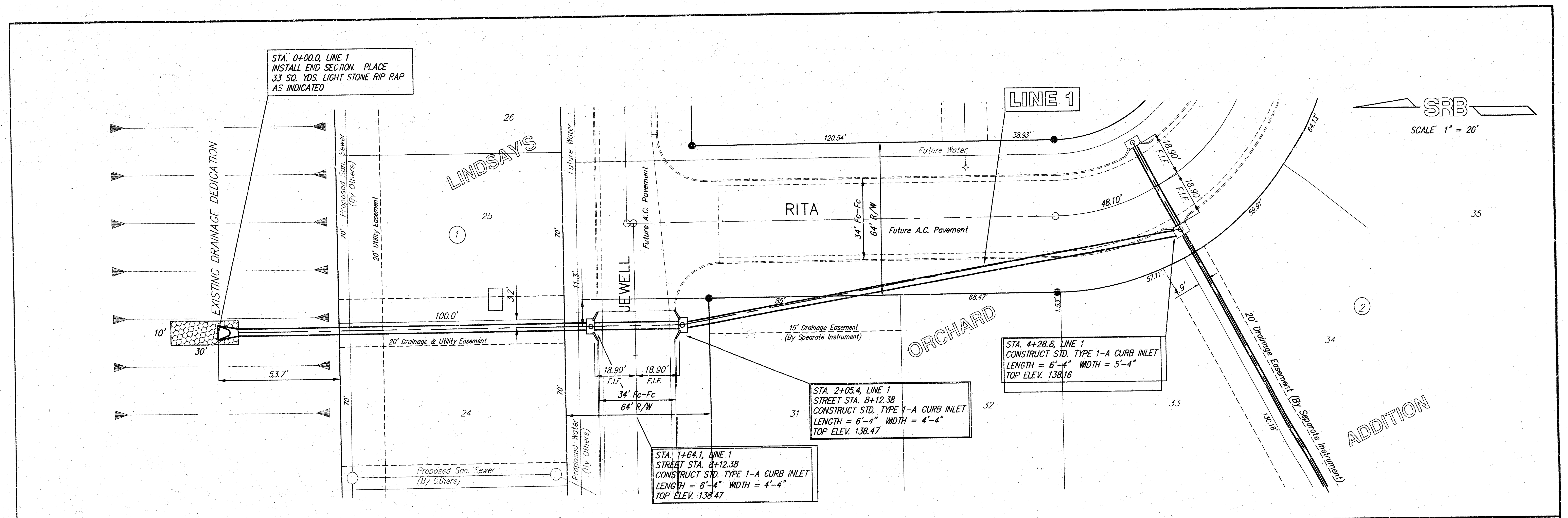
IMPROVEMENT DISTRICT

CITY OF WICHITA, KANSAS
MICHAEL E. LINDEBAK, P.E.

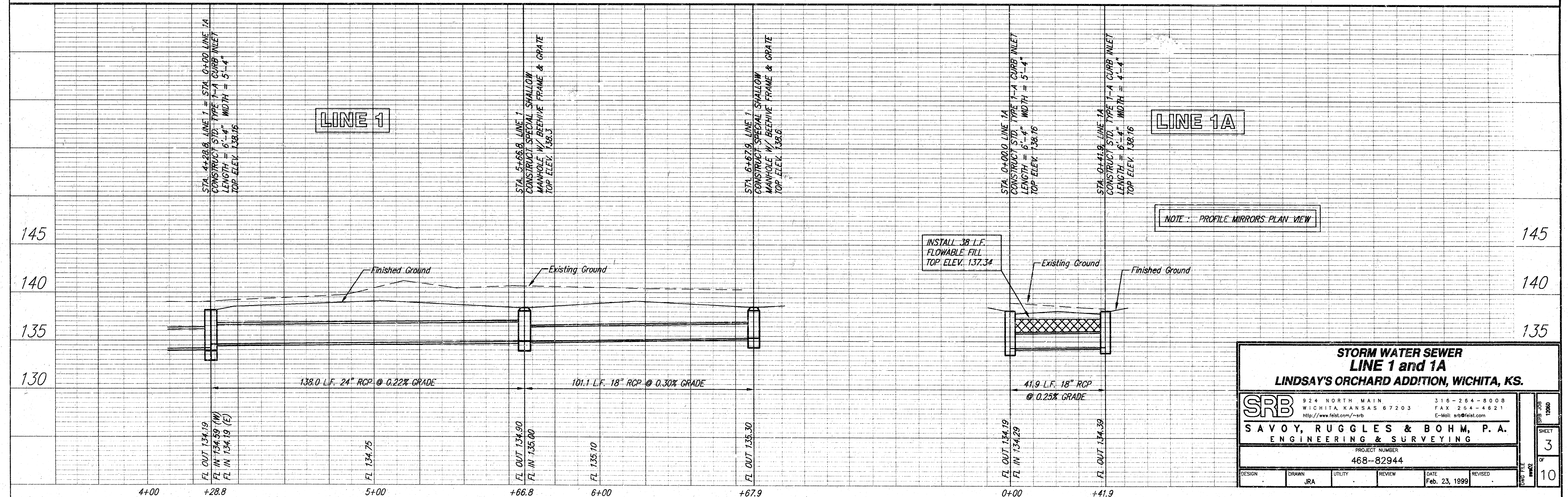
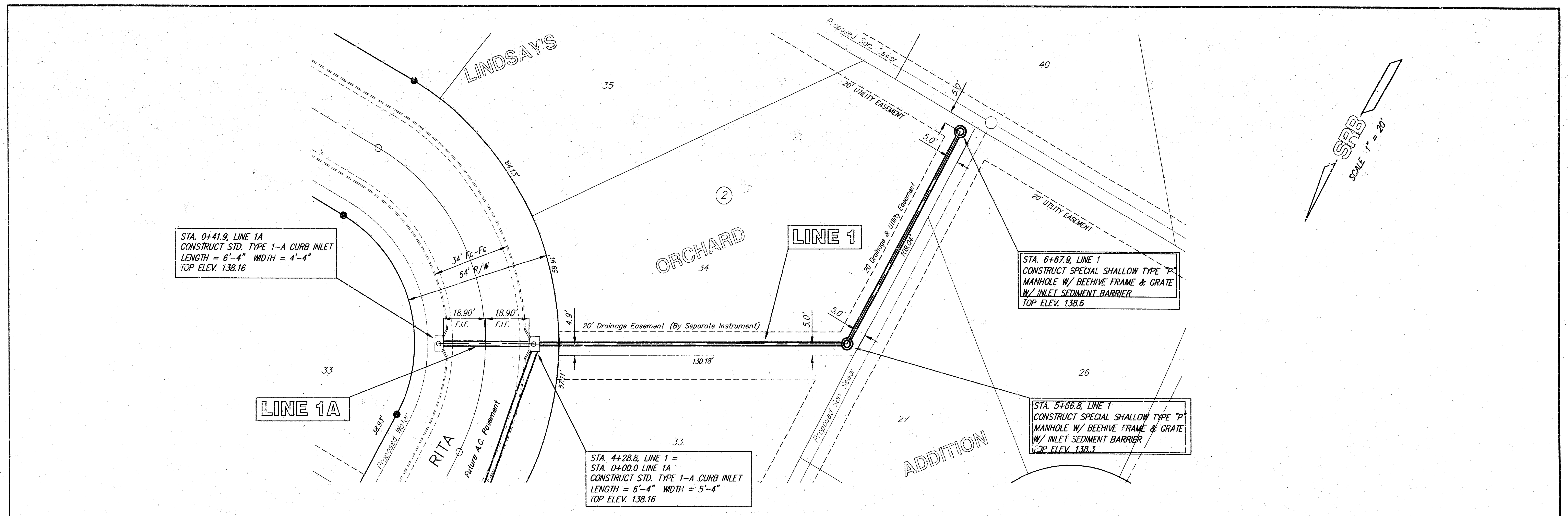


SRB 924 NORTH MAIN 316-264-8008
WICHITA, KANSAS 67203 FAX 264-4621
SAVOY, RUGGLES & BOHM, P. A.
ENGINEERING & SURVEYING

BOOKED
11-17-99
MCE
D-441



STORM WATER SEWER EXTENSIONS					
LINE 1					
LINDSAY'S ORCHARD ADDITION, WICHITA, KS.					
SRB		924 NORTH MAIN WICHITA, KANSAS 67203 http://www.fest.com/~srb		316-264-8008 FAX 264-4621 E-Mail: srb@fest.com	
SAVOY, RUGGLES & BOHM, P. A.					
ENGINEERING & SURVEYING					
PROJECT NUMBER 468-82944					
DESIGN	DRAWN	UTILITY	REVIEW	DATE	REVISED
	JRA			Feb. 23, 1999	
SHEET 2					OF 10



**STORM WATER SEWER
LINE 1 and 1A
LINDSAY'S ORCHARD ADDITION, WICHITA, KS.**

SRB 924 NORTH MAIN 316-264-8008
WICHITA, KANSAS 67203 FAX 264-4621
http://www.srb.com/~srb E-Mail: srb@srbs.com

SAVOY, RUGGLES & BOHM, P.A.
ENGINEERING & SURVEYING

PROJECT NUMBER
468-82944

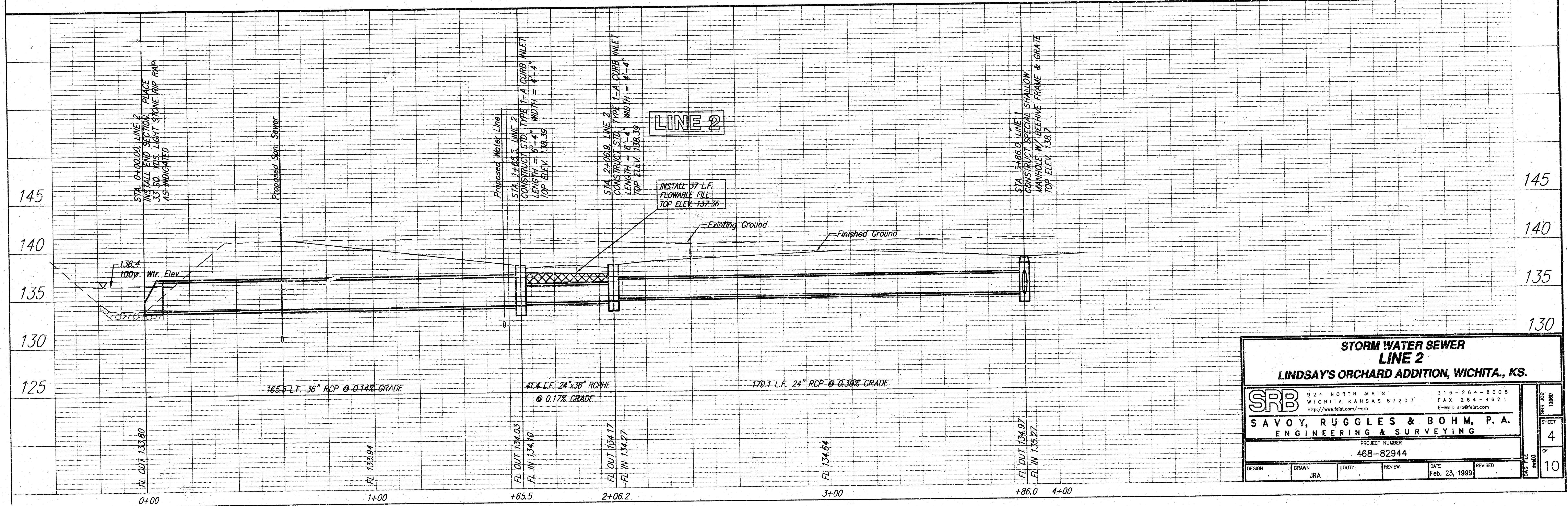
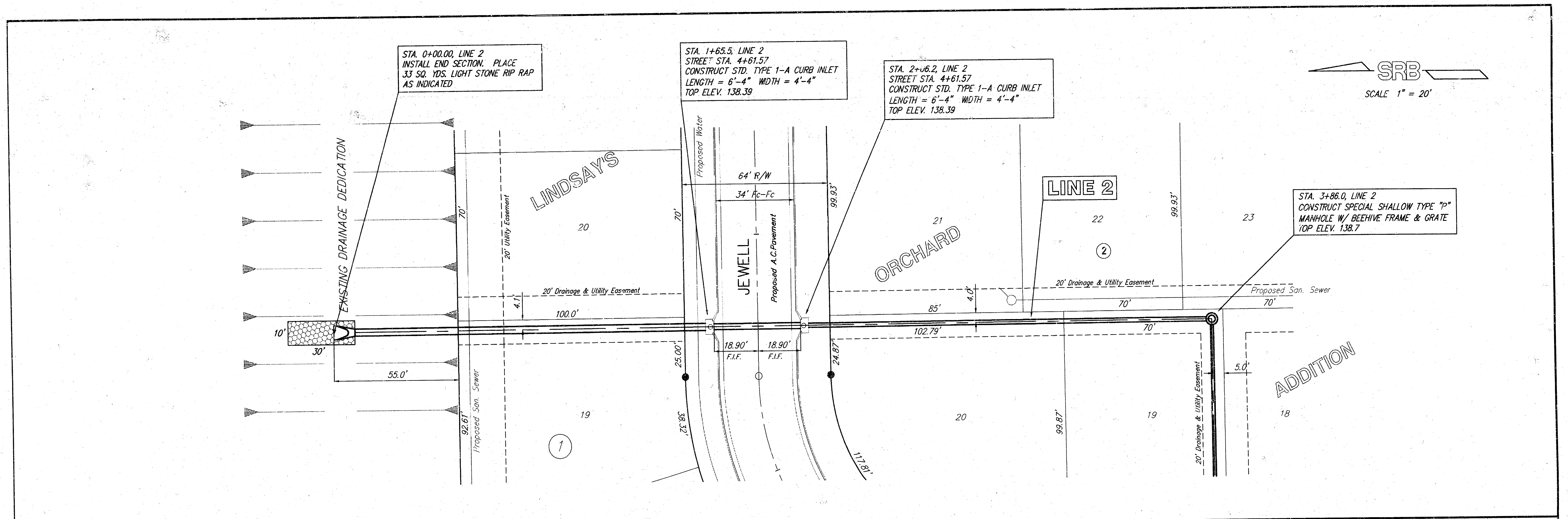
DESIGN	DRAWN	CHECKED	REVIEW	DATE	REVISED
	JRA			Feb. 23, 1999	

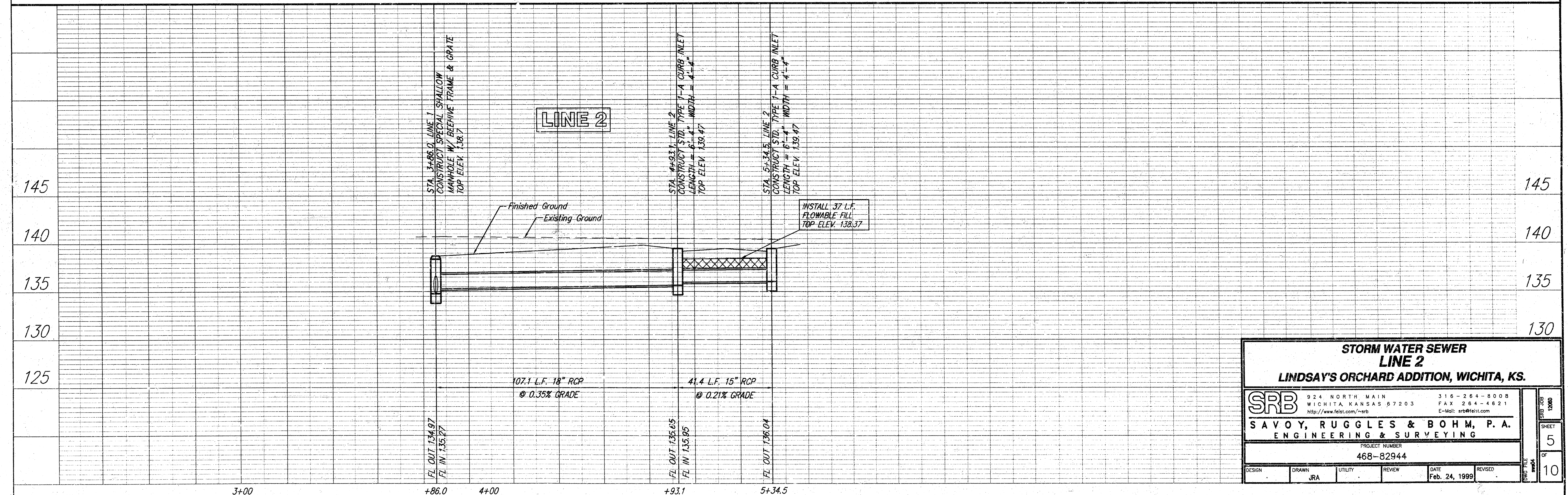
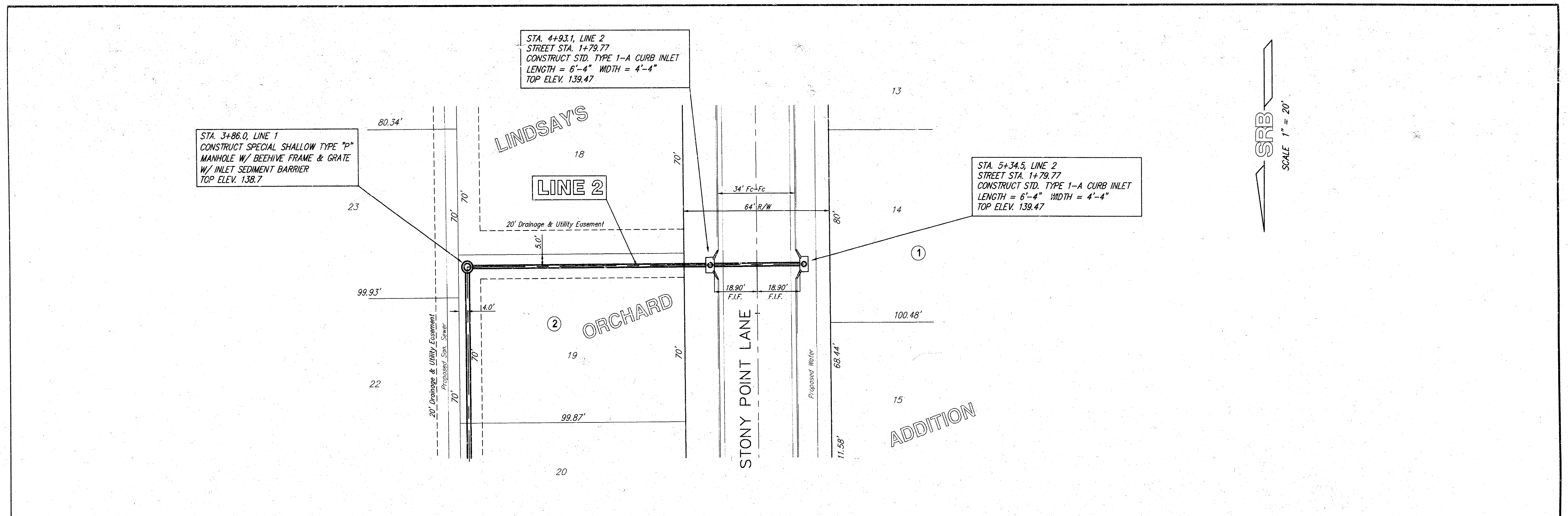
DATE: FEB 23, 1999

10000

3

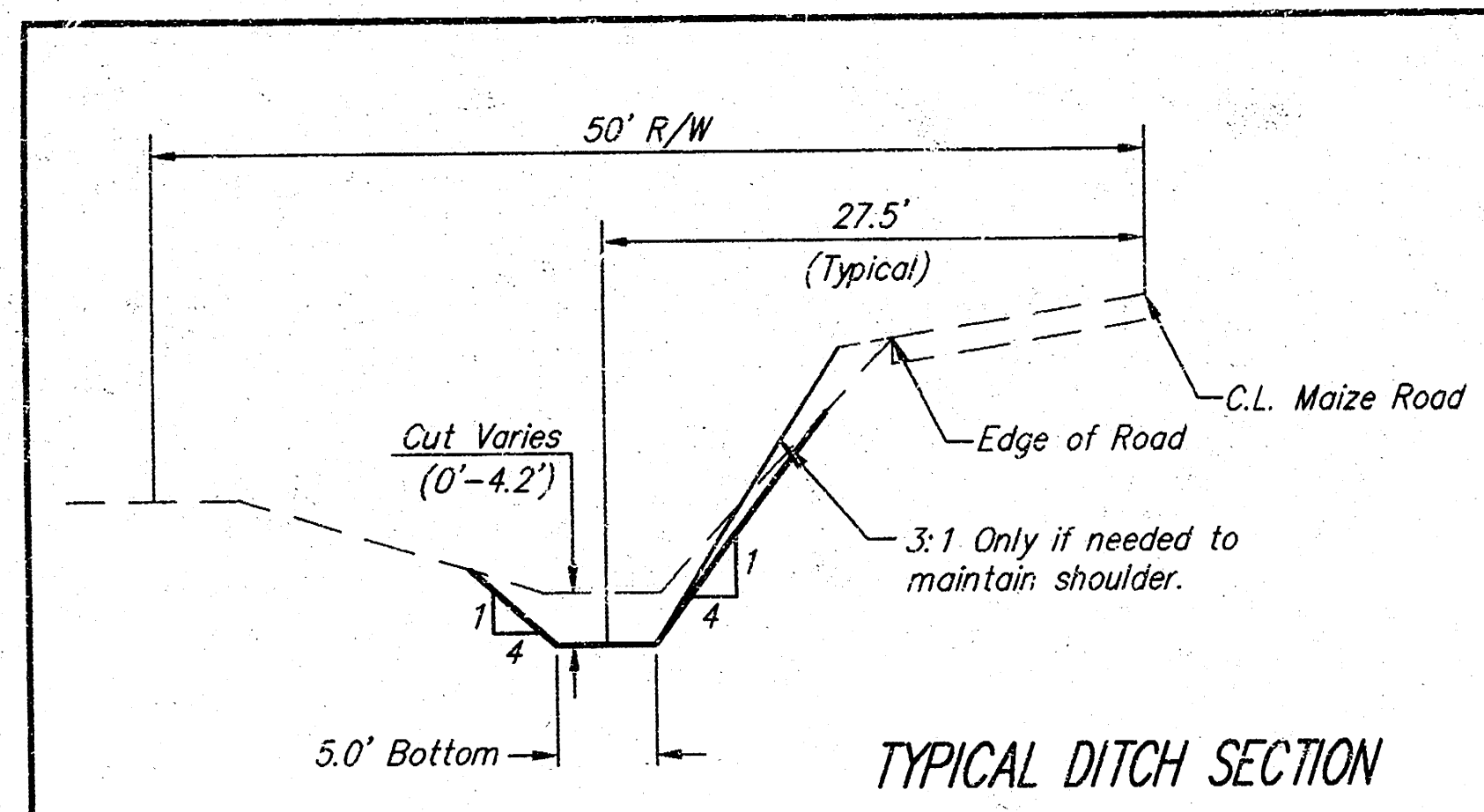
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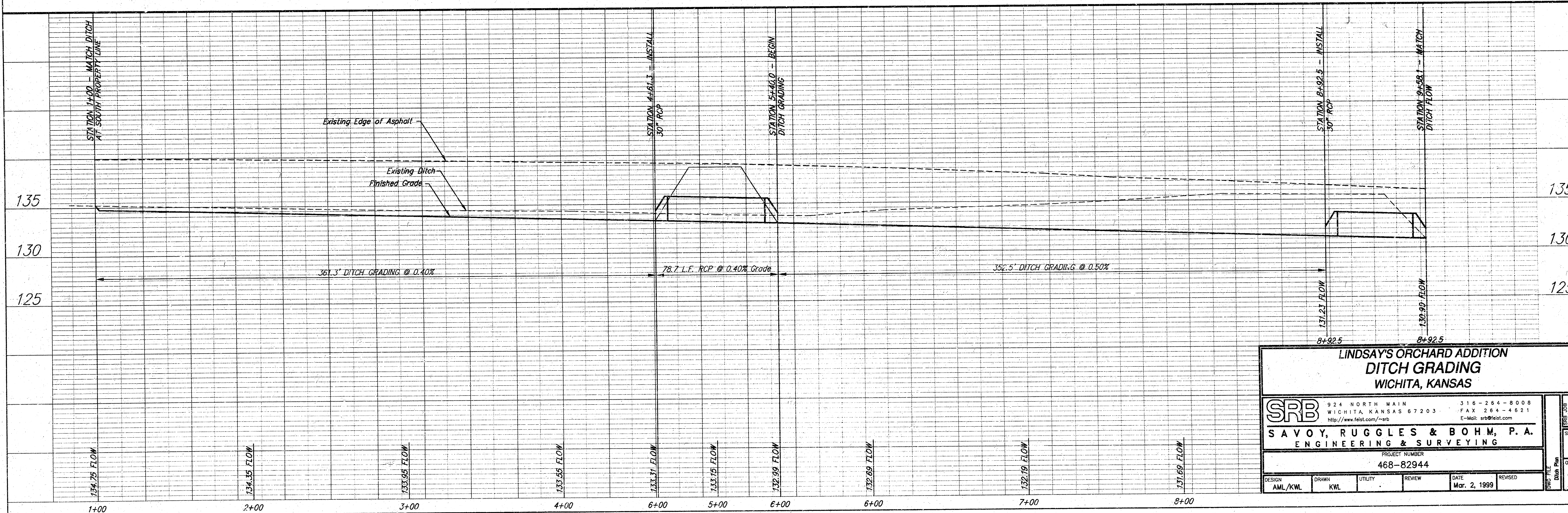
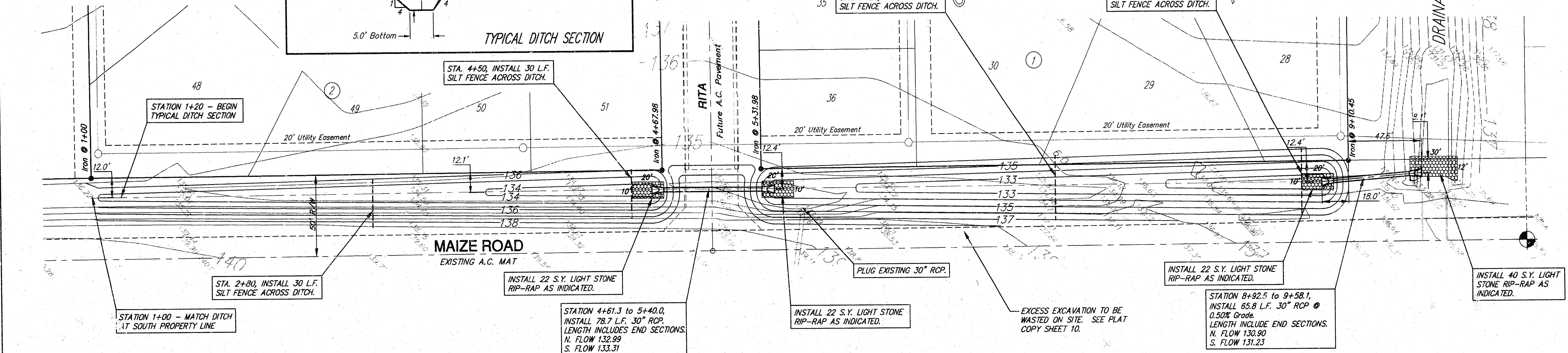


STORM WATER SEWER LINE 2 LINDSAY'S ORCHARD ADDITION, WICHITA, KS.					
SRB		924 NORTH MAIN WICHITA, KANSAS 67203 http://www.felst.com/~srb		316-264-8008 FAX 264-4621 E-Mail: srbs@felst.com	
SAVOY, RUGGLES & BOHM, P.A. ENGINEERING & SURVEYING					
PROJECT NUMBER 468-82944					
DESIGN	DRAWN	UTILITY	REVIEW	DATE	REVISED
	JRA			Feb. 24, 1999	
SHEET 5					10

SRB
SCALE
1" = 30' PLAN
1" = 5' PROFILE (VERT.)



NOTE: East ditch slope shall be increased to 3:1 as necessary to maintain existing shoulder.



LINDSAY'S ORCHARD ADDITION
DITCH GRADING
WICHITA, KANSAS

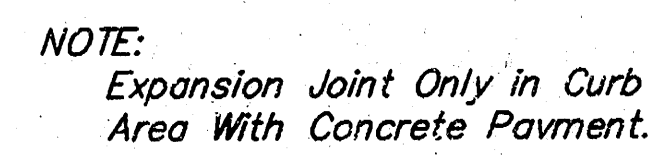
SRB
924 NORTH MAIN
WICHITA, KANSAS 67203
316-264-8008
FAX 264-4621
http://www.fest.com/~srb
E-Mail: srb@fest.com

SAVOY, RUGGLES & BOHM, P.A.
ENGINEERING & SURVEYING

PROJECT NUMBER
468-82944

DESIGN AML/KWL	DRAWN KWL	UTILITY	REVIEW	DATE Mar. 2, 1999	REVISED
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1000
SHEET
6
OF
10



NOTE:
Concrete Tops to be installed on thin mortar cushion to insure full support along brick walls. Concrete tops may be cast in place or precast. Concrete used for inlet construction shall be concrete pavement mix with air entrainment.



The ends of all pipes installed in inlets shall be cut off flush with the inside face of the inlet wall

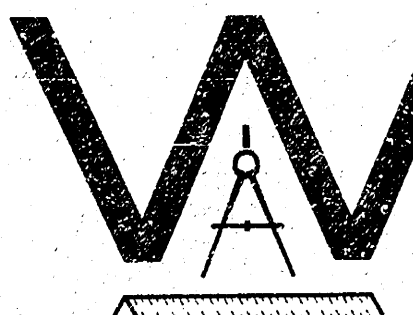
The ends of all pipes installed in inlets shall be cut off flush with the inside face of the inlet wall



SECTION B-B



THE CITY OF WICHITA

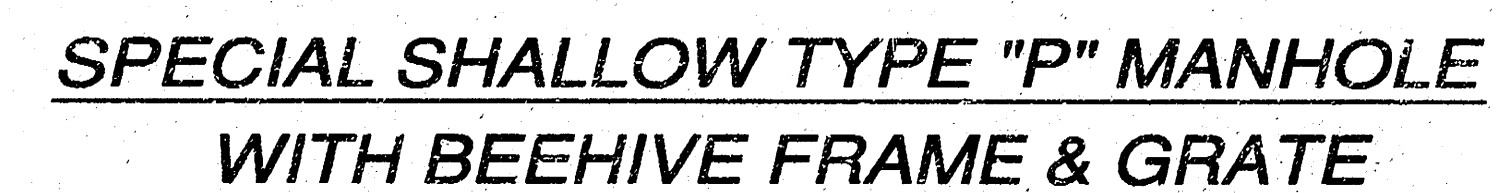


CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MARK STREET
WICHITA, KANSAS 67202
(316) 268-4501
(316) 268-4114 FAX

DATE 11-2-88 SHEET 7 OF 10



CONCRETE SLAB DETAILS



- ## GENERAL NOTES
1. ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISIONS OF A.S.T.M. C478 AS MODIFIED BY THE SPECIFICATIONS.
 2. NON-SHRINK GROUT SHALL BE NON-METALLIC TYPE.
 3. APPROVED FLEXIBLE WATERSTOP GASKETS SHALL BE INSTALLED TO JOIN THE SEWER TO THE MANHOLE WALL WHEN A.B.S. COMPOSITE PIPE OR P.V.C. PIPE IS USED. FOR OTHER TYPES OF SEWER PIPE THE JOINT SHALL BE GROUTED IN PLACE WITH NON-SHRINK GROUT. THE SEWER PIPE SHALL BE SUPPORTED WITH CONCRETE ENCASEMENT A MINIMUM OF 3 FEET FROM THE MANHOLE WALL AND TO THE FIRST JOINT FOR V.C.P. SUCH THAT THE JOINT REMAINS FLEXIBLE.
 4. ALL INSIDE SURFACES OF THE CONCRETE MANHOLE WHICH WOULD BE EXPOSED TO SEWER GAS SHALL BE COATED WITH 2 COATS TRENAC SERIES 66 HI-BUILD EPOXYLINE, DRY THICKNESS OF 8 MILS (MIN.)
 5. EXTERIOR MANHOLE WALLS SHALL BE COATED WITH 1 COAT MOBILARMA 633 BITUMINOUS COATING.
 6. JOINT SEALING COMPOUND SHALL BE KENT SEAL NO. 2 OR APPROVED EQUAL.
 7. PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO THE MANHOLE BASE.
 8. TOP OF MANHOLE FLOOR SLAB SHALL BE AT LEAST 3 INCHES BELOW THE FLOW LINE OF THE OUTLET PIPE TO INSURE SUFFICIENT MINIMUM THICKNESS OF SHAPED INVERT.
 9. LIFTING HOLES SHALL BE FILLED WITH NON-SHRINK GROUT AND THE INTERIOR SURFACE COATED AS SPECIFIED.
 10. MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 BAGS OF CEMENT PER CUBIC YARD. CONCRETE USED IN MANHOLE BASES SHALL BE TYPE 1. A CONCRETE THROUGHOUT MORTAR SHALL BE PLACED AROUND THE MANHOLE RING AS SHOWN ON THE DRAWINGS WHEN MANHOLES ARE CONSTRUCTED IN UNPAVED AREAS. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE SMALLER THAN 36" SHALL HAVE AN INSIDE DIAMETER OF 36" MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE 24" OR LARGER SHALL HAVE AN INSIDE DIAMETER OF 5". COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATER TIGHT.
 11. REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES AND SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED AT LEAST 3" ABOVE THE BOTTOM OF THE MANHOLE BASE. ALL COSTS FOR FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
 12. THE FLOORS OF ALL MANHOLES SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE MANHOLES WILL BE SELF CLEANING AND FREE OF AREAS WHERE SOLIDS COULD BE DEPOSITED AS SEWAGE FLOWS THROUGH THE MANHOLE FROM ALL INLET PIPES TO THE OUTLET PIPE. FLOW CHANNELS SHALL BE FORMED TO MATCH THE BOTTOM OF THE INLET AND FLOWING PIPES AND THE OUTFLOWING PIPE AS SHOWN BY THE DRAWINGS EXCEPT FOR INSIDE DROP MANHOLES. FLOW CHANNELS FOR INSIDE DROP MANHOLES SHALL BE CONSTRUCTED AS INDICATED BY THE DRAWING. MANHOLE FLOORS SHALL HAVE A MINIMUM OF 3 INCHES PER FOOT IN THE AREAS OUTSIDE OF THE FLOW CHANNELS SLOPED TOWARD THE FLOW CHANNELS. PIPES LAID THROUGH MANHOLES SHALL HAVE THE TOP HALF REMOVED TO NEAT LINES FOR THE FULL INSIDE DIAMETER OF THE MANHOLE. MANHOLE FLOORS SHALL BE SHAPED AROUND THE BOTTOM HALF OF THE PIPE WHICH FORMS THE FLOW CHANNEL.
 13. PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE MANHOLE SHALL BE SET WITH CONCRETE OR MORTAR TO LIMITS OF THE EXCAVATION. WHEN CLAY PIPE IS USED, THE CRADLE SHALL EXTEND TO THE FIRST JOINT UNDER THE MANHOLE. THE CRADLE SHALL BE TERMINATED AT THE CLAY PIPE JOINT IN A MANNER WHICH WILL MAINTAIN THE FLEXIBILITY OF THE JOINT. COST OF CRADLE WITHIN MANHOLE EXCAVATION OR TO CLAY PIPE JOINTS ADJACENT TO MANHOLE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
 14. MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWING.
 15. ALL BRICK USED IN MANHOLE CONSTRUCTION SHALL MEET GRADE SW. OF ASTM C652 OR C62-87.

SHALLOW TYPE "P" MANHOLE DETAILS WITH BEEHIVE INLET

	924 NORTH MAIN		316-264-8008		REMS&D 8 OF 10
	WICHITA KANSAS 67203		FAX 264-4621		
SAVOY, RUGGLES & BOHM, P. A. ENGINEERING & SURVEYING					Review Marked Detail 8 OF 10
PROJECT NUMBER 468-R2944					
DRAWN	DESIGN	REVIEW	DATE	UTILITY	CRG JOB
	C.O.W.		July 13, 1998		1206D

GENERAL NOTES

STRAW OR HAY BALE NOTES:

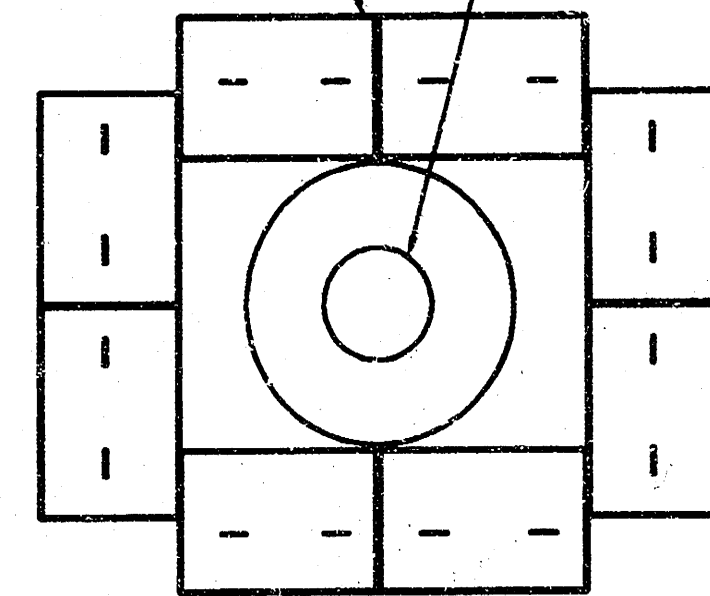
1. Place Bales tightly together, with loose straw or hay wedged between Bales to close off any openings.
2. Wood Stakes shall be 2" x 2" (nom.) x 4'-0" long (min.)
3. Use as many Bales as necessary to completely block the entire width of ditch flowline, with excess Bale length cut into fore and back slopes.
4. Use as many Bales as necessary on fore and back slopes to insure water does not flow around barrier.
5. Use only twine to bind bales. The use of wire binding is prohibited because it does not readily biodegrade.

SILT FENCE NOTES:

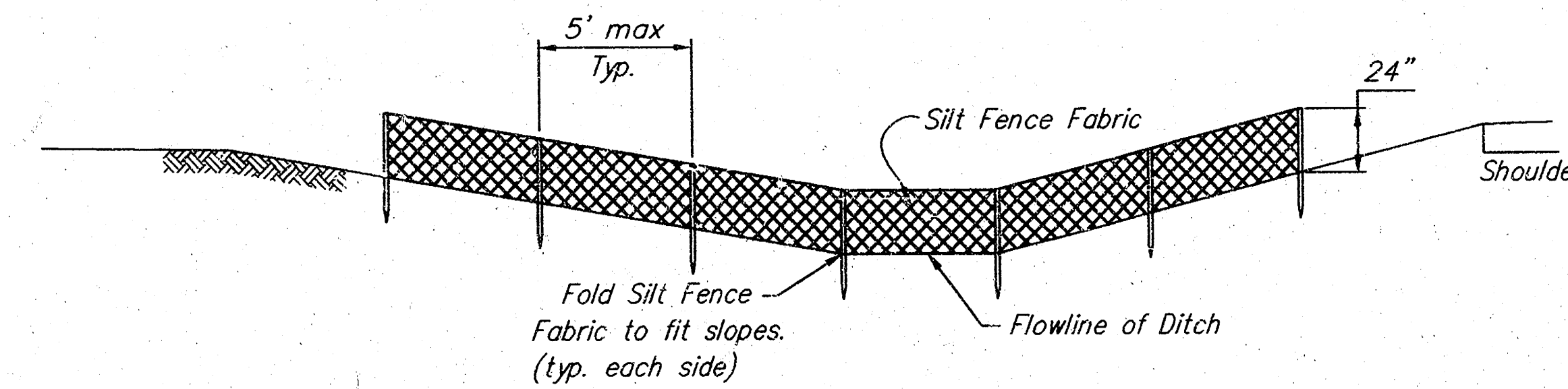
1. Wood Stakes shall be 2" x 2" (nom.) x 5'-0" long (min.)
2. Attach Fence Fabric to wood stakes with staples, wire, or nails.
3. Use as many wood stakes as necessary to achieve a maximum spacing of 5' across ditch cross section.

STAKED STRAW BALES TO SURROUND INLET

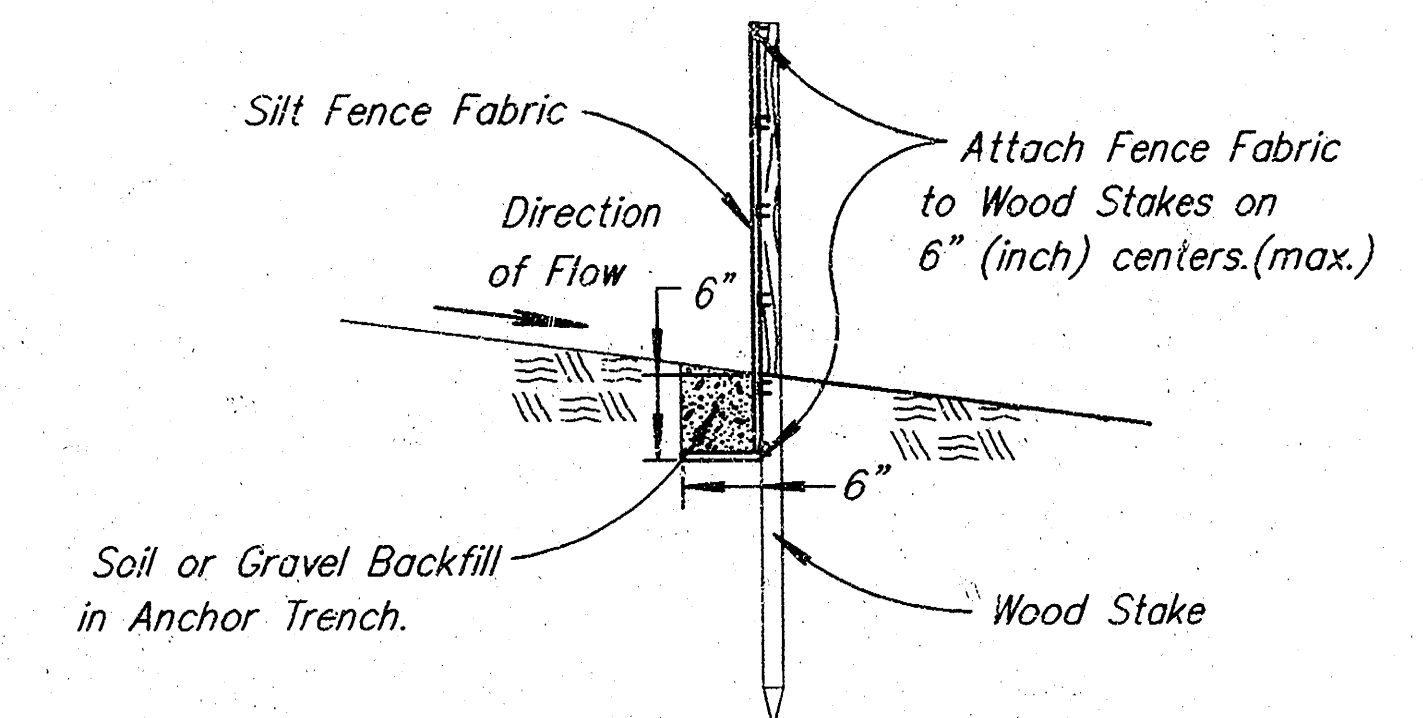
MANHOLE/BEEHIVE INLET



STRAW BALE INLET
SEDIMENT BARRIER
DETAIL

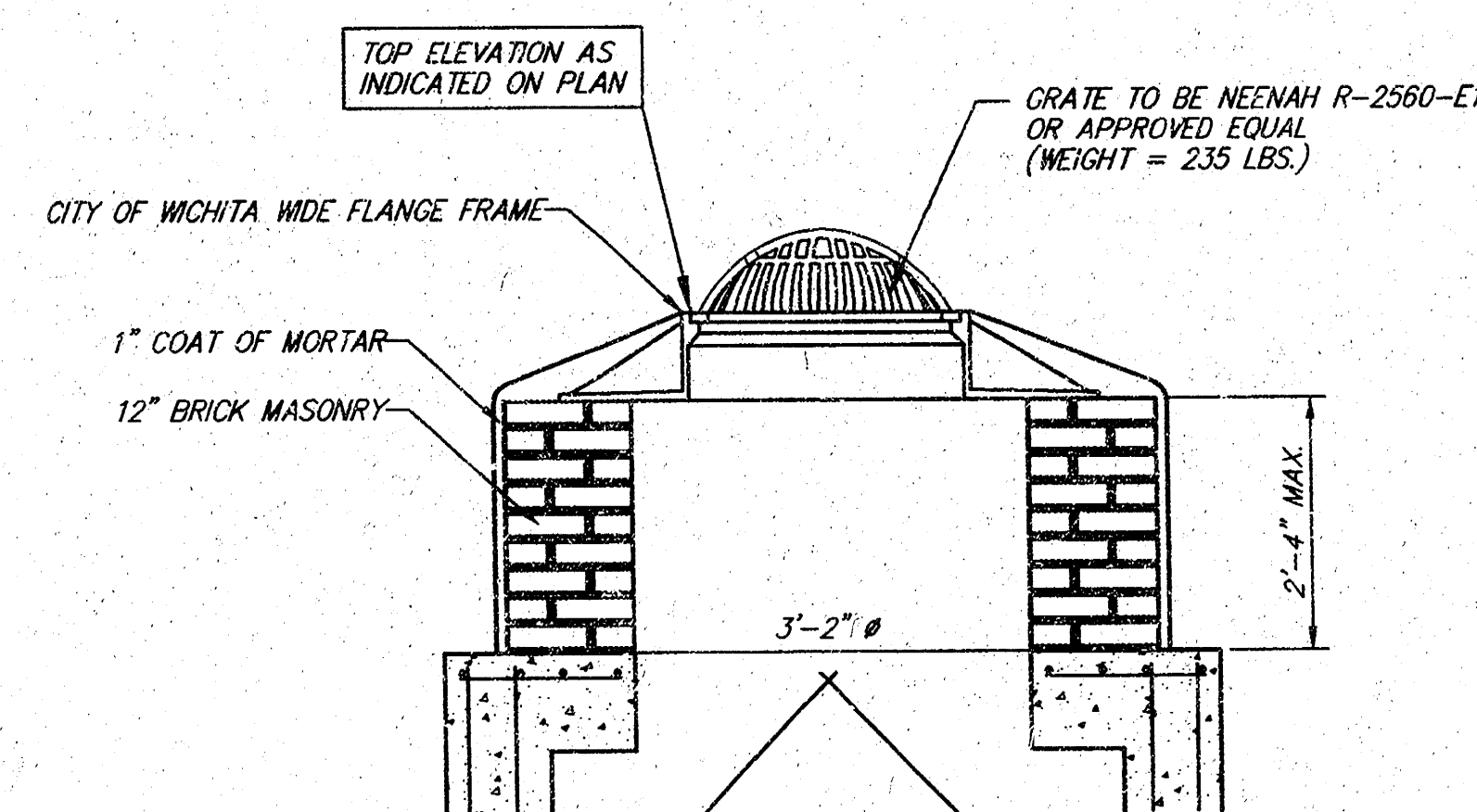


SILT FENCE DITCH CHECK

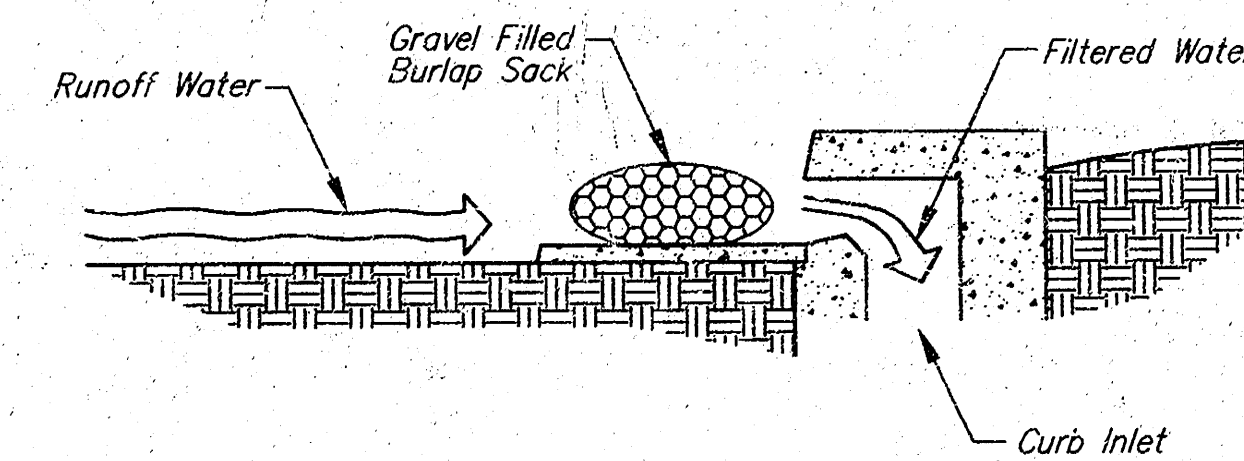
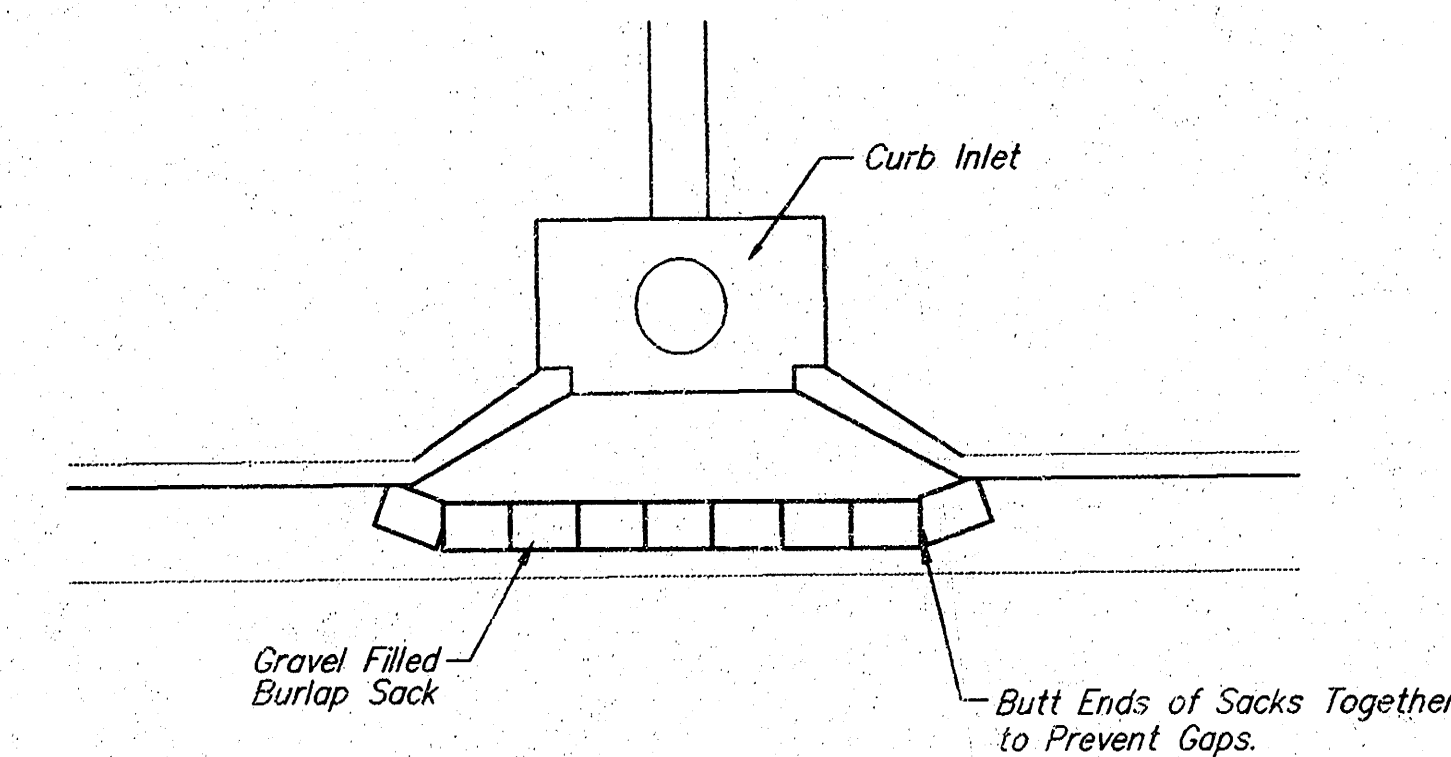


SILT FENCE DITCH CHECK SECTION

NOTE: For clarity of details, this view has been enlarged.



BEEHIVE FRAME & GRATE DETAIL



Note: Sacks to be filled with 1" to 3" Clean Gravel

CURB INLET SEDIMENT BARRIER

TEMPORARY DITCH CHECK SPACING	
DITCH & SLOPE (%)	SPACING INTERVAL (Ft.)
1.0	200
1.5	133
2.0	100
2.5	80
3.0	66
3.5	57
4.0	50
4.5	44
5.0	40
5.5	38
6.0	35
6.5	30
7.0	28
7.5	26
8.0	25
8.5	23
9.0	22
9.5	21
10.0	20

EROSION CONTROL SUMMARY		
	Hay Bales	Silt Fence Ditch Check (L.F.)
Inlets	112	-
Manholes	24	-
Ditch	-	140

Note: For Information Only

MISCELLANEOUS SWS DETAILS					
SRB 924 NORTH MAIN WICHITA, KANSAS 67203 http://www.heist.com/~srb		316-264-8008 FAX 264-4621 E-mail: srbs@heist.com		SHEET 9 OF 10	
SAVOY, RUGGLES & BOHM, P. A. ENGINEERING & SURVEYING					
PROJECT NUMBER 468-82944					
DESIGN	DRAWN	UTILITY	REVIEW	DATE Mar. 4, 1999	REVISED

LINDSAY'S ORCHARD ADDITION

WICHITA, SEDGWICK COUNTY, KANSAS

State of Kansas) SS
Sedgwick County)

We, Savoy, Ruggles & Bohm, P.A., Surveyors in aforesaid county and state do hereby certify that, under the supervision of the undersigned, we have surveyed and platted "LINDSAY'S ORCHARD ADDITION", Wichita, Sedgwick County, Kansas and that the accompanying plat is a true and correct exhibit of the property surveyed, described as follows:

That part of the NE1/4 of the SE1/4 of Sec 31, Twp. 27-S, R-1-W of the 6th P.M., Sedgwick County, Kansas, except the north 115 feet thereof and except the north 215 feet of the south 375 feet of the west 365 feet of the NE1/4 of the SE1/4 of said Sec. 31.

All Public easements and dedications being vacated by virtue of K.S.A. 12-512(b).

Savoy, Ruggles & Bohm, P.A.

Date _____

Mark A. Savoy RLS #788 Surveyor

Know all men by these presents that we, the undersigned have caused the land described in the surveyor's certificate to be platted into Lots, Blocks, Reserves and Streets to be known as "LINDSAY'S ORCHARD ADDITION", Wichita, Sedgwick County Kansas. The utility easements are hereby granted as indicated for the construction and maintenance of all public utilities. The Streets are hereby dedicated to and for the use of the public. Access Controls are hereby granted to the City of Wichita (as indicated on the face of the plat), with the location of openings to be approved by the City Engineer. Minimum building pad elevations for lowest opening to a structure shall be as shown on the face of the plat.

Rick Thompson Construction Inc.

Rick Thompson President

State of Kansas) SS
Sedgwick County)

The foregoing instrument acknowledged before me, this _____ day of _____, 1998, by Rick Thompson, President, Rick Thompson Construction Inc.

Notary Public

My App't. Exp. _____

This plat of "LINDSAY'S ORCHARD ADDITION", Wichita, Sedgwick County, Kansas, has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas. Dated this _____ day of _____, 1997.

Wichita-Sedgwick County Metropolitan Area Planning Commission

John C. Frye Chairman

Marvin S. Krout Secretary

Bob Knight Mayor

Pat Burnett City Clerk

Entered on transfer record this _____ day of _____, 1998.

James Alford County Clerk

State of Kansas) SS
Sedgwick County)

This is to certify that this plat has been filed for record in the office of the Register of Deeds, this _____ day of _____, 1998, at _____ o'clock _____ M. and is duly recorded.

Larry Consolver Register of Deeds

Michael D. Hurtt Deputy

MINIMUM BUILDING PAD ELEVATION FOR LOWEST OPENING TO A STRUCTURE			
		ELEVATION	
LOT	BLOCK	CITY DATUM	N.G.V.D.
6, 7	2	138.5	1325.9
17, 18, 19	2	138.0	1325.4
20, 21, 22	2	137.5	1324.9
23, 24, 25, 26	2	137.0	1324.4
27, 28	2	136.5	1323.9

BENCHMARK:
City of Wichita Benchmark disc @ Maize Road and May Street
31.5' S. and 38' E. of centerline both.
Elev.=137.67 (City Datum)
Elev.=1325.07 (NGVD)

S.B. = BUILDING SETBACK

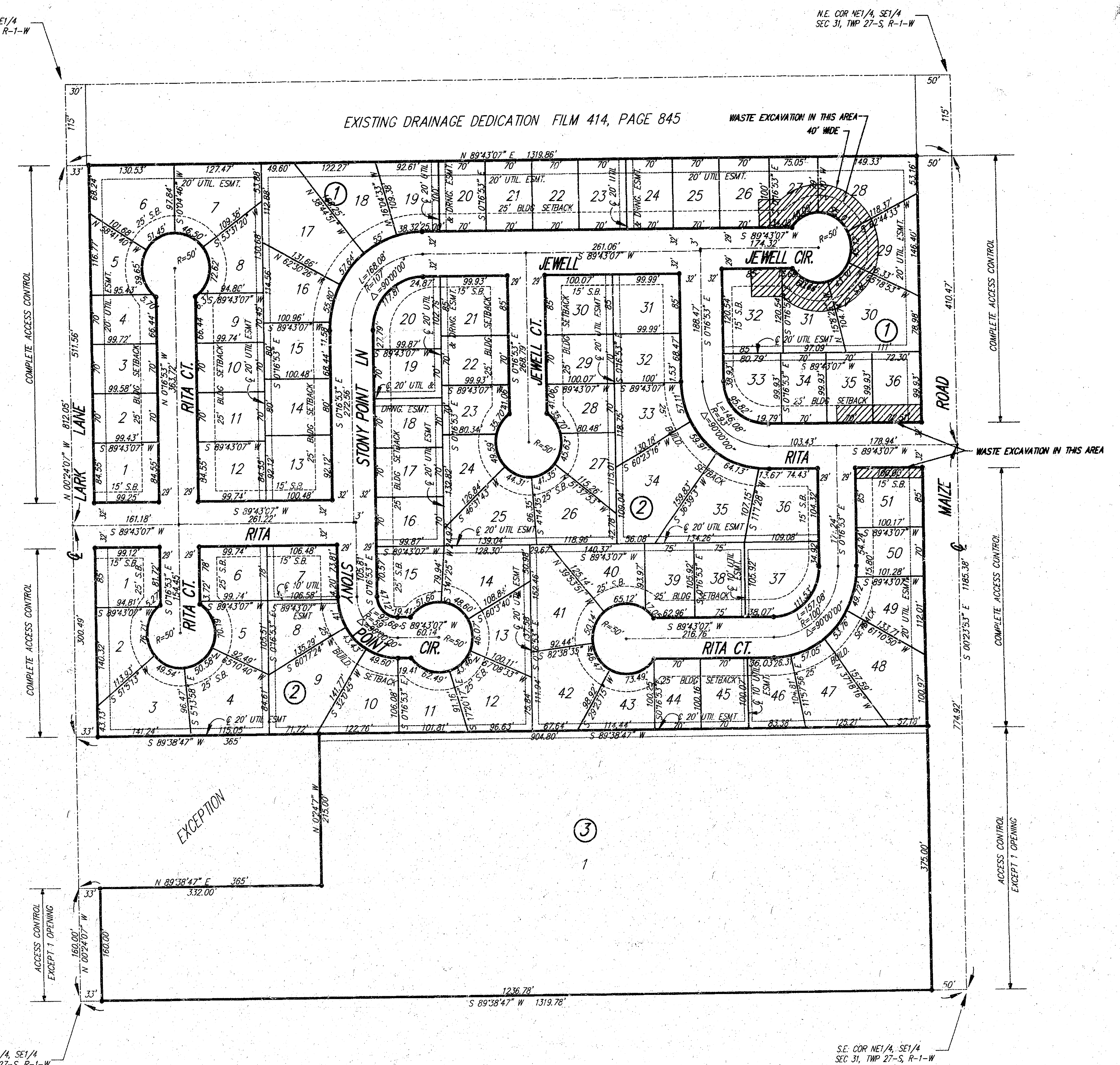
C.A.C. = COMPLETE ACCESS CONTROL

N.W. COR NE1/4, SE1/4
SEC 31, TWP 27-S, R-1-W

N.E. COR NE1/4, SE1/4
SEC 31, TWP 27-S, R-1-W

S.W. COR NE1/4, SE1/4
SEC 31, TWP 27-S, R-1-W

S.E. COR NE1/4, SE1/4
SEC 31, TWP 27-S, R-1-W



LINDSAY'S ORCHARD PLAT WICHITA, KANSAS			
SRB 924 NORTH MAIN WICHITA, KANSAS 67203 http://www.fest.com/~srb		316-264-8008 FAX 364-4621 E-mail: srb@fest.com	
SAVOY, RUGGLES & BOHM, P.A. ENGINEERING & SURVEYING			
PROJECT NUMBER			
DESIGN AML	DRAWN AML	UTILITY CMB	REVIEW CMB
DATE Jan. 12, 1999		REVISED	
SHEET 10		OF 10	

18-01-03-30