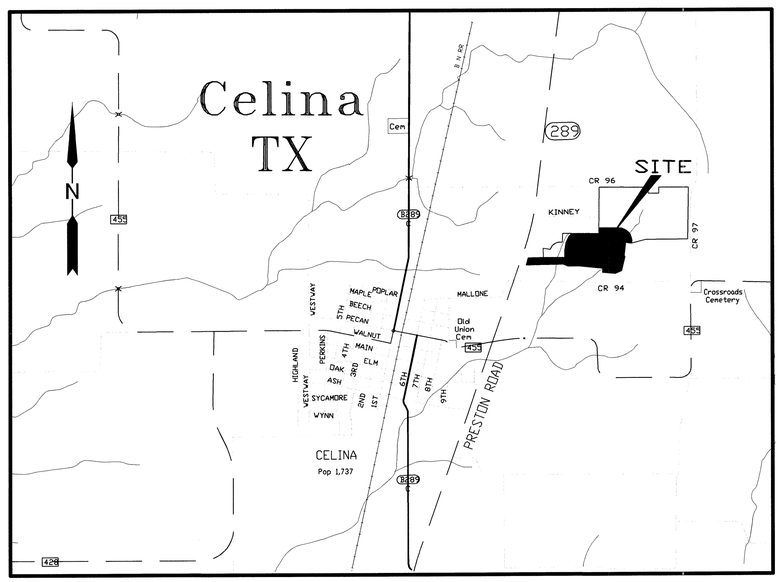
CONSTRUCTION PLANS
FOR
HERITAGE
PHASE 1
CITY OF CELINA
COLLIN COUNTY, TEXAS



LOCATION MAP
NOT TO SCALE

INDEX

SHEET NO.	DESCRIPTION
1–2	FINAL PLAT
3	STANDARD PAVING DETAILS
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13	EROSION CONTROL PLAN
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16	INLET & STORM SEWER CALCULATIONS
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23	SANITARY SEWER PLAN
24–29	SANITARY SEWER PROFILES
30	LIGHTING & SIGNAGE PLAN
D1–D4	STANDARD DETAIL SHEETS

DEVELOPER:

WILBOW CORPORATION, INC.
ABRAMS CENTRE
9330 LBJ FREEWAY STE. 745, LOCKBOX 68
DALLAS, TEXAS 75243
(972) 994-1672

ENGINEER \ SURVEYOR:

JONES & BOYD, INC.
16800 DALLAS PARKWAY, SUITE 240
DALLAS, TEXAS 75248
(972) 248-7676

GENERAL NOTE

ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE CITY OF CELINA STANDARD CONSTRUCTION DETAILS FOR PAVING, DRAINAGE, WATER & SANITARY SEWER FACILITIES AND BE INSTALLED IN ACCORDANCE WITH THE CITY SPECIFICATIONS AND STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION FOR NORTH CENTRAL TEXAS PUBLISHED BY NCTCOG. THESE SPECIFICATIONS SHALL BE MADE PART OF THESE PLANS. ALL WORK SHALL BE INSPECTED BY THE CITY OF CELINA PUBLIC WORKS INSPECTORS.

RECORD DRAWING
THIS DRAWING HAS BEEN REVISED TO REFLECT THE ACTUAL CONSTRUCTION DETAILS AS CONTAINED IN THE RECORDS OF THE CONTRACTOR. ELEVATIONS SHOWN ON THIS PLAN WERE NOT FIELD VERIFIED, UNLESS OTHERWISE NOTED ON THE PLANS.

JONES & BOYD, INC.
BY:
DATE: 5-12-03

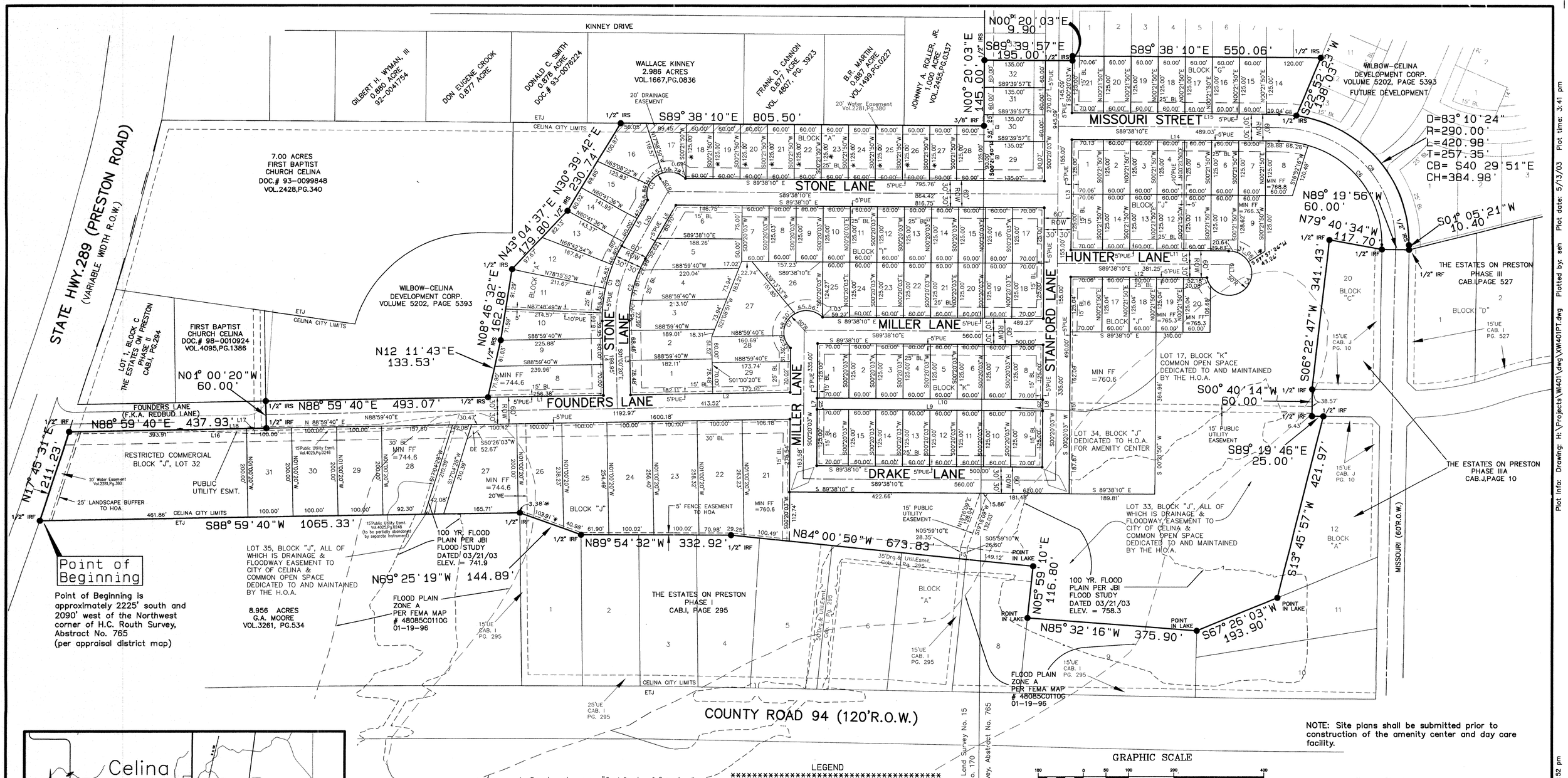
5/9/03
STATE OF TEXAS
JEFFERY M. WINKLER
90358
LICENSED
PROFESSIONAL ENGINEER

The seal appearing on this document was authorized by Jeffery M. Winkler, P.E. 90358. Alteration of a sealed document without proper notification to the responsible engineer is an offense under the Texas Engineering Practice Act.
RECORD DRAWINGS

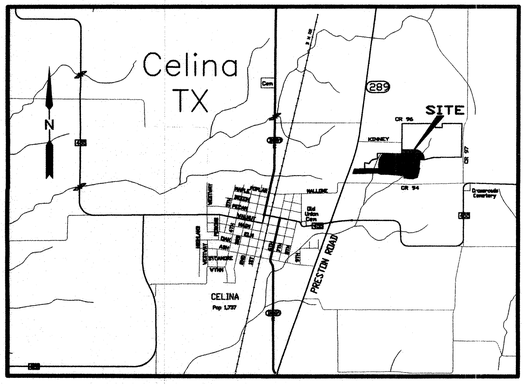
HERITAGE – PHASE 1

JBI Job No. – WI 401

P-200305-01



NOTE: Site plans shall be submitted prior to construction of the amenity center and day care facility.



LOCATION MAP
NOT TO SCALE

* Denotes change per "Certificate of Correction" filed in Volume 5447, Page 6938 Collin County Deed Records

⊡ Denotes change per "Certificate of Correction" filed in Volume 5811, Page 5232 Collin County Deed Records

FLOOD PLAIN ZONE A PER FEMA MAP # 48085C0110G 01-19-96

NOTE: Lots 21-31, Block J are Type II lots, all others are Type I.

LEGEND

IRF	IRON ROD FOUND
IRS	IRON ROD SET
H.O.A.	HOME OWNERS ASSOCIATION
UE	UTILITY EASEMENT
DE	DRAINAGE EASEMENT
SSE	SANITARY SEWER EASEMENT
WE	WATER EASEMENT
DUE	DRAINAGE & UTILITY EASEMENT
PUE	PUBLIC UTILITY EASEMENT
◇	STREET NAME CHANGE

LOT SUMMARY			
TYPE	AREA	TYPICAL	PHASE I
I	7,500 S.F.	60'X125'	98
II	20,000 S.F.	100'X200'	11
III	43,560 S.F.	210'X200'	0
		TOTAL	109

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

N W E S

FILED FOR RECORD IN: COLLIN COUNTY, MCKINNEY TX
HONORABLE BRENDA TAYLOR, COLLIN COUNTY CLERK
ON June 6, 2003 8:30 AM
DOC/NUM: 2003-0105112
RECORDING/TYPE:PL 26.00
RECEIPT# 22034

03911

Final Plat

HERITAGE, PHASE 1

109 RESIDENTIAL LOTS

BEING 48.912 ACRES OF LAND
OUT OF THE
HUGH C. ROUTH SURVEY, ABSTRACT NO. 765 AND
THE COLLIN COUNTY SCHOOL LAND SURVEY,
ABSTRACT NO. 170

CITY OF CELINA
COLLIN COUNTY, TEXAS

WILBOW – CELINA DEVELOPMENT CORP. OWNER/DEVELOPER
9330 LBJ Freeway, Suite 745, Lockbox 68
Dallas, TX 75243 (972) 479-0697

JONES & BOYD, INC. SURVEYOR/ENGINEER
16800 Dallas Parkway, Suite 240
Dallas, Texas 75248 (972)248-7676

April 14, 2003

Drawing Info: seh H:\Projects\WI401\dwg\WI401PT.dwg 5/13/03 12:52 pm
Plot Info: Drawing: H:\Projects\WI401\dwg\WI401PT.dwg Plotted by: seh Plot date: 5/13/03 Plot time: 3:41 pm

515(A)
P-200305-01

OWNER'S CERTIFICATE

WHEREAS, WILBOW–CELINA DEVELOPMENT CORPORATION is the owner of a tract of land situated in the Hugh C. Routh Survey, Abstract No. 765, the Collin County School Land Survey No. 15, Abstract No. 170, Collin County, Texas, and being a part of a 134.258 acre tract of land conveyed to Wilbow–Celina Development Corporation as recorded in Volume 5202, Page 5393, Collin County Deed Records, and being further described as follows:

BEGINNING at a 1/2"iron rod found for corner at the most westerly southwest corner of said 134.258 acre tract of land, said point being in the east right of way line of State Highway No. 289 (Preston Road) (a variable width right–of–way);

THENCE North 17 degrees 45 minutes 31 seconds East, 211.23 feet along the east right of way line of State Highway No. 289 and along the west line of said 134.258 acre tract, to a 1/2"iron rod found for corner at the southwest corner of Redbud Lane (a 60 foot wide right–of–way);

THENCE North 88 degrees 59 minutes 40 seconds East, 437.93 feet along the north line of said 134.258 acre tract to a 1/2"iron rod found at the southeast corner of Redbud Lane as recorded in Collin County Clerks File No. 2002–0129120;

THENCE North 01 degrees 00 minutes 20 seconds West, 60.00 feet along the west line of said 134.258 acre tract to a 1/2 inch iron rod set for corner at the southeast corner of First Baptist Church Tract by Special Warranty Deed filed February 5, 1998, recorded in Volume 4095, Page 1386 of the Land Records of Collin County, Texas;

THENCE North 88 degrees 59 minutes 40 seconds East, 493.07 feet to a 1/2 inch iron rod set for corner;

THENCE North 12 degrees 11 minutes 43 seconds East, 133.53 feet to a 1/2 inch iron rod set for corner;

THENCE North 08 degrees 46 minutes 32 seconds East, 162.88 feet to a 1/2 inch iron rod set for corner;

THENCE North 43 degrees 04 minutes 37 seconds East, 179.80 feet to a 1/2 inch iron rod set for corner;

THENCE North 30 degrees 39 minutes 42 seconds East, 230.74 feet to a 1/2 inch iron rod set for corner in the south line of a 2.986 acre tract of land conveyed to Wallace Kinney as recorded in Volume 1667, Page 836, Collin County Deed Records;

THENCE South 89 degrees 38 minutes 10 seconds East, 805.50 feet to a 3/8 inch iron rod found for corner at the southeast corner of a1.0 acre tract of land conveyed to J. A. Roller as recorded in Volume 2455, Page 337, Deed Records, Collin County, Texas;

THENCE North 00 degrees 20 minutes 03 seconds East, 145.00 feet along the east line of said Roller tract to a 1/2 inch iron rod set for corner;

THENCE South 89 degrees 39 minutes 57 seconds East, 195.00 feet to a 1/2 inch iron rod set for corner;

THENCE North 00 degrees 20 minutes 03 seconds East, 9.90 feet to a 1/2 inch iron rod set for corner;

THENCE South 89 degrees 38 minutes 10 seconds East, 550.06 feet to a 1/2 inch iron rod set for corner;

THENCE South 22 degrees 52 minutes 23 seconds West, 138.03 feet to a 1/2 inch iron rod set for corner;

THENCE Southeasterly, 420.98 feet along a curve to the right which has a central angle of 83 degrees 10 minutes 24 seconds, and a radius of 290.00 feet, a tangent of 257.35 feet, and whose chord bears South 40 degrees 29 minutes 51 seconds East, 384.98 feet to a 1/2 inch iron rod set for corner;

THENCE South 01 degrees 05 minutes 21 seconds West, 10.40 feet to a 1/2 inch iron rod found for corner in the north line of The Estates on Preston, Phase III, an addition to the City of Celina as recorded in Cabinet I, Page 527, Plat Records of Collin County, Texas, said point also being in the south line of said 134.258 acre tract;

THENCE along the south line of said 134.258 acre tract as follows:
North 89 degrees 19 minutes 56 seconds West, 60.00 feet to a 1/2 inch iron rod found for corner at the northwest corner of said Phase III, said point being the northeast corner of The Estates on Preston Phase III–A, an addition to the City of Celina as recorded in County Clerks File No. 93–005348 and in Cabinet J, Page 10 of the Plat Records of Collin County, Texas;
North 79 degrees 40 minutes 34 seconds West, 117.70 feet along the north line of said Phase III–A to a 1/2 inch iron rod found for corner at the northwest corner of said Phase III–A;

THENCE along the west line of said Phase III–A and along the east line of said 134.258 acre tract as follows:
South 06 degrees 22 minutes 47 seconds West, 341.43 feet to a 1/2 inch iron rod found for corner;
South 00 degrees 40 minutes 14 seconds West, 60.00 to a 1/2 inch iron rod found for corner;
South 89 degrees 19 minutes 46 seconds East, 25.00 feet to a 1/2 inch iron rod found for corner;
South 13 degrees 45 minutes 57 second West, 421.97 feet to a point in a lake for corner, said point being in the north line of The Estates of Preston, Phase I, an addition to the City of Celina as recorded in Volume I, Page 295 of the Plat Records, Collin County, Texas;

THENCE along the north line of said Phase I and along the south line of said 134.258 acre tract as follows:
South 67 degrees 26 minutes 03 seconds West, 193.90 feet to a point in a lake for corner;
North 85 degrees 32 minutes 16 seconds West, 375.90 feet to a point in a lake for corner;
North 05 degrees 59 minutes 10 seconds East, 116.80 feet to a point in a lake for corner;
North 84 degrees 00 minutes 50 seconds West, 673.83 feet to a 1/2 inch iron rod found for corner;
North 89 degrees 54 minutes 32 seconds West, 332.92 feet to a 1/2 inch iron rod found for corner;
North 69 degrees 25 minutes 19 seconds West, 144.89 feet to a 1/2 inch iron rod found for corner at the northwest corner of said Phase I, said point being the northeast corner of a 8,956 acre tract of land conveyed to G. A. Moore as recorded in Volume 3261, Page 534, Deed Records, Collin County, Texas;

THENCE South 88 degrees 59 minutes 40 seconds West, 1065.33 feet along the north line of said 8.956 acre tract and along the south line of said 134.258 acre tract to the POINT OF BEGINNING and containing 48.912 acres or 2,130,585 square feet of land.

LINE TABLE		
LINE	LENGTH	BEARING
L1	256.38'	N88°59'40"E
L2	354.21'	N88°59'40"E
L3	169.95'	S01°00'20"E
L4	169.95'	S01°00'20"E
L5	117.36'	S29°18'24"W
L6	138.32'	S29°18'24"W
L7	275.00'	S00°20'03"W
L8	275.00'	S00°20'03"W
L9	499.97'	S89°38'10"E
L10	499.97'	S89°38'10"E
L11	349.83'	S89°38'10"E
L12	302.25'	S89°38'10"E
L13	250.00'	S00°20'03"W
L14	459.01'	S89°38'10"E
L15	459.04'	S89°38'10"E
L16	174.08'	S87°04'07"E
L17	11.95'	N00°36'16"W
L18	173.75'	N88°59'40"E
L19	19.98'	N00°21'50"E
L20	156.01'	S29°18'24"W

CURVE TABLE						
NO.	DELTA	RADIUS	LENGTH	TANGENT	CHORD BEARING	CHORD
C1	30°18'44"	335.00'	177.23'	90.74'	S 14°09'02" W	175.17'
C2	30°18'44"	275.00'	145.49'	74.49'	S 14°09'02" W	143.80'
C3	152°12'12"	50.00'	132.82'	202.07'	S 59°50'07" W	97.07'
C4	260°05'19"	50.00'	226.97'	59.49'	N 38°45'30" E	76.55'
C5	7°33'07"	290.00'	38.22'	19.14'	N 85°51'36" W	38.20'
C6	90°43'31"	230.00'	364.19'	232.93'	N 44°16'25" W	327.32'
C7	181°10'33"	50.00'	158.11'	4873.10'	S 45°20'56" W	99.99'
C8	90°43'31"	260.00'	411.70'	263.31'	N 44°16'25" W	370.02'
C9	30°18'44"	305.00'	161.36'	82.62'	S 14°09'02" W	159.48'

OWNER'S DEDICATION

NOW THEREFORE KNOW ALL MEN BY THESE PRESENTS:

That WILBOW–CELINA DEVELOPMENT CORPORATION, acting herein by and through his (its) duly authorized officer(s), does hereby adopt this plat designating the herein above described property as HERITAGE, PHASE 1, an addition to the City of Celina, Texas, and does hereby dedicate, in fee simple, to the public use forever, the streets, rights–of–way, and other public improvements shown thereon. The streets and alleys, if any, are dedicated for street purposes. The easements and public use areas as shown are dedicated for the public use forever for the purposes indicated on this plat. No buildings, fences, trees, shrubs or other improvements or growths shall be constsructed or placed upon, over or across the easements as shown except that landscape improvements may be placed in landscape easements, if approved by the City Council of the City of Celina. In addition, utility easements may also be used for the mutual use and accommodation of all public utilities desiring to use or using the same unless the easement limits the use to particular utilities, said use by public utilities being subordinate to the public's and City of Celina's use thereof. The City of Celina and public utility entities shall have the right to remove and keep removed all or parts of any buildings, fences, trees, shrubs or other improvements or growths which may in any way endanger or interfere with the construction, maintenance, or efficiency of their respective systems in said easements. The City of Celina and public utility entities shall at all times have the full right of ingress and egress to or from their respective easements for the purpose of constructing, reconstructing, inspecting, patrolling, maintaining, reading meters, and adding to or removing all or parts of their respective systems without the necessity at any time procuring permission from anyone.

This plat approved subject to all platting ordinances, rules, regulations and resolutions of the City of Celina, Texas.

Witness, my hand, this the 17th day of April, 2003.

BY: _____
Authorized Signature of Owner

Chas E. Fitzgerald, President
Printed Name and Title

State of Texas
County of Dallas :

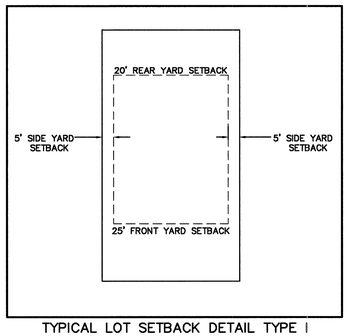
Before me, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared Chas E. Fitzgerald Owner, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purpose and considerations therein expressed.

Given under my hand and seal of office, this 17th day of April, 2003.

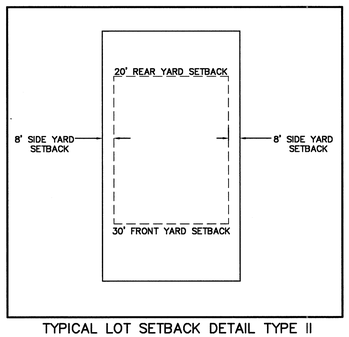
_____
Notary Public in and for the State of Texas

Greg W. Gitcho
My Commission Expires On: 03-Aug-05

GREG W. GITCHO
Notary Public, State of Texas
My Comm. Expires 08/03/05



TYPICAL LOT SETBACK DETAIL TYPE I



TYPICAL LOT SETBACK DETAIL TYPE II

FILED FOR RECORD IN: COLLIN COUNTY, MCKINNEY TX
HONORABLE BRENDA TAYLOR, COLLIN COUNTY CLERK
ON June 6, 2003 8:30 AM
DOCNUM: 2003-0105112
RECORDING/TYPE:PL 26.00
RECEIPT# 22034

0592

KNOW ALL MEN BY THESE PRESENTS:

That I, STEVEN E. HINES, do hereby certify that I prepared this plat from an actual and accurate survey of the land and that the corner monuments shown therein as "set" were properly placed under my personal supervision in accordance with the Subdivision Ordinance of the City of Celina.

_____
Steven E. Hines, R.P.L.S. No. 5380

STATE OF TEXAS
REGISTERED
STEVEN E. HINES
5380
PROFESSIONAL LAND SURVEYOR

State of Texas :
County of Dallas :

Before me, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared STEVEN E. HINES, Registered Professional Land Surveyor, 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 considerations therein expressed.

Given under my hand and seal of office, this 22nd day of April, 2003.

_____
Notary Public in and for the State of Texas

CATHY L. CUNNYNGHAM
Notary Public, State of Texas
My Comm. Expires 06/29/03

06/29/03
My Commission Expires On:

FINAL PLAT

Approved by the City of Celina for filing at the office of the County Clerk of Collin County, Texas.

RECOMMENDED BY: Planning and Zoning Commission
City of Celina, Texas

_____ 11-26-02
Signature of Chairperson Date of Recommendation

APPROVED BY: City Council
City of Celina, Texas

_____ ~~5-13-03~~ 12-10-02 v7
Signature of Mayor Date of Approval

ATTEST:

_____ 5-13-03
City Secretary Date

This property is located in the corporate limits [or the extraterritorial jurisdiction] of the City of Celina, Collin County, Texas.

_____ 5-13-03
Mayor, City of Celina Date

ATTEST:

_____ 5-13-03
City Secretary, City of Celina Date

Final Plat

HERITAGE, PHASE 1

109 RESIDENTIAL LOTS

BEING 48.912 ACRES OF LAND
OUT OF THE
HUGH C. ROUTH SURVEY, ABSTRACT NO. 765 AND
THE COLLIN COUNTY SCHOOL LAND SURVEY,
ABSTRACT NO. 170

CITY OF CELINA
COLLIN COUNTY, TEXAS

WILBOW – CELINA DEVELOPMENT CORP. OWNER/DEVELOPER
9330 LBJ Freeway, Suite 745, Lockbox 68
Dallas, TX 75243 (972) 479–0697

JONES & BOYD, INC. SURVEYOR/ENGINEER
16800 Dallas Parkway, Suite 240
Dallas, Texas 75248 (972)248–7676

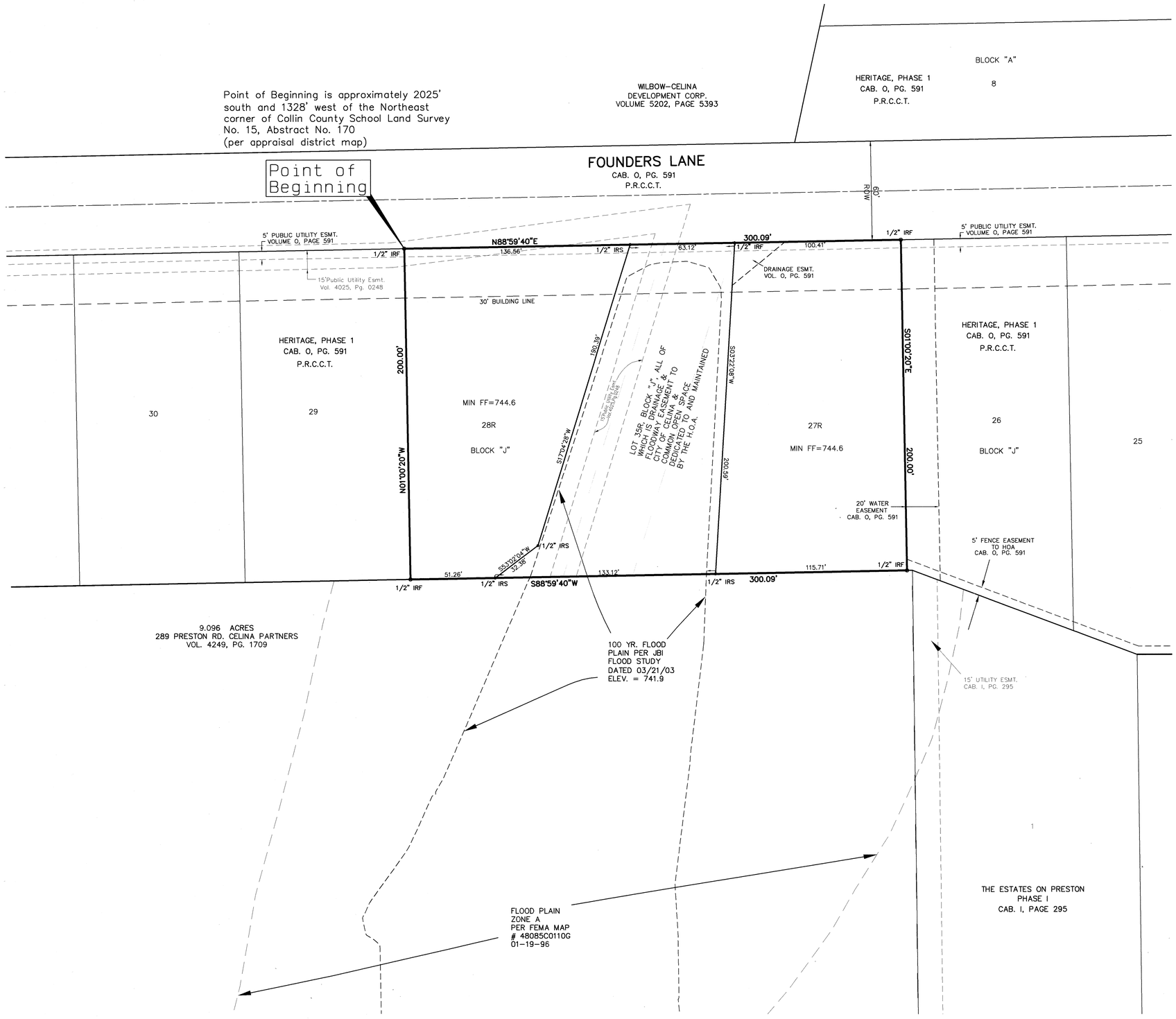
April 14, 2003 Sheet 2 of 2

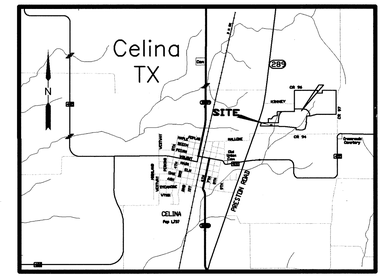
Filed for Record in:
Collin County, McKinney TX
Honorable Brenda Taylor
Collin County Clerk

On Dec 30 2003
At 1:05pm P399

Doc/Num : 2003- 0248257

Recording/Type:PL 31.00
Receipt #: 50928





LOCATION MAP
NOT TO SCALE

GRAPHIC SCALE

(IN FEET)
1 inch = 30 ft.

NOTE: LOTS 27R AND 28R ARE TYPE II LOTS. PER THE APPLICABLE ZONING ORDINANCE.

Replat

HERITAGE, PHASE 1

BLOCK J, LOTS 27R, 28R, & 35R

BEING 1.378 ACRES OF LAND
OUT OF THE
THE COLLIN COUNTY SCHOOL LAND SURVEY,
ABSTRACT NO. 170

CITY OF CELINA
COLLIN COUNTY, TEXAS

WILBOW – CELINA DEVELOPMENT CORP. OWNER/DEVELOPER
9330 LBJ Freeway, Suite 745, Lockbox 68
Dallas, TX 75243 (972) 479-0697

JONES & BOYD, INC. SURVEYOR/ENGINEER
17090 Dallas Parkway, Suite 200
Dallas, Texas 75248 (972)248-7676

November 20, 2003

P-200305-01

Plot Info: Drawing: H:\projects\W1401\dwg\XW1401RPT-BLKJ.dwg Plotted by: seh Plot date: 11/20/03 Plot time: 11:23 am

Drawing Info: seh H:\projects\W1401\dwg\XW1401RPT-BLKJ.dwg 11/20/03 11:20 am

Filed for Record in:
Collin County, McKinney TX
Honorable Brenda Taylor
Collin County Clerk

On Dec 30 2003
At 1:05pm p 400

Doc/Num : 2003- 0248257

Recording/Type:PL 31.00
Receipt #: 58926

OWNER'S CERTIFICATE

STATE OF TEXAS~

COUNTY OF COLLIN~

WHEREAS, WILBOW–CELINA DEVELOPMENT CORPORATION is the owner of a 1.378 acre tract of land situated in the City of Celina, Collin County, Texas, a part of the Collin County School Land Survey No. 15, Abstract No. 170, Collin County, Texas, and being all of Lots 27, 28, and 35, Block J, Heritage Phase 1, an addition to the City of Celina as recorded in Cabinet O, Page 591, Collin County Plat Records, and being further described as follows:

BEGINNING at a one–half inch iron rod found at the northeast corner of Lot 29, of said Block J, said point being in the south line of Founders Lane (a 60' right–of–way), said point also being the northwest corner of said Lot 28;

THENCE North 88 degrees 59 minutes 40 seconds East, 300.09 feet along the south line of Founders Lane to a one–half inch iron rod found at the northwest corner of Lot 26, of said Block J, and the northeast corner of said Lot 27;

THENCE South 01 degrees 00 minutes 20 seconds East, 200.00 feet to a one–half inch iron rod found at the southwest corner of said Lot 26 and at the southeast corner of said Lot 27, said point being in the north line of a 8.956 acre tract of land conveyed to G.A. Moore as recorded in Volume 3261, Page 534, Collin County Deed Records;

THENCE South 88 degrees 59 minutes 40 seconds West, 300.09 feet along the north line of said 8.956 acre tract to a one–half inch iron rod found at the southeast corner of said Lot 29 and at the southwest corner of said Lot 28;

THENCE North 01 degrees 00 minutes 20 seconds West, 200.00 feet along the east line of said Lot 29 and along the west line of said Lot 28 to the POINT OF BEGINNING and containing 1.378 acres or 60,019 square feet of land.

OWNER'S DEDICATION

NOW THEREFORE KNOW ALL MEN BY THESE PRESENTS:

That WILBOW–CELINA DEVELOPMENT CORPORATION, acting herein by and through his (its) duly authorized officer(s), does hereby adopt this plat designating the herein above described property as REPLAT, HERITAGE, PHASE 1, BLOCK J, LOTS 27R, 28R AND 35R, an addition to the City of Celina, Texas, and does hereby dedicate, in fee simple, to the public use forever, the streets, rights–of–way, and other public improvements shown thereon. The streets and alleys, if any, are dedicated for street purposes. The easements and public use areas as shown are dedicated for the public use forever for the purposes indicated on this plat. No buildings, fences, trees, shrubs or other improvements or growths shall be constsructed or placed upon, over or across the easements as shown except that landscape improvements may be placed in landscape easements, if approved by the City Council of the City of Celina. In addition, utility easements may also be used for the mutual use and accommodation of all public utilities desiring to use or using the same unless the easement limits the use to particular utilities, said use by public utilities being subordinate to the public's and City of Celina's use thereof. The City of Celina and public utility entities shall have the right to remove and keep removed all or parts of any buildings, fences, trees, shrubs or other improvements or growths which may in any way endanger or interfere with the construction, maintenance, or efficiency of their respective systems in said easements. The City of Celina and public utility entities shall at all times have the full right of ingress and egress to or from their respective easements for the purpose of constructing, reconstructing, inspecting, patrolling, maintaining, reading meters, and adding to or removing all or parts of their respective systems without the necessity at any time procuring permission from anyone.

This plat approved subject to all platting ordinances, rules, regulations and resolutions of the City of Celina, Texas.

Witness my hand, this the 1st day of December, 2003.

BY: _____
Authorized Signature of Owner
Chas E. Fitzgerald, President

State of Texas :
County of Dallas :

Before me, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared Chas E. Fitzgerald, Owner, 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 considerations therein expressed.

Given under my hand and seal of office, this 1st day of December 2003.

_____
Notary Public in and for the State of Texas

NOTARY PUBLIC STATE OF TEXAS
Greg W Gitzho
My Commission Expires
August 03, 2005

KNOW ALL MEN BY THESE PRESENTS:

That I, STEVEN E. HINES, do hereby certify that I prepared this plat from an actual and accurate survey of the land and that the corner monuments shown therein as "set" were properly placed under my personal supervision in accordance with the Subdivision Ordinance of the City of Celina.

_____
Steven E. Hines, R.P.L.S. No. 5380

STATE OF TEXAS
REGISTERED
STEVEN E. HINES
5380
PROFESSIONAL
LAND SURVEYOR

State of Texas :
County of Dallas :

Before me, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared STEVEN E. HINES, Registered Professional Land Surveyor, 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 considerations therein expressed.

Given under my hand and seal of office, this 1st day of December, 2003.

_____
Notary Public in and for the State of Texas

NOTARY PUBLIC STATE OF TEXAS
CATHY L. CUNNYNGHAM
Notary Public, State of Texas
My Comm. Expires 07/14/07

REPLAT

Approved by the City of Celina for filing at the office of the County Clerk of Collin County, Texas.

RECOMMENDED BY: Planning and Zoning Commission
City of Celina, Texas

_____ 10/28/2003
Signature of Chairperson Date of Recommendation

APPROVED BY: City Council
City of Celina, Texas

_____ ~~12/9/03~~ 11/11/03 vgf
Signature of Mayor Date of Approval

ATTEST:

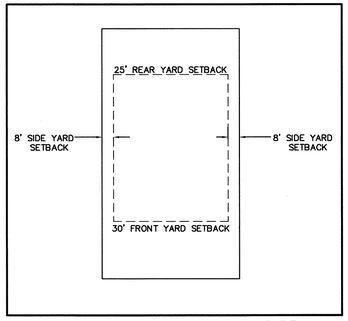
_____ ~~12/9/03~~ 11/11/03 vgf
City Secretary Date

This property is located in the corporate limits of the City of Celina, Collin County, Texas.

_____ ~~12/9/03~~ 11/11/03 vgf
Mayor, City of Celina Date

ATTEST:

_____ ~~12/9/03~~ 11/11/03 vgf
City Secretary, City of Celina Date



TYPICAL LOT SETBACK DETAIL TYPE II

Replat

HERITAGE, PHASE 1

BLOCK J, LOTS 27R, 28R & 35R

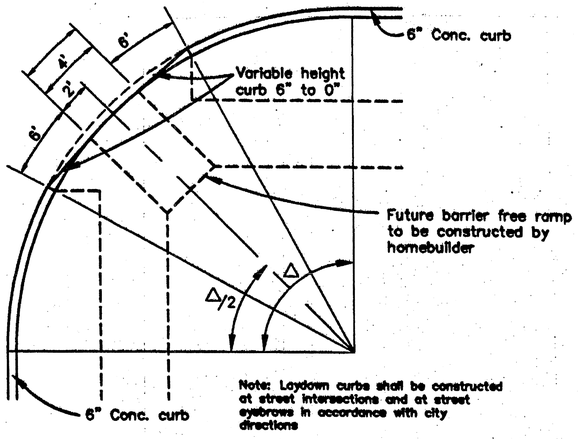
BEING 1.378 ACRES OF LAND
OUT OF THE
THE COLLIN COUNTY SCHOOL LAND SURVEY,
ABSTRACT NO. 170

CITY OF CELINA
COLLIN COUNTY, TEXAS

WILBOW – CELINA DEVELOPMENT CORP. OWNER/DEVELOPER
9330 LBJ Freeway, Suite 745, Lockbox 68
Dallas, TX 75243 (972) 479–0697

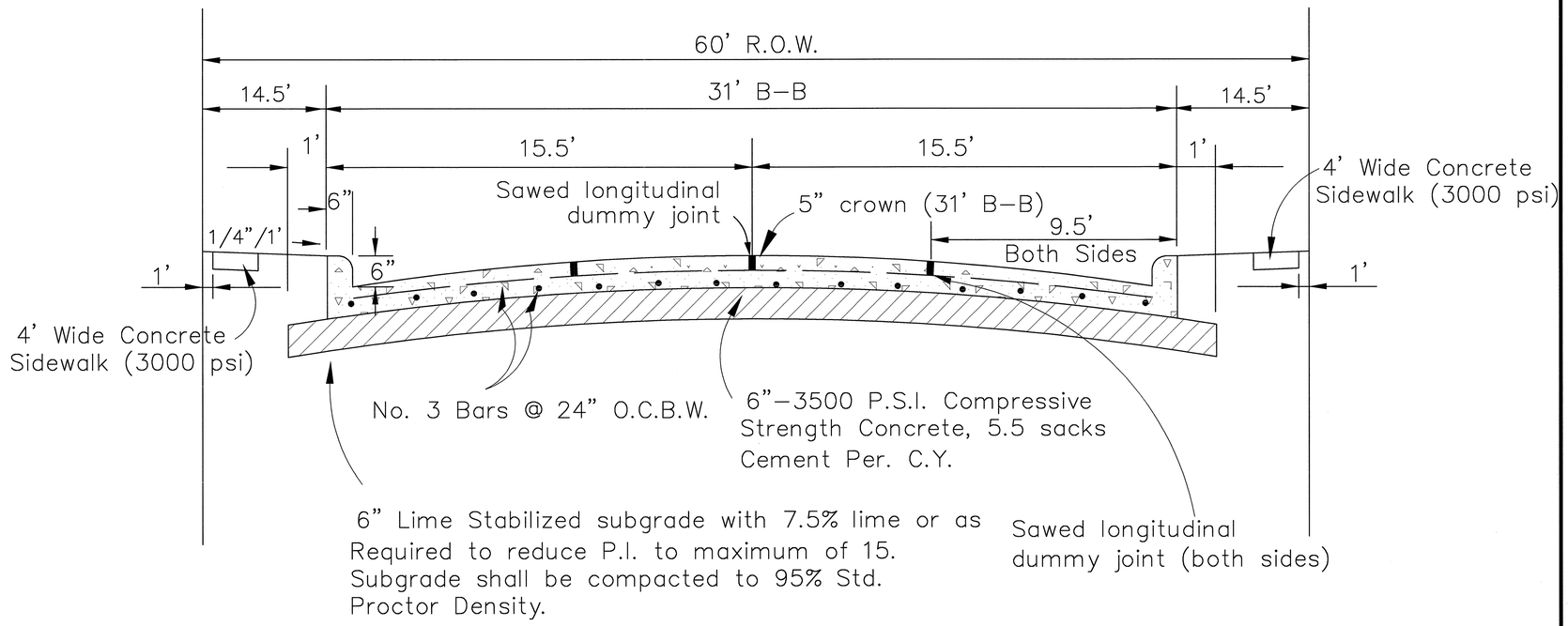
JONES & BOYD, INC. SURVEYOR/ENGINEER
17090 Dallas Parkway, Suite 200
Dallas, Texas 75248 (972)248–7676

November 20, 2003 Sheet 2 of 2



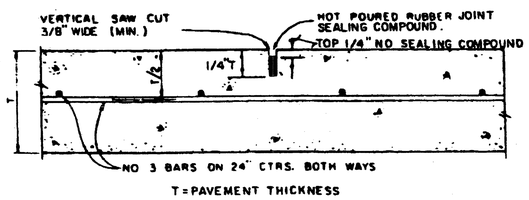
LAYDOWN CURB DETAIL

N.T.S.

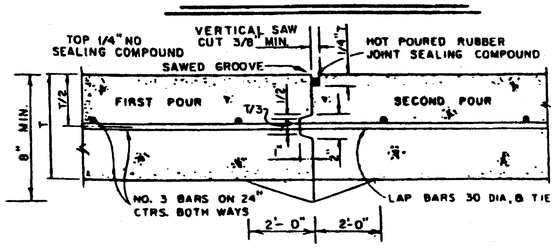


CITY OF CELINA
STREET PAVEMENT DETAIL

N.T.S.



SAWED DUMMY JOINT



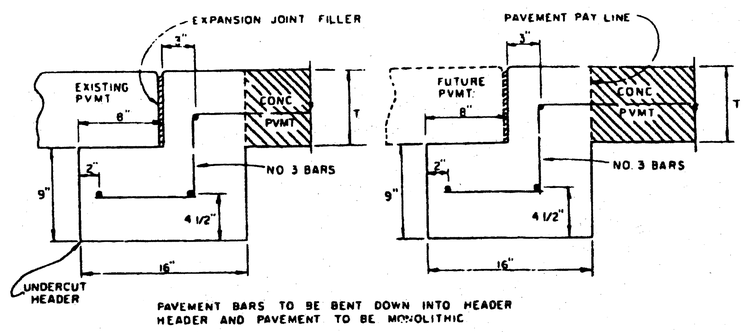
CONSTRUCTION JOINT FOR PAVEMENTS

TRANSVERSE AND LONGITUDINAL JOINTS

NOTE: CONTRACTOR SHALL PROTECT KEYWAY PRIOR TO SECOND POUR. IF LONGITUDINAL KEYWAY IS DAMAGED, CONTRACTOR SHALL REPAIR WITH THE USE OF LONGITUDINAL BUTT JOINT. DRILL DOWELS INTO FIRST POUR.

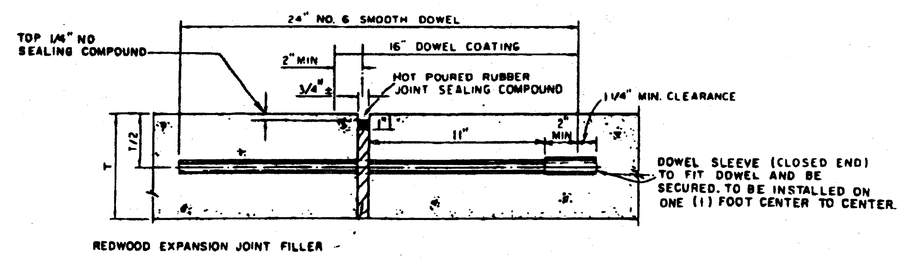
T= PAVEMENT THICKNESS

THICKENED EDGES ARE REQUIRED FOR FUTURE WIDENING ONLY.



PAVEMENT BARS TO BE BENT DOWN INTO HEADER
HEADER AND PAVEMENT TO BE MONOLITHIC

STREET HEADER



TRANSVERSE EXPANSION JOINT

(SPACED 600 FT. MAXIMUM, LOCATE AT INTERSECTIONS)

T = PAVEMENT THICKNESS

NOTE:
DOWELS & REINFORCING BARS SHALL BE SUPPORTED BY A BASKET OR OTHER APPROVED DEVICE.

RECORD DRAWING
THIS DRAWING HAS BEEN REVISED TO REFLECT THE ACTUAL CONSTRUCTION DETAILS AS CONTAINED IN THE RECORDS OF THE CONTRACTOR. ELEVATIONS SHOWN ON THIS PLAN WERE NOT FIELD VERIFIED, UNLESS OTHERWISE NOTED ON THE PLANS.
JONES & BOYD, INC.
BY:
DATE: 5-12-03

BENCHMARKS:

1. " ◻ Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road.
Elev. 764.92'
2. " ◻ Cut on top centerline headwall on Northeast corner Missouri East and Redbud Road.
Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE

NO.	REVISIONS DURING PLAN REVIEW	BY	DATE
2	Back to stand. curbs & 5" crown paving sect.	JMW	11/27/02
1	Crown height of 5" & sidewalks 1' off R.O.W.	JMW	11/21/02

11/27/02
STATE OF TEXAS
JEFFERY M. WINKLER
90358
LICENSED
PROFESSIONAL ENGINEER

The seal appearing on this document was authorized by Jeffery M. Winkler, P.E. 90358. Alteration of a sealed document without proper notification to the responsible engineer is an offense under the Texas Engineering Practice Act.

For Approval
For Construction 12/9/02

Jones & Boyd, Inc.
16800 Dallas Parkway, Suite 240
Dallas, Texas 75248
Tel: 972-248-7676
Fax: 972-248-1414
• Engineering
• Planning
• Landscape Architecture
• Surveying

PAVING DETAILS

HERITAGE, PHASE 1

CITY OF CELINA
COLLIN COUNTY, TEXAS

PROJECT NO. W1401

SHEET NO. 3

jmw W1401DET.dwg H:\Projects\W1401\dwg\ 11/27/02 11:11 am

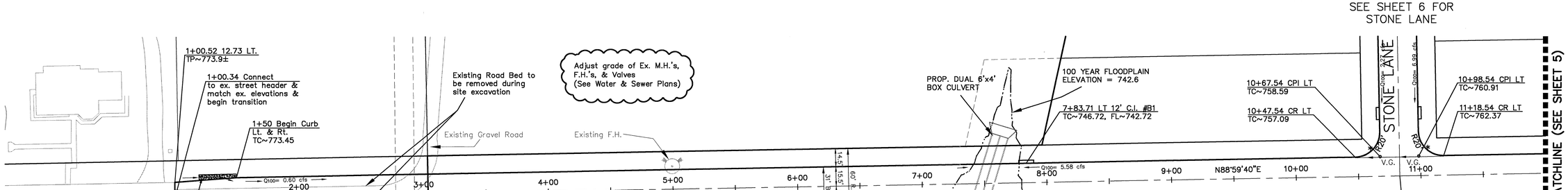
P-200305-01

"*" Denotes location where Paving Contractor shall construct a "Lay Down" Curb for the construction of a Barrier Free Ramp per City of Celina Standards.

Barrier Free Ramp & Sidewalks to be constructed by Homebuilder unless otherwise noted.

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

SEE SHEET 6 FOR STONE LANE



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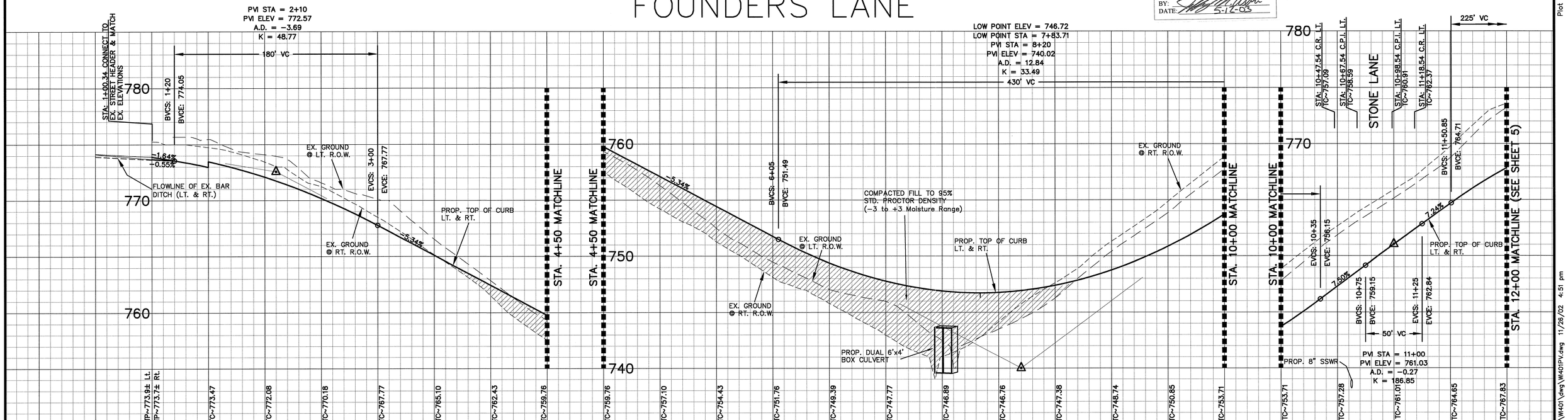
JONES & BOYD, INC.
BY:
DATE: 5-12-03

FOUNDERS LANE



BENCHMARKS:

1. "□" Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road. Elev. 764.92'
2. "□" Cut on top centerline headwall on Northeast corner Missouri Eest and Redbud Road. Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE

NO.	REVISIONS DURING PLAN REVIEW	BY	DATE
1	Revised per staff comments.	SJS	11/26/02

11/27/02
STATE OF TEXAS
JEFFERY M. WINKLER
90358
LICENSED
PROFESSIONAL ENGINEER

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Fax: 972-248-1414
- Engineering
- Planning
- Landscape Architecture
- Surveying

PAVING PLAN & PROFILE
FOUNDERS LANE (1+00 TO 12+00)
HERITAGE, PHASE 1
City of Celina, Collin County, Texas

PROJECT NO. WI401
SHEET NO. 4

P-200305-01

Drawing Info: s.j.s H:\Projects\WI401\dwg\WI401PV.dwg 11/26/02 4:51 pm Plot Info: Drawing: H:\Projects\WI401\dwg\WI401PV.dwg Plotted by: sjs Plot date: 11/26/02 Plot time: 4:52 pm

"*" Denotes location where Paving Contractor shall construct a "Lay Down" Curb for the construction of a Barrier Free Ramp per City of Celina Standards.

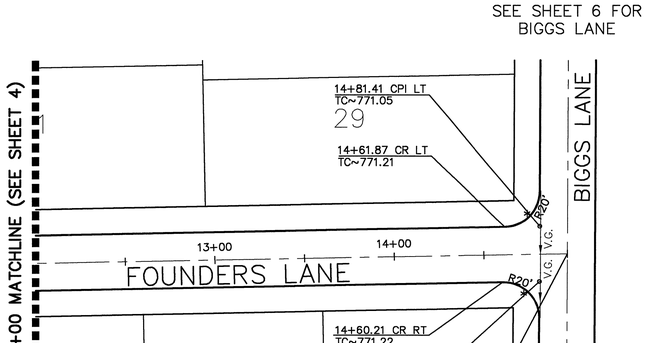
Barrier Free Ramp & Sidewalks to be constructed by Homebuilder unless otherwise noted.

GRAPHIC SCALE

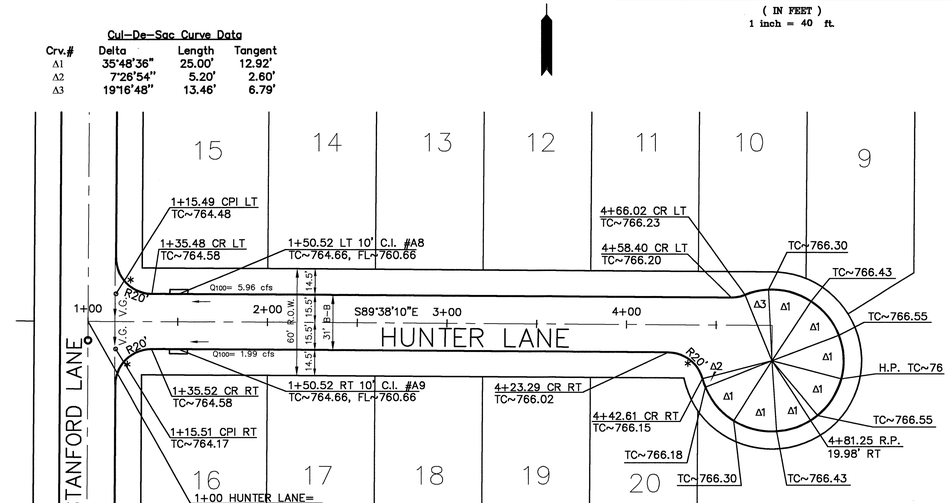
(IN FEET)
1 inch = 40 ft.

Cul-De-Sac Curve Data

Crv.#	Delta	Length	Tangent
Δ1	35°48'36"	25.00'	12.92'
Δ2	7°26'54"	5.20'	2.60'
Δ3	19°16'48"	13.46'	6.79'



FOUNDERS LANE



SEE SHEET 9 FOR STANFORD LANE

HUNTER LANE

RECORD DRAWING
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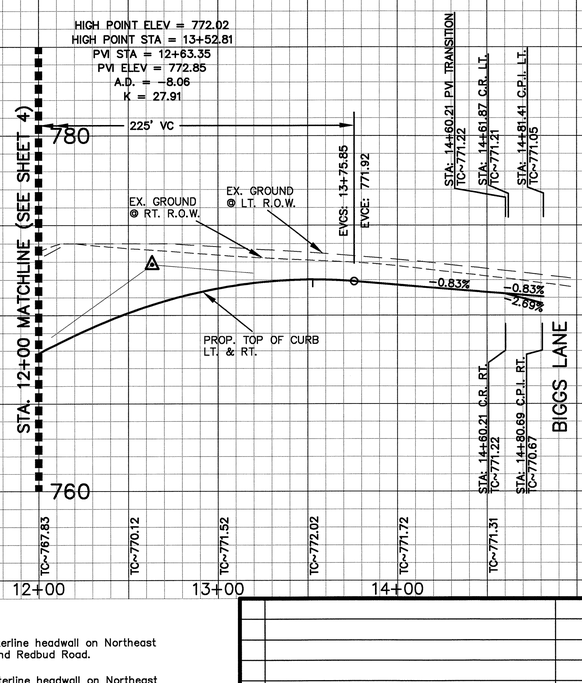
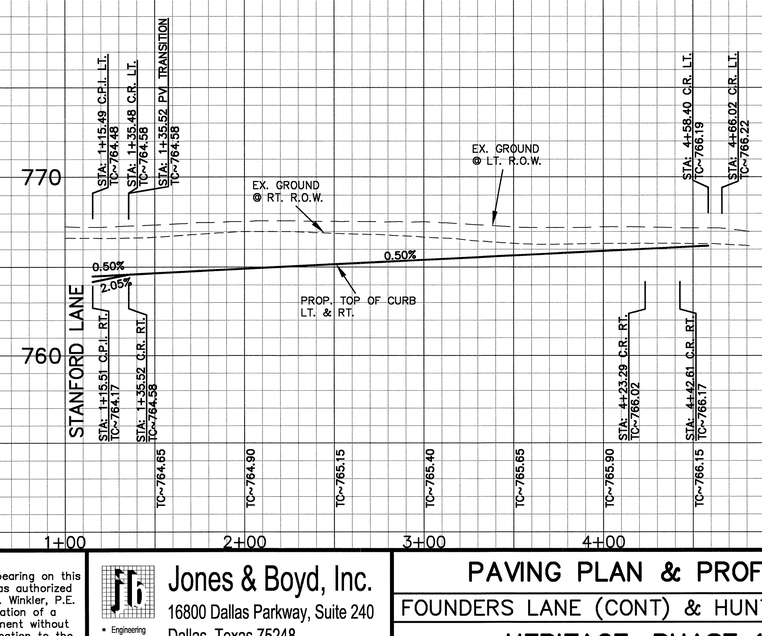
JONES & BOYD, INC.
BY:
DATE: 5-12-03





BENCHMARKS:

1. "D" Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road. Elev. 764.92'
2. "D" Cut on top centerline headwall on Northeast corner Missouri East and Redbud Road. Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE

NO.	REVISIONS DURING PLAN REVIEW	BY	DATE
1	Revised per staff comments.	SJS	11/26/02

11/21/02
STATE OF TEXAS
JEFFERY M. WINKLER
90358
LICENSED
PROFESSIONAL ENGINEER

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For Approval
For Construction 12/9/02

Jones & Boyd, Inc.
16800 Dallas Parkway, Suite 240
Dallas, Texas 75248
Tel: 972-248-7676
Fax: 972-248-1414
- Engineering
- Planning
- Landscape Architecture
- Surveying

PAVING PLAN & PROFILE
FOUNDERS LANE (CONT) & HUNTER LANE
HERITAGE, PHASE 1
City of Celina, Collin County, Texas

PROJECT NO. WI401
SHEET NO. 5

Plot Info: Drawing: H:\Projects\WI401\dwg\WI401PV.dwg Plotted by: sjs Plot date: 11/26/02 Plot time: 5:00 pm
Drawing Info: sjs H:\Projects\WI401\dwg\WI401PV.dwg 11/26/02 5:00 pm

P-200305-01

"*" Denotes location where Paving Contractor shall construct a "Lay Down" Curb for the construction of a Barrier Free Ramp per City of Celina Standards.

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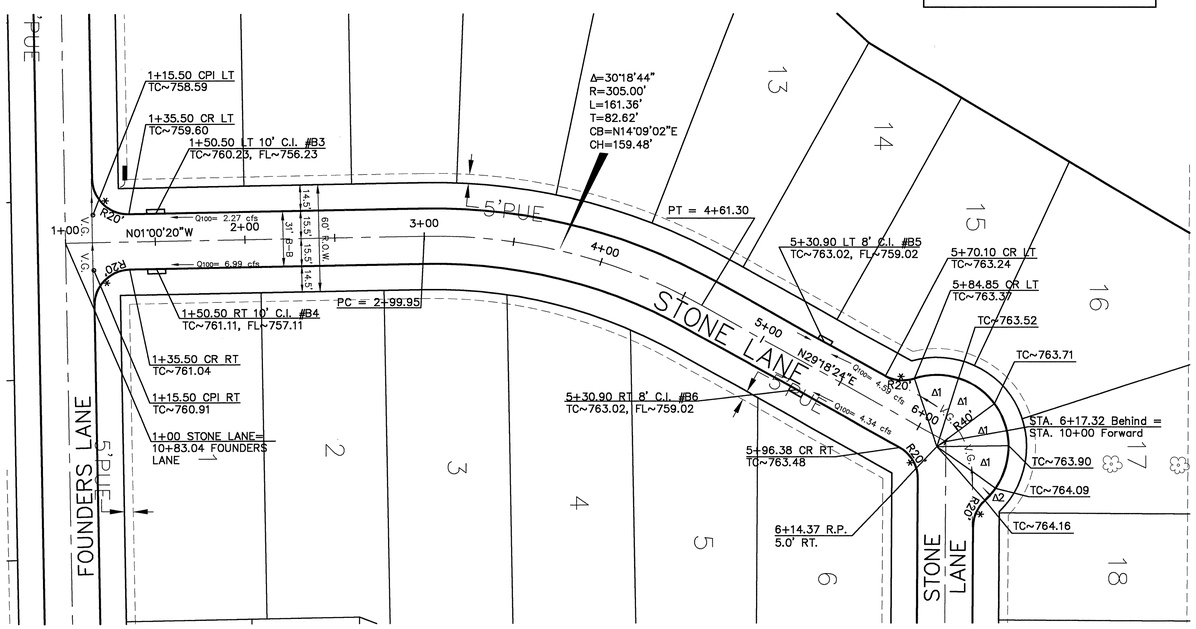
Eyebrow Curve Data

Crv.#	Delta	Length	Tangent
Δ1	35°48'36"	25.00'	12.92'
Δ2	12°54'32"	9.01'	4.53'



SEE SHEETS 4 & 5 FOR FOUNDERS LANE

SEE SHEET 7 FOR STONE LANE

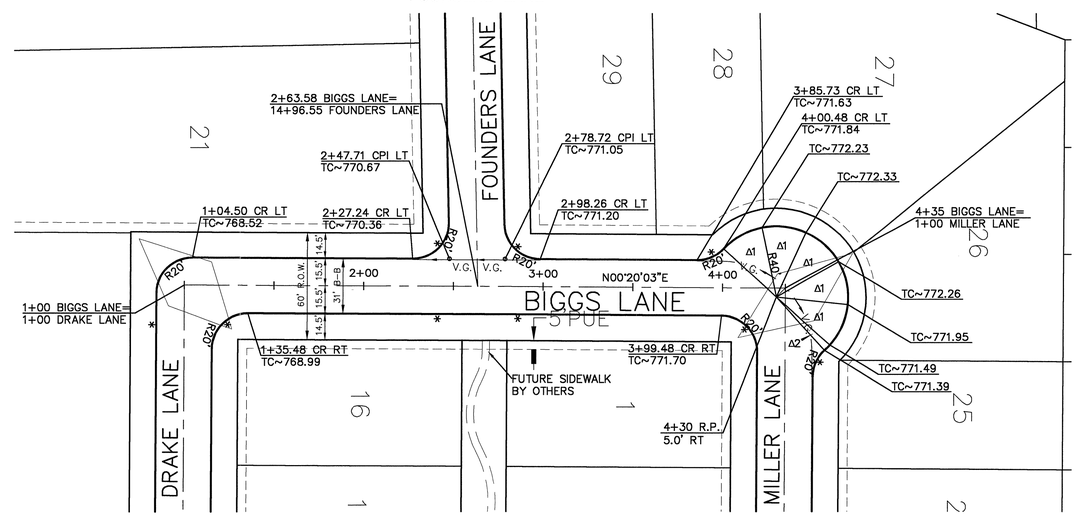
STONE LANE

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

Eyebrow Curve Data

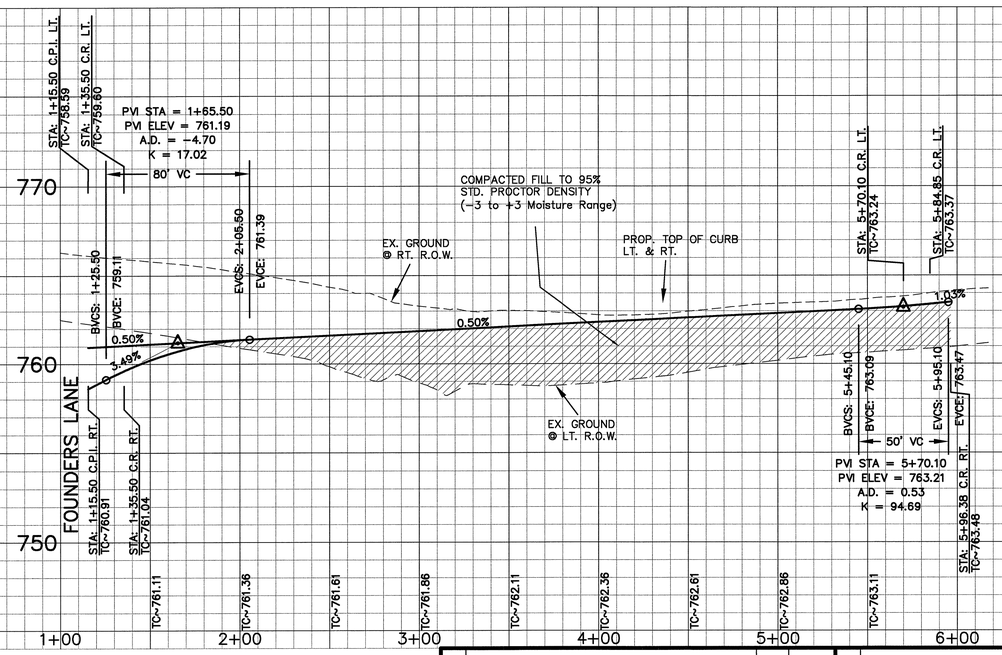
Crv.#	Delta	Length	Tangent
Δ1	35°48'36"	25.00'	12.92'
Δ2	6°04'17"	4.24'	2.12'

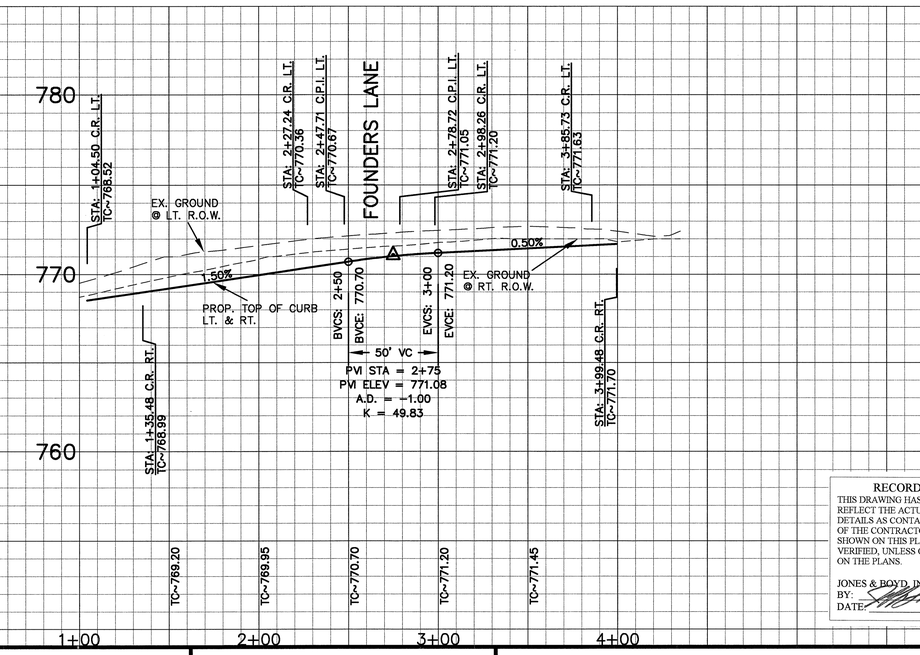


SEE SHEET 8 FOR DRAKE LANE

BIGGS LANE

SEE SHEET 8 FOR MILLER LANE





RECORD DRAWING
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JONES & BOYD, INC.
BY:
DATE: 5-12-03

BENCHMARKS:

1. "□" Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road. Elev. 764.92'
2. "□" Cut on top centerline headwall on Northeast corner Missouri East and Redbud Road. Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE
1	Added TC elevations at Biggs Lane eyebrow.	SJS	12/19/02

NO.	REVISIONS DURING PLAN REVIEW	BY	DATE
2	Added additional curb depressions for ramps.	JMW	12/9/02
1	Revised per staff comments.	SJS	11/26/02

12/20/02
STATE OF TEXAS
JEFFERY M. WINKLER
90358
LICENSED
PROFESSIONAL ENGINEER

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For CONSTRUCTION

Jones & Boyd, Inc.
16800 Dallas Parkway, Suite 240
Dallas, Texas 75248
Tel: 972-248-7676
Fax: 972-248-1414
- Engineering
- Planning
- Landscape Architecture
- Surveying

PAVING PLAN & PROFILE

STONE LANE & BIGGS LANE

HERITAGE, PHASE 1

City of Celina, Collin County, Texas

PROJECT NO. WI401

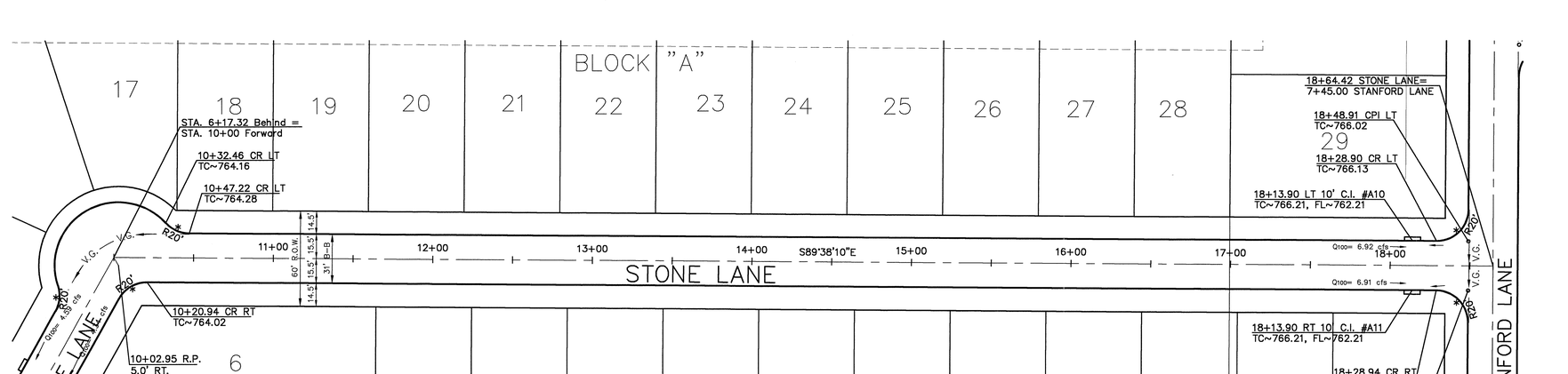
SHEET NO. 6

Plot Info: Drawing: H:\Projects\WI401\dwg\WI401PV.dwg Plotted by: ss Plot date: 12/19/02 Plot time: 11:28 am
Drawing Info: ss H:\Projects\WI401\dwg\WI401PV.dwg 12/19/02 11:27 am

P-200305-01

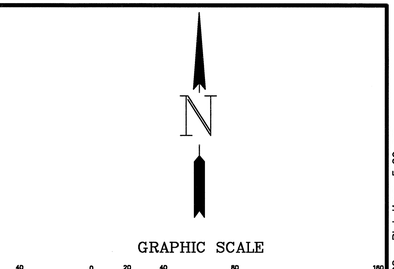
"*" Denotes location where Paving Contractor shall construct a "Lay Down" Curb for the construction of a Barrier Free Ramp per City of Celina Standards.

Barrier Free Ramp & Sidewalks to be constructed by Homebuilder unless otherwise noted.

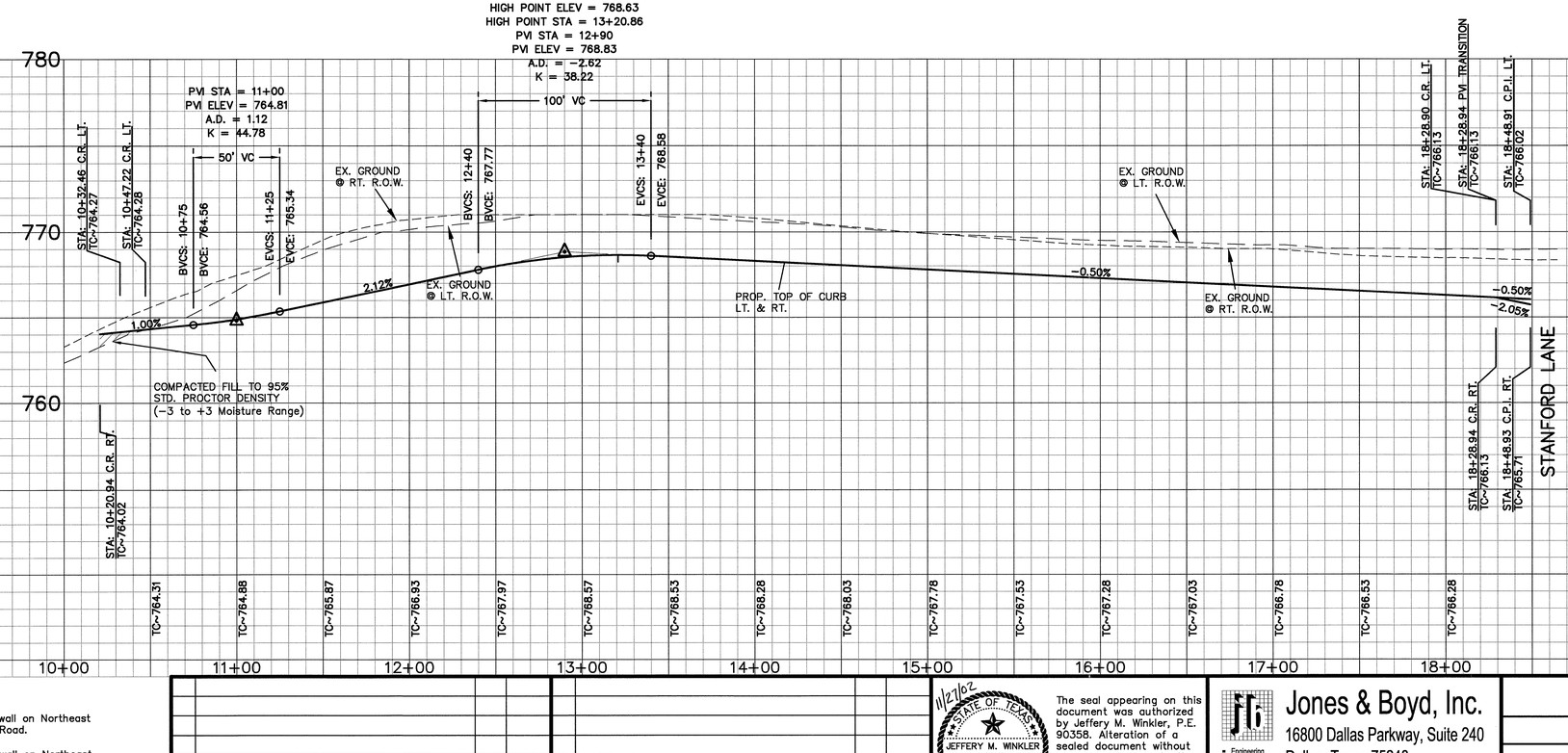


SEE SHEET 6 FOR STONE LANE

SEE SHEET 9 FOR STANFORD LANE



STONE LANE



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JONES & BOYD, INC.
BY:
DATE: 5-12-03

BENCHMARKS:

1. "□" Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road. Elev. 764.92'
2. "□" Cut on top centerline headwall on Northeast corner Missouri East and Redbud Road. Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE

NO.	REVISIONS DURING PLAN REVIEW	BY	DATE
1	Revised per staff comments.	SJS	11/26/02

STATE OF TEXAS — JEFFERY M. WINKLER — 90358 — LICENSED PROFESSIONAL ENGINEER — 11/27/02

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For Approval
For Construction 12/9/02

Jones & Boyd, Inc.
16800 Dallas Parkway, Suite 240
Dallas, Texas 75248
Tel: 972-248-7676
Fax: 972-248-1414
- Engineering
- Planning
- Landscape Architecture
- Surveying

PAVING PLAN & PROFILE
STONE LANE
HERITAGE, PHASE 1
City of Celina, Collin County, Texas

PROJECT NO. W1401
SHEET NO. 7

Drawing Info: sjs H:\Projects\W1401\dwg\W1401PV.dwg 11/26/02 5:00 pm Plot Info: Drawing: H:\Projects\W1401\dwg\W1401PV.dwg Plotted by: sjs Plot date: 11/26/02 Plot time: 5:09 pm

P-200305-01

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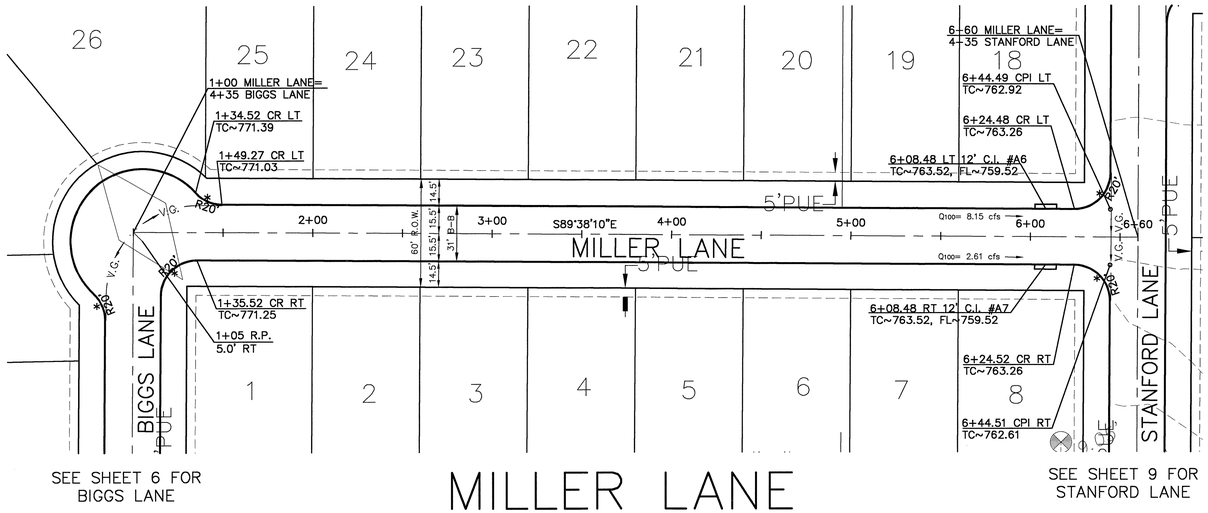
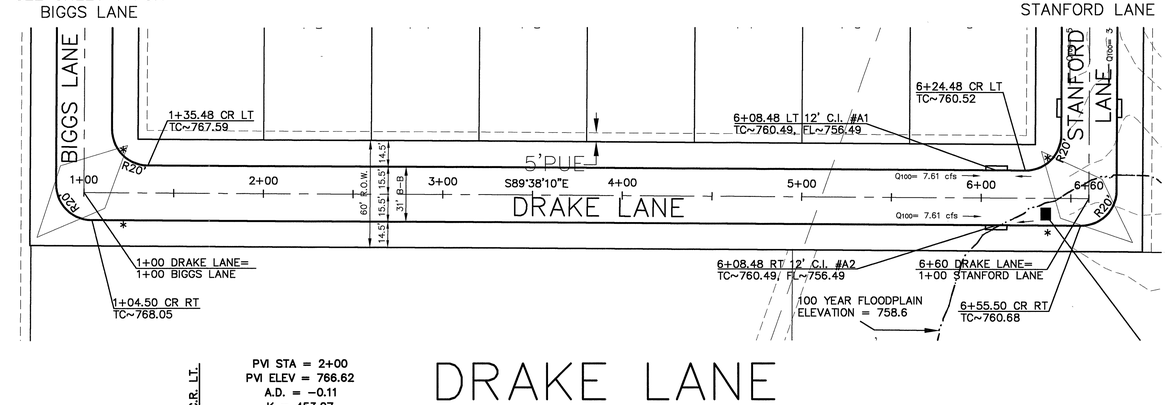


SEE SHEET 6 FOR BIGGS LANE

SEE SHEET 9 FOR STANFORD LANE

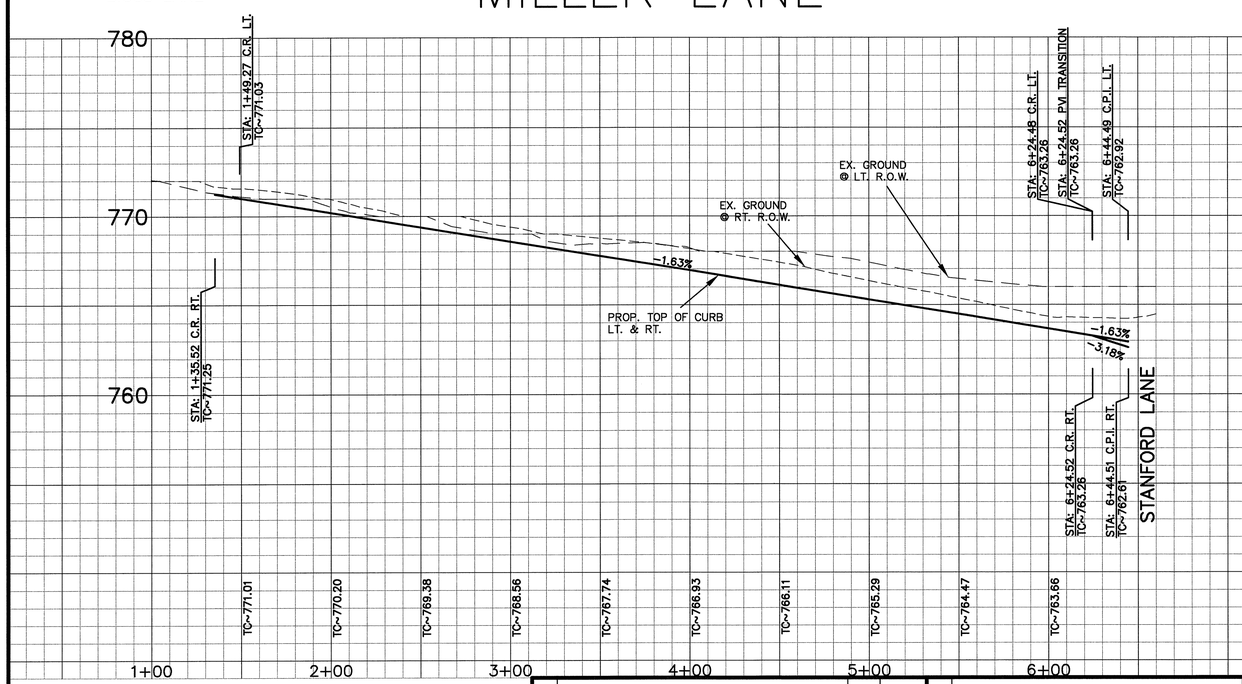
MILLER LANE

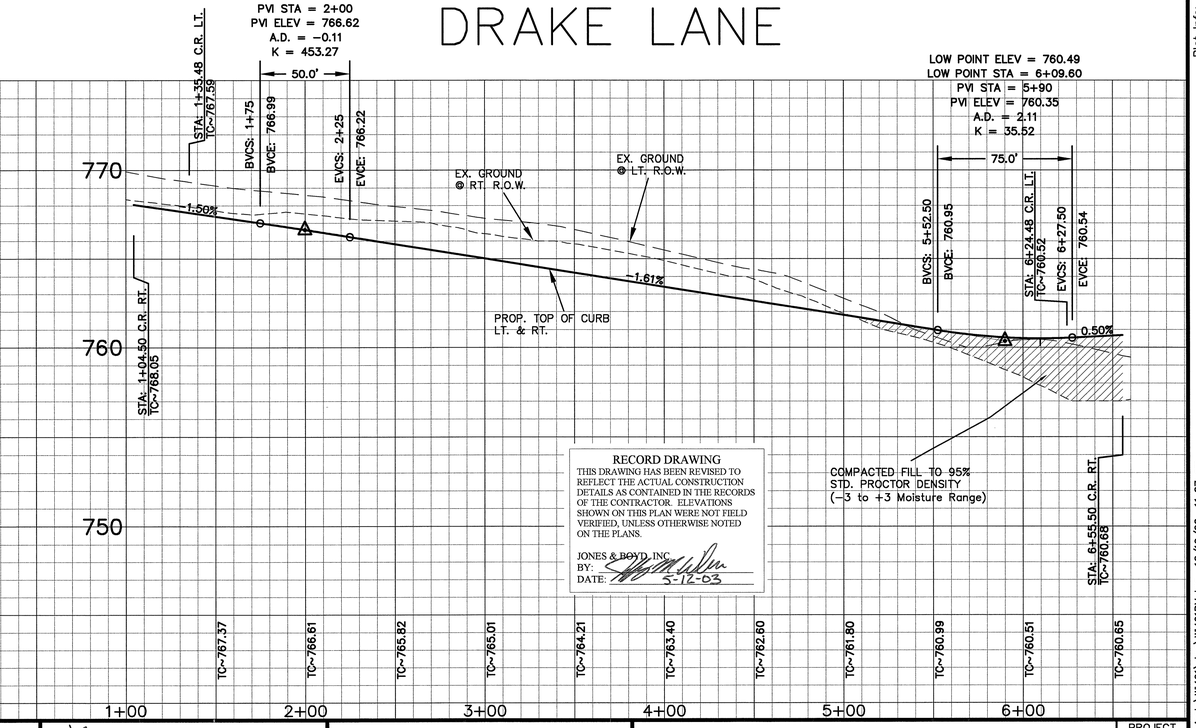


SEE SHEET 6 FOR BIGGS LANE

SEE SHEET 9 FOR STANFORD LANE

DRAKE LANE





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JONES & BOYD, INC.
BY:
DATE: 5-12-03

BENCHMARKS:

1. "□" Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road. Elev. 764.92'
2. "□" Cut on top centerline headwall on Northeast corner Missouri Eest and Redbud Road. Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE
1	Revised TC elev. at 1+34.52 Miller Lane eyebrow.	SJS	12/19/02

NO.	REVISIONS DURING PLAN REVIEW	BY	DATE
2	Added additional curb depressions for ramps.	JMW	12/9/02
1	Revised per staff comments.	SJS	11/26/02

12/20/02 STATE OF TEXAS JEFFERY M. WINKLER 90358 LICENSED PROFESSIONAL ENGINEER
FOR CONSTRUCTION

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Fax: 972-248-1414
- Engineering
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- Surveying

PAVING PLAN & PROFILE

MILLER LANE & DRAKE LANE

HERITAGE, PHASE 1

City of Celina, Collin County, Texas

PROJECT NO. WI401

SHEET NO. 8

P-200305-01

Drawing Info: ss H:\Projects\WI401\dwg\WI401PV.dwg 12/19/02 11:27 am

Plot Info: Drawing: H:\Projects\WI401\dwg\WI401PV.dwg Plotted by: ss Plot date: 12/19/02 Plot time: 11:27 am

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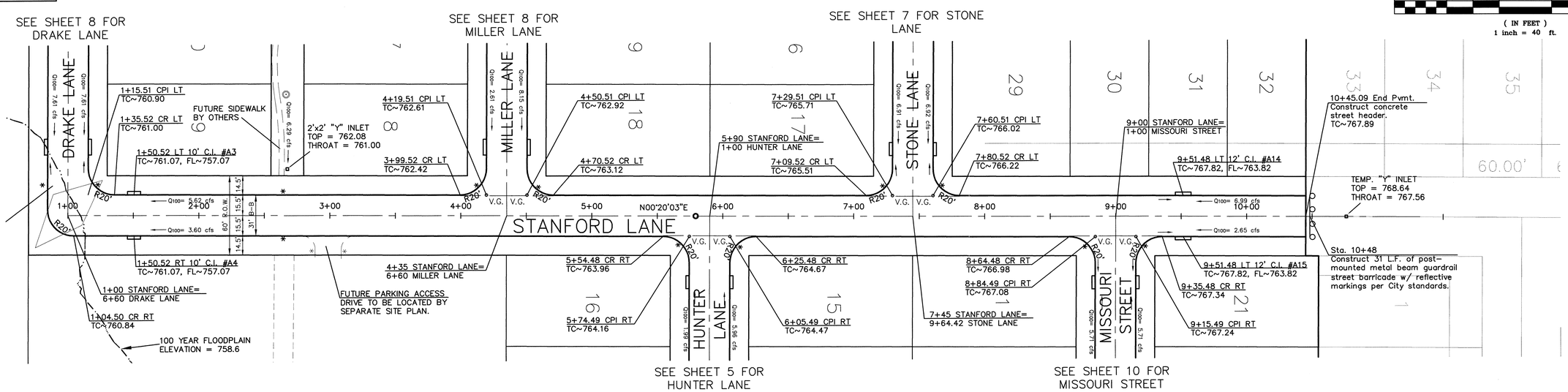
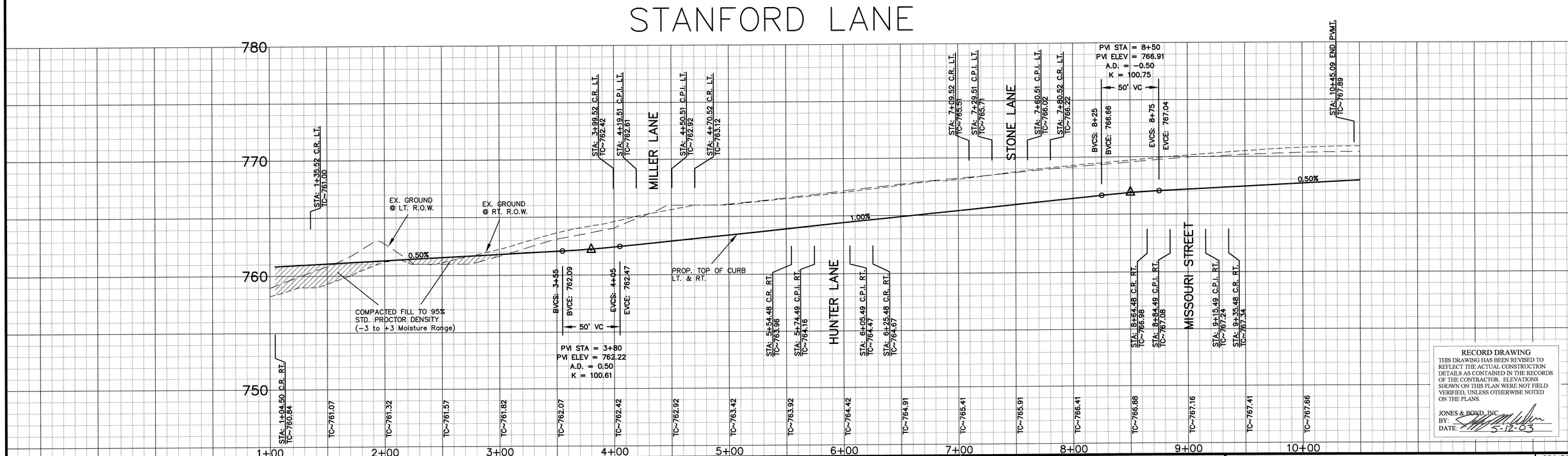
Barrier Free Ramp & Sidewalks to be constructed by Homebuilder unless otherwise noted.

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.



STANFORD LANE



RECORD DRAWING
THIS DRAWING HAS BEEN REVISED TO REFLECT THE ACTUAL CONSTRUCTION DETAILS AS CONTAINED IN THE RECORDS OF THE CONTRACTOR. ELEVATIONS SHOWN ON THIS PLAN WERE NOT FIELD VERIFIED, UNLESS OTHERWISE NOTED ON THE PLANS.
JONES & BOYD, INC.
BY:
DATE: 5-12-03

BENCHMARKS:

1. "□" Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road. Elev. 764.92'
2. "□" Cut on top centerline headwall on Northeast corner Missouri East and Redbud Road. Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE

NO.	REVISIONS DURING PLAN REVIEW	BY	DATE
3	Added additional curb depressions for ramps.	JMW	12/9/02
2	Add note for street barricade per staff comment.	JMW	12/9/02
1	Revised per staff comments.	SJS	11/21/02

12/9/02
STATE OF TEXAS
JEFFERY M. WINKLER
90358
LICENSED PROFESSIONAL ENGINEER
For Construction

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16800 Dallas Parkway, Suite 240
Dallas, Texas 75248
Tel: 972-248-7676
Fax: 972-248-1414
• Engineering • Planning • Landscape Architecture • Surveying

PAVING PLAN & PROFILE
STANFORD LANE
HERITAGE, PHASE 1
City of Celina, Collin County, Texas

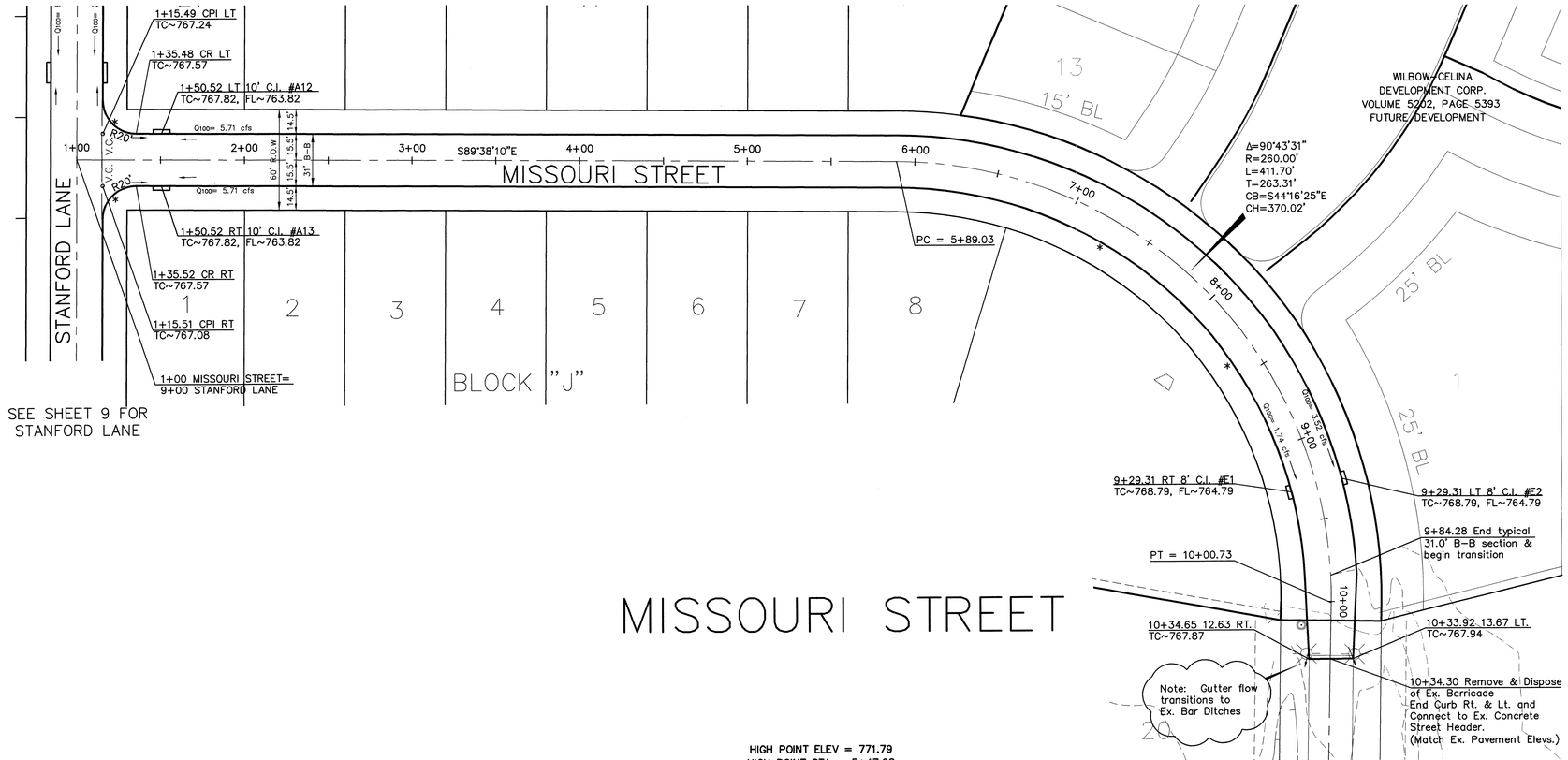
PROJECT NO. W1401
SHEET NO. 9

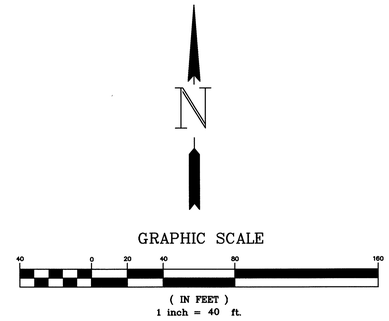
Plot Info: Drawing: W401PV.dwg H:\Projects\W1401\dwg\ Plotted by: jmw Plot date: 12/9/02 Plot time: 11:15 am
Drawing Info: jmw W1401PV.dwg H:\Projects\W1401\dwg\ 12/9/02 11:15 am

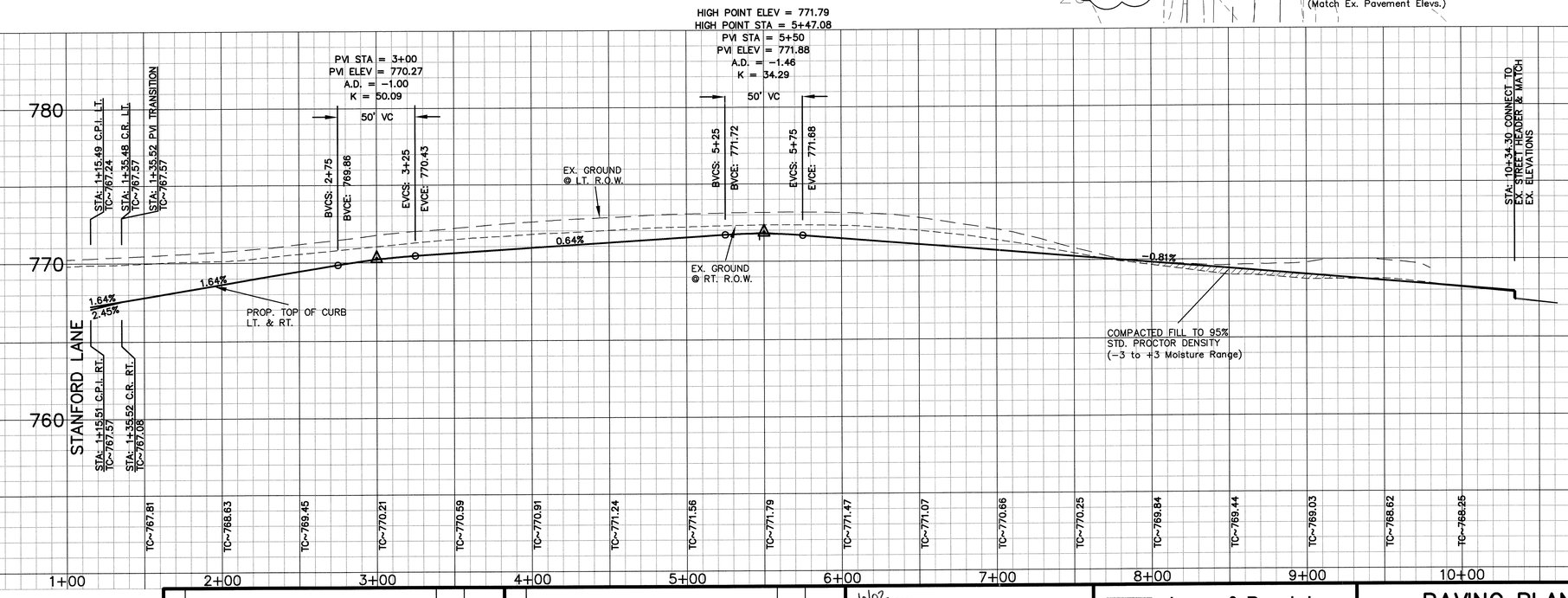
P-200305-01

"*" Denotes location where Paving Contractor shall construct a "Lay Down" Curb for the construction of a Barrier Free Ramp per City of Celina Standards.

Barrier Free Ramp & Sidewalks to be constructed by Homebuilder unless otherwise noted.







RECORD DRAWING
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JONES & BOYD, INC.
BY:
DATE: 5-12-03

BENCHMARKS:

1. "□" Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road. Elev. 764.92'
2. "□" Cut on top centerline headwall on Northeast corner Missouri Eest and Redbud Road. Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE

NO.	REVISIONS DURING PLAN REVIEW	BY	DATE
2	Added additional curb depressions for ramps.	JMW	12/9/02
1	Revised per staff comments.	SJS	11/21/02

12/9/02
STATE OF TEXAS
JEFFERY M. WINKLER
90358
LICENSED
PROFESSIONAL ENGINEER
For Construction

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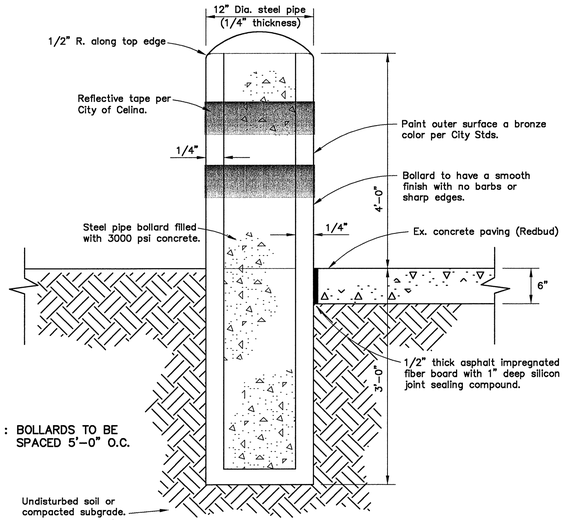
PAVING PLAN & PROFILE
MISSOURI STREET
HERITAGE, PHASE 1
City of Celina, Collin County, Texas

PROJECT NO. W1401
SHEET NO. 10

Plot info: Drawing: W401PV.dwg H:\Projects\W401\dwg\ Plotted by: jmw Plot date: 12/9/02 Plot time: 11:17 am

P-200305-01



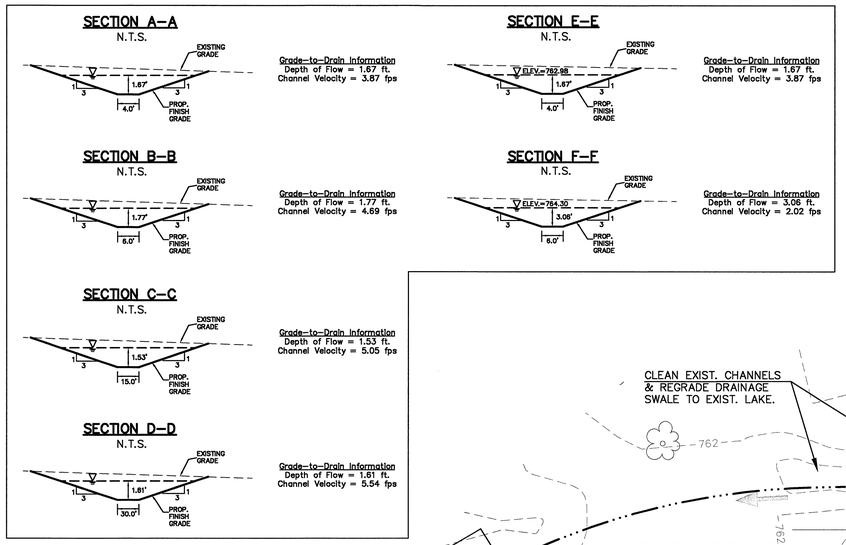
NOTE : BOLLARDS TO BE SPACED 5'-0" O.C.

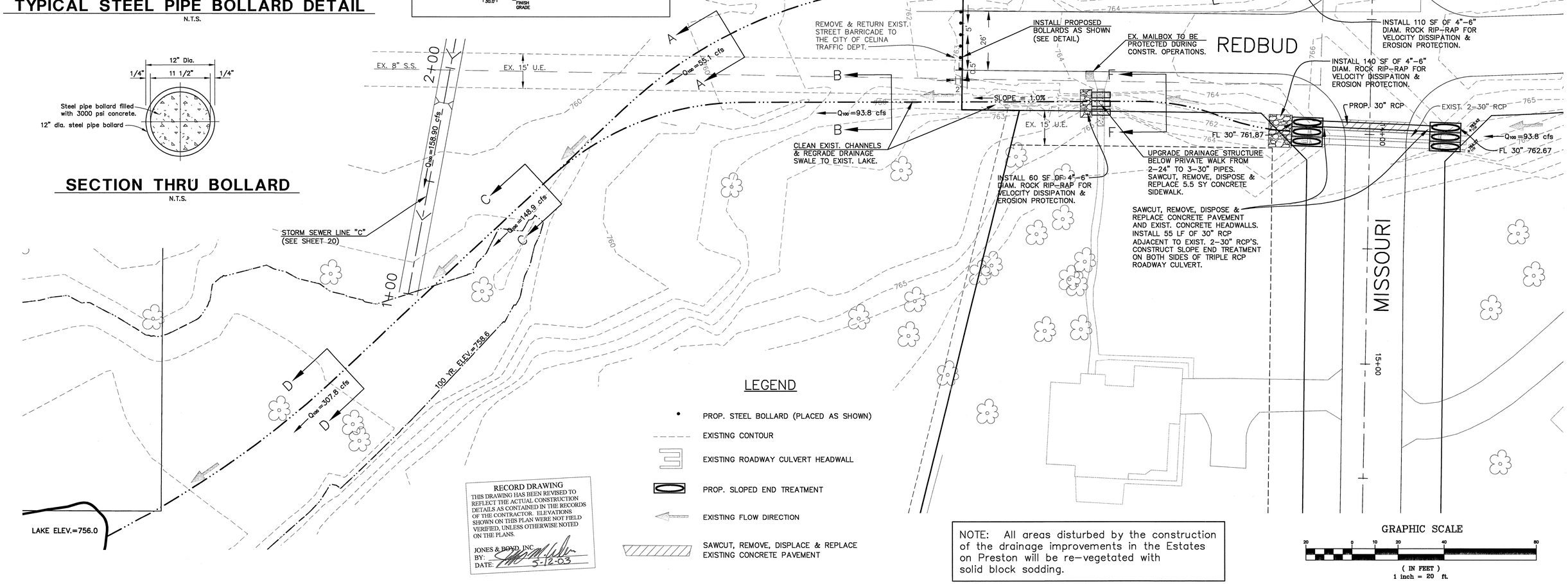
TYPICAL STEEL PIPE BOLLARD DETAIL

N.T.S.

SECTION THRU BOLLARD

N.T.S.





LEGEND

- PROP. STEEL BOLLARD (PLACED AS SHOWN)
- EXISTING CONTOUR
- EXISTING ROADWAY CULVERT HEADWALL
- PROP. SLOPED END TREATMENT
- EXISTING FLOW DIRECTION
- SAWCUT, REMOVE, DISPLACE & REPLACE EXISTING CONCRETE PAVEMENT

RECORD DRAWING
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JONES & BOYD, INC.
BY:
DATE: 5-12-03

NOTE: All areas disturbed by the construction of the drainage improvements in the Estates on Preston will be re-vegetated with solid block sodding.

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

BENCHMARKS:

1. "D" Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road. Elev. 764.92'
2. "D" Cut on top centerline headwall on Northeast corner Missouri East and Redbud Road. Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE

NO.	REVISIONS DURING PLAN REVIEW	BY	DATE
2	Added additional cross sections and notes.	SJS	1/30/03
1	Added plan sheet per staff comments.	JMW	12/10/02

2/4/03 STATE OF TEXAS JEFFERY M. WINKLER 90358 LICENSED PROFESSIONAL ENGINEER

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FOR APPROVAL

Jones & Boyd, Inc.
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- Engineering
- Planning
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PAVING / DRAINAGE IMPROVEMENTS

MISSOURI / REDBUD INTERSECTION

HERITAGE, PHASE 1

City of Celina, Collin County, Texas

PROJECT NO. W1401

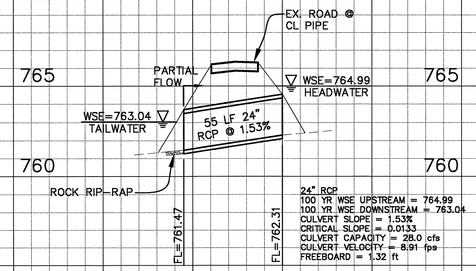
SHEET NO. 10A

Drawing Info: SS H:\Projects\W1401\dwg\W401PV.dwg 1/30/03 6:05 pm
Plot Info: Drawing: H:\Projects\W1401\dwg\W401PV.dwg Plotted by: SS Plot date: 1/30/03 Plot time: 6:05 pm

P-200305-01

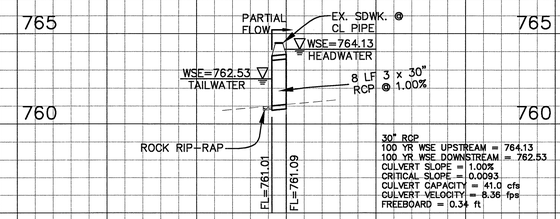
CULVERTS ON NORTH SIDE OF REDBUD CROSSING MISSOURI

EXISTING 2-24" CULVERT
INSTALL 1-24" ADDITIONAL PIPE



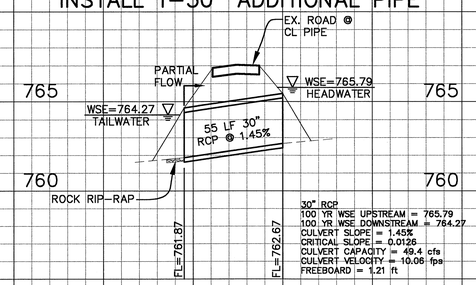
PROPOSED PIPES UNDER SDWK. (LOT 12, BLK. A)

INSTALL 3-30" CULVERT



CULVERTS ON SOUTH SIDE OF REDBUD CROSSING MISSOURI

EXISTING 2-30" CULVERT
INSTALL 1-30" ADDITIONAL PIPE



NOTE:
INSTALLATION OF CULVERTS SHALL MAINTAIN DESIGN SLOPE AS NOTED. CONTRACTOR TO VERIFY PRIOR TO PAVING OPERATIONS.

RECORD DRAWING
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JONES & BOYD, INC
BY:
DATE: 5-12-03

1"=40' HORIZ.
1"=4' VERTICAL

BENCHMARKS:

1. "□" Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road. Elev. 764.92'
2. "□" Cut on top centerline headwall on Northeast corner Missouri East and Redbud Road. Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE

NO.	REVISIONS DURING PLAN REVIEW	BY	DATE
1	Added plan sheet per staff comments.	SJS	1/30/03

2/4/03
STATE OF TEXAS
JEFFERY M. WINKLER
90358
LICENSED
PROFESSIONAL ENGINEER
FOR APPROVAL

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- Engineering
- Planning
- Landscape Architecture
- Surveying

ROAD CULVERT PROFILES

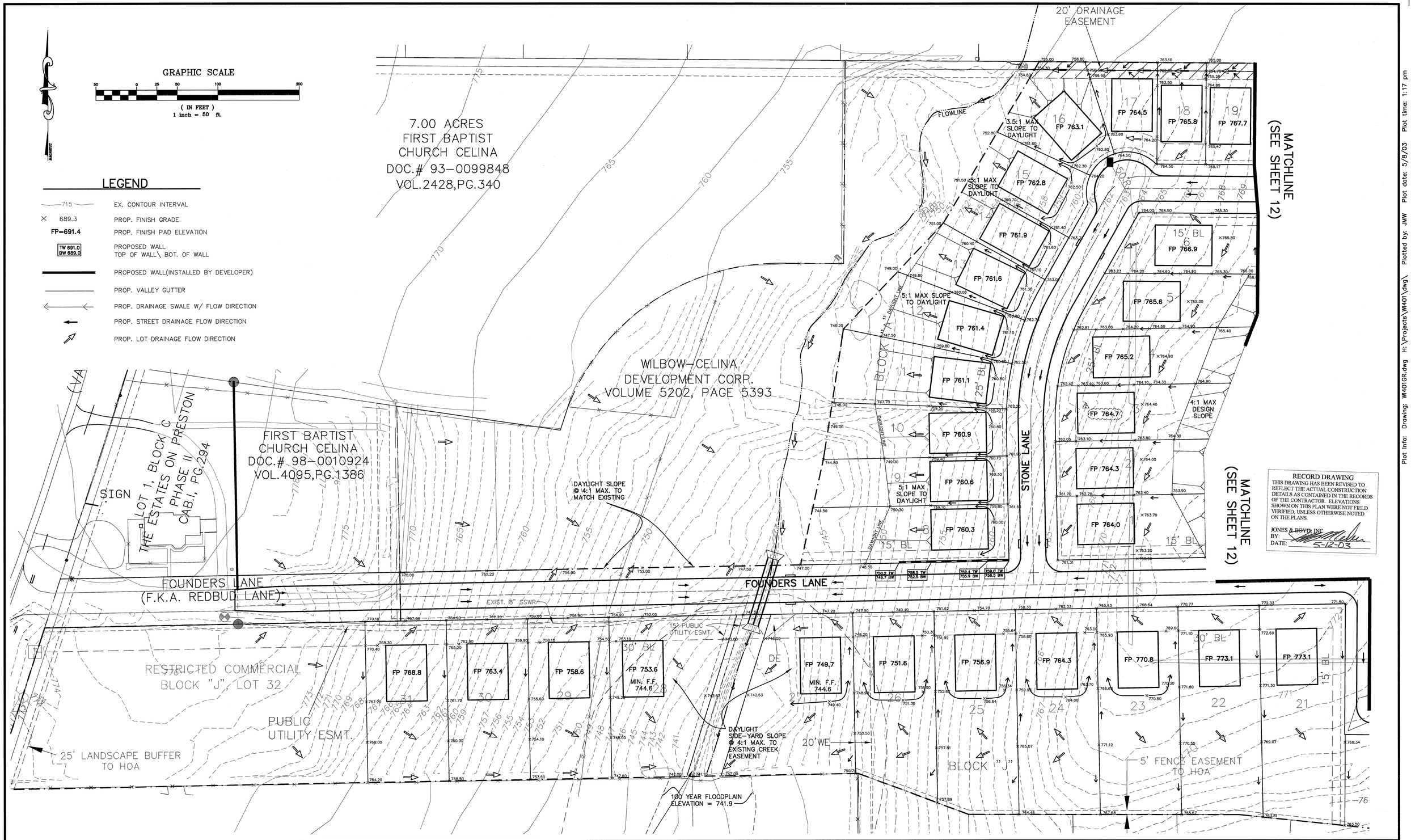
HERITAGE, PHASE 1

City of Celina, Collin County, Texas

PROJECT NO. W1401
SHEET NO. 10B

Plot Info: Drawing: H:\Projects\W1401\dwg\W401PV.dwg Plotted by: ss Plot date: 1/31/03 Plot time: 4:22 pm
Drawing Info: ss H:\Projects\W1401\dwg\W401PV.dwg 1/31/03 4:21 pm

P-200305-01



BENCHMARKS:

1. "D" Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road. Elev. 764.92'
2. "D" Cut on top centerline headwall on Northeast corner Missouri East and Redbud Road. Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE	NO.	REVISIONS DURING PLAN REVIEW	BY	DATE
6	Record drawings.	JMW	5/9/03				
5	Lower pads – Lots 8–17, Blk. A 2' to balance.	JMW	5/7/03				
4	Spot elevs & wall along back of Lots 8–16, Blk.A.	JMW	5/7/03				
3	Add flow arrows to back of Lots 21–31, Blk. J.	JMW	5/7/03				
2	Adjusted design grade.	SJS	3/14/03				
1	Add drainage swale behind Lots 16–20, Block A.	SJS	2/4/03	1	Add retaining walls along floodplain (lots 27–28).	JMW	12/9/02

5/9/03
STATE OF TEXAS
JEFFERY M. WINKLER
90358
LICENSED
PROFESSIONAL ENGINEER
"Record Drawings"

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• Engineering
• Planning
• Landscape Architecture
• Surveying

LOT GRADING PLAN

HERITAGE, PHASE 1

City of Celina, Collin County, Texas

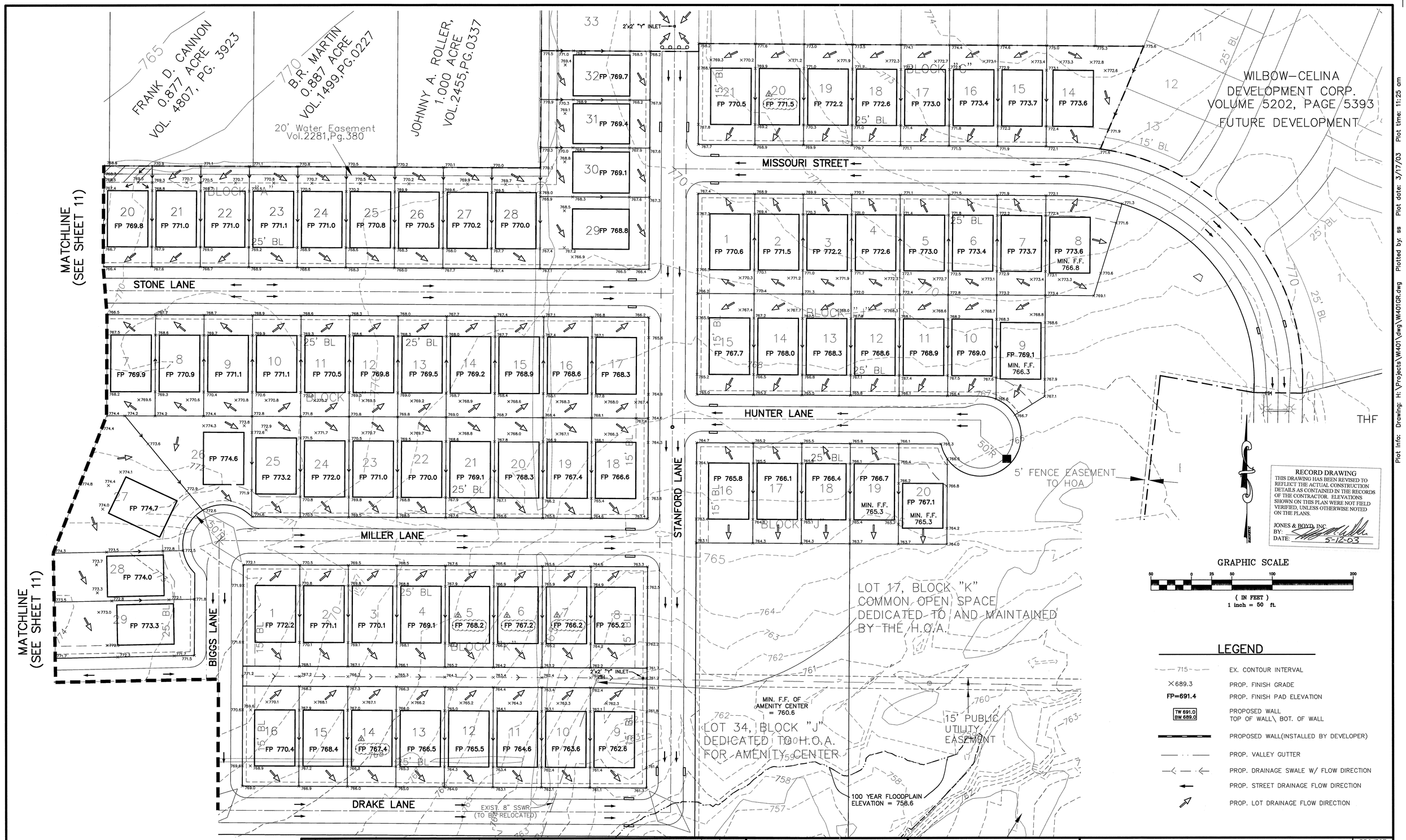
PROJECT NO. WI401

SHEET NO. 11

Plot Info: Drawing: WI401GR.dwg H:\Projects\WI401\dwg\ Plotted by: JMW Plot date: 5/8/03 Plot time: 1:17 pm

Drawing Info:

P-200305-01



BENCHMARKS:

1. "D" Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road. Elev. 764.92'
2. "D" Cut on top centerline headwall on Northeast corner Missouri East and Redbud Road. Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE
3	Deleted retaining walls on lots 27 & 28, Block J.	SJS	3/14/03
2	Adjusted design grade.	SJS	3/14/03
1	Add drainage swale behind Lots 16–20, Block A.	SJS	2/4/03

NO.	REVISIONS DURING PLAN REVIEW	BY	DATE

3/17/03 STATE OF TEXAS JEFFERY M. WINKLER 90358 LICENSED PROFESSIONAL ENGINEER

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FOR CONSTRUCTION

Jones & Boyd, Inc.
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Tel: 972-248-7676
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- Engineering
- Planning
- Landscape Architecture
- Surveying

LOT GRADING PLAN

HERITAGE, PHASE 1

City of Celina, Collin County, Texas

PROJECT NO. W1401

SHEET NO. 12

Plot Info: Drawing: H:\Projects\W1401\dwg\W1401GR.dwg Plotted by: ss Plot date: 3/17/03 Plot time: 11:25 am

Drawing Info:

P-200305-01

All Erosion Control Measures Shall Be Maintained Until Ground Cover Is Established. This Includes Grassing of All Areas Disturbed During Construction.

LEGEND

- 625 — Existing ground contours & elevations
- Inlet Protection by UtilityPaving Contractor
- Silt Fence by Erosion Control Contractor Prior to Excavation
- Curlex Erosion Control Mat After Paving
- Direction of Flow for Proposed Grading
- Vegetative Buffer (Natural)

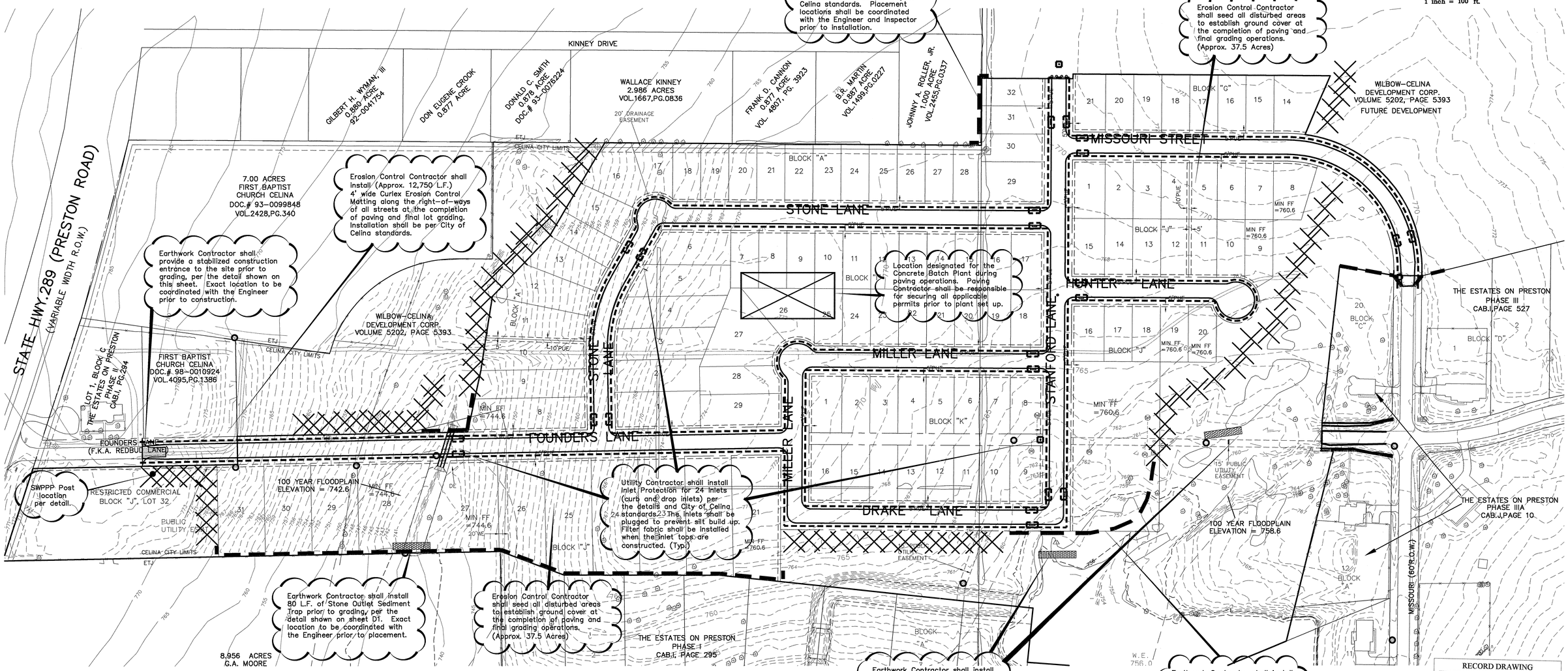
All Erosion Control Measures shall be constructed per City of Celina standards and the details shown on sheet D1.

N

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.



RECORD DRAWING

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JONES & BOYD, INC.
BY: M. Wilder
DATE: 5-12-03

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NO.	REVISIONS DURING CONSTRUCTION	BY	DATE
1	Record Drawings.	JMW	5/9/03

NO.	REVISIONS DURING PLAN REVIEW	BY	DATE

5/9/03 STATE OF TEXAS JEFFERY M. WINKLER 90358 LICENSED PROFESSIONAL ENGINEER

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RECORD DRAWINGS

Jones & Boyd, Inc.
16800 Dallas Parkway, Suite 240
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Tel: 972-248-7676
Fax: 972-248-1414
- Engineering
- Planning
- Landscape Architecture
- Surveying

EROSION CONTROL PLAN

HERITAGE, PHASE 1

City of Celina, Collin County, Texas

PROJECT NO. WI401

SHEET NO. 13

Plot Info: Drawing: A-WI401ER-13-D4.dwg H:\Projects\WI401\dwg\ 5/9/03 1:19 pm Plotted by: JMW Plot date: 5/9/03 Plot time: 1:24 pm
Drawing Info: JMW A-WI401ER-13-D4.dwg H:\Projects\WI401\dwg\

P-200305-01

LEGEND

D1 / ACRES / CFS
- DRAINAGE AREA NUMBER
- AREA (Acres)
- RUNOFF (c.f.s.)

- ON-SITE DRAINAGE DIVIDE
- PROP. ON-SITE FLOW DIRECTION
- EXIST. OFF-SITE FLOW DIRECTION
- EXIST. 5' INTERVAL CONTOUR
- EXIST. 1' INTERVAL CONTOUR
- PROP. STORM SEWER AND INLET

RUNOFF CALCULATIONS

Drainage Basin	Area (Acres)	Runoff Coeff.	Intensity (in./hr.)	Time Conc. (min.)	Discharge (c.f.s.)
	"A"	"C."	"I"	"Tc"	"Q"
A	0.85	0.55	7.52	15.0	3.52
B	0.42	0.55	7.52	15.0	1.74
C	1.38	0.55	7.52	15.0	5.71
D	1.38	0.55	7.52	15.0	5.71
E	1.44	0.55	7.52	15.0	5.96
F	0.48	0.55	7.52	15.0	1.99
G	0.86	0.55	7.52	15.0	3.56
H	2.26	0.55	7.52	15.0	9.35
I	0.87	0.55	7.52	15.0	3.60
J	1.36	0.55	7.52	15.0	5.62
K	1.52	0.55	7.52	15.0	6.29
L	1.67	0.55	7.52	15.0	6.91
M	1.97	0.55	7.52	15.0	8.15
N	0.63	0.55	7.52	15.0	2.61
O	1.52	0.55	7.52	15.0	6.29
P	1.84	0.55	7.52	15.0	7.61
Q	1.84	0.55	7.52	15.0	7.61
R	1.11	0.55	7.52	15.0	4.59
S	1.05	0.55	7.52	15.0	4.34
T	1.69	0.55	7.52	15.0	6.99
U	0.55	0.55	7.52	15.0	2.27
V	1.35	0.55	7.52	15.0	5.58
W	3.50	0.55	7.52	15.0	14.48
OF-1	110.00	0.50	7.52	15.0	413.60
OF-2	4.04	0.30	7.52	15.0	9.11
(Fut. Drainage Areas)					
P1	22.70	0.50	7.52	15.0	85.35
P2	4.31	0.52	7.52	15.0	16.85
P3	1.29	0.30	7.52	15.0	2.91
P4	37.00	0.50	7.52	15.0	139.12
P5	12.5	0.50	7.52	15.0	47.00

DRAINAGE DESIGN THEORY

Rational Method
Q=CIA
"C" and "I" values taken from City of Plano Standards

N

GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)
1 inch = 100 ft.

RECORD DRAWING
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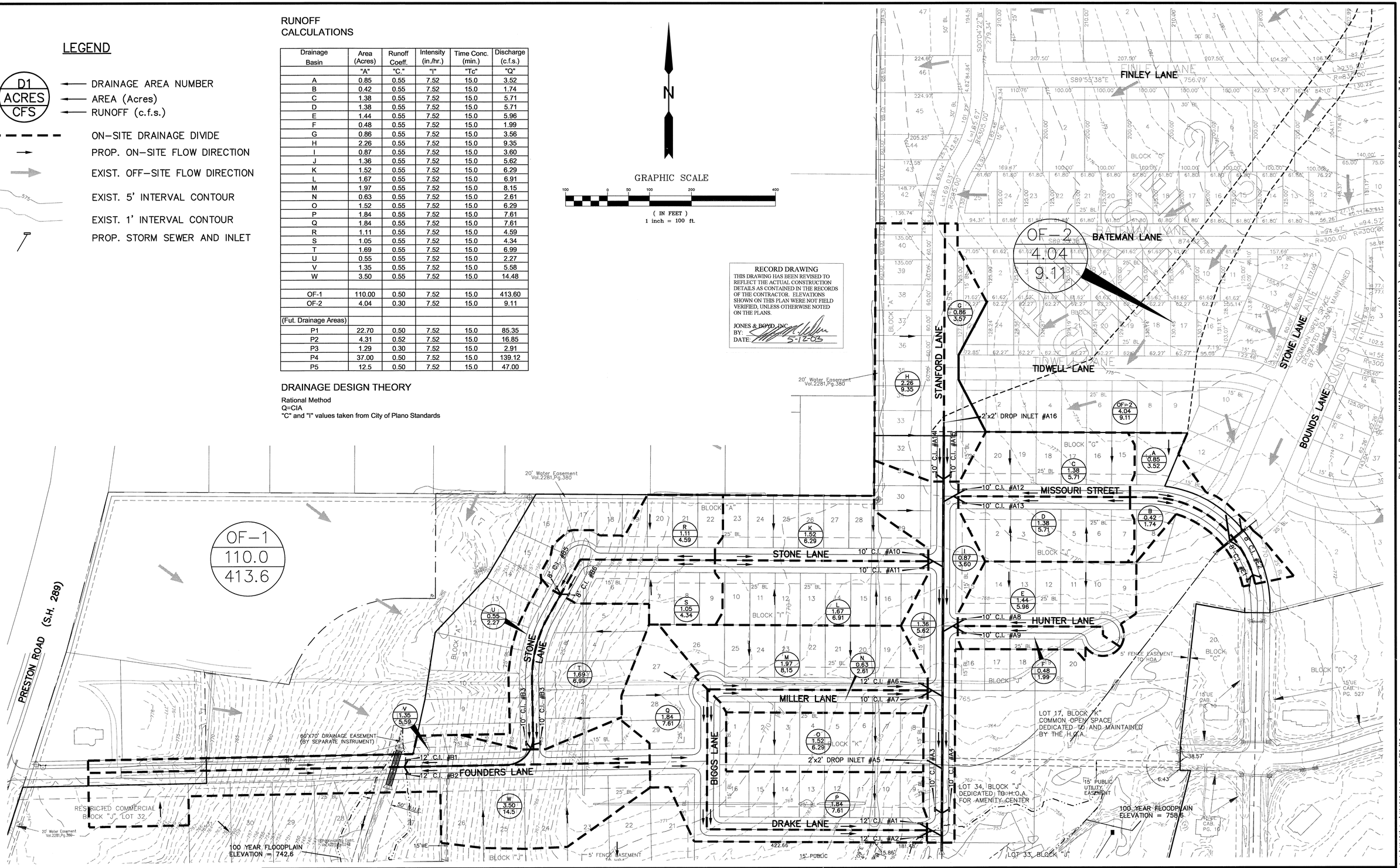
JONES & BOYD, INC.
BY:
DATE: 5-12-03



BENCHMARKS:

1. "D" Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road. Elev. 764.92'
2. "D" Cut on top centerline headwall on Northeast corner Missouri Eest and Redbud Road. Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE	NO.	REVISIONS DURING PLAN REVIEW	BY	DATE

11/6/02 STATE OF TEXAS JEFFERY M. WINKLER 90358 LICENSED PROFESSIONAL ENGINEER

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FOR CITY REVIEW
For Approval 11/27/02
For Construction 12/9/02

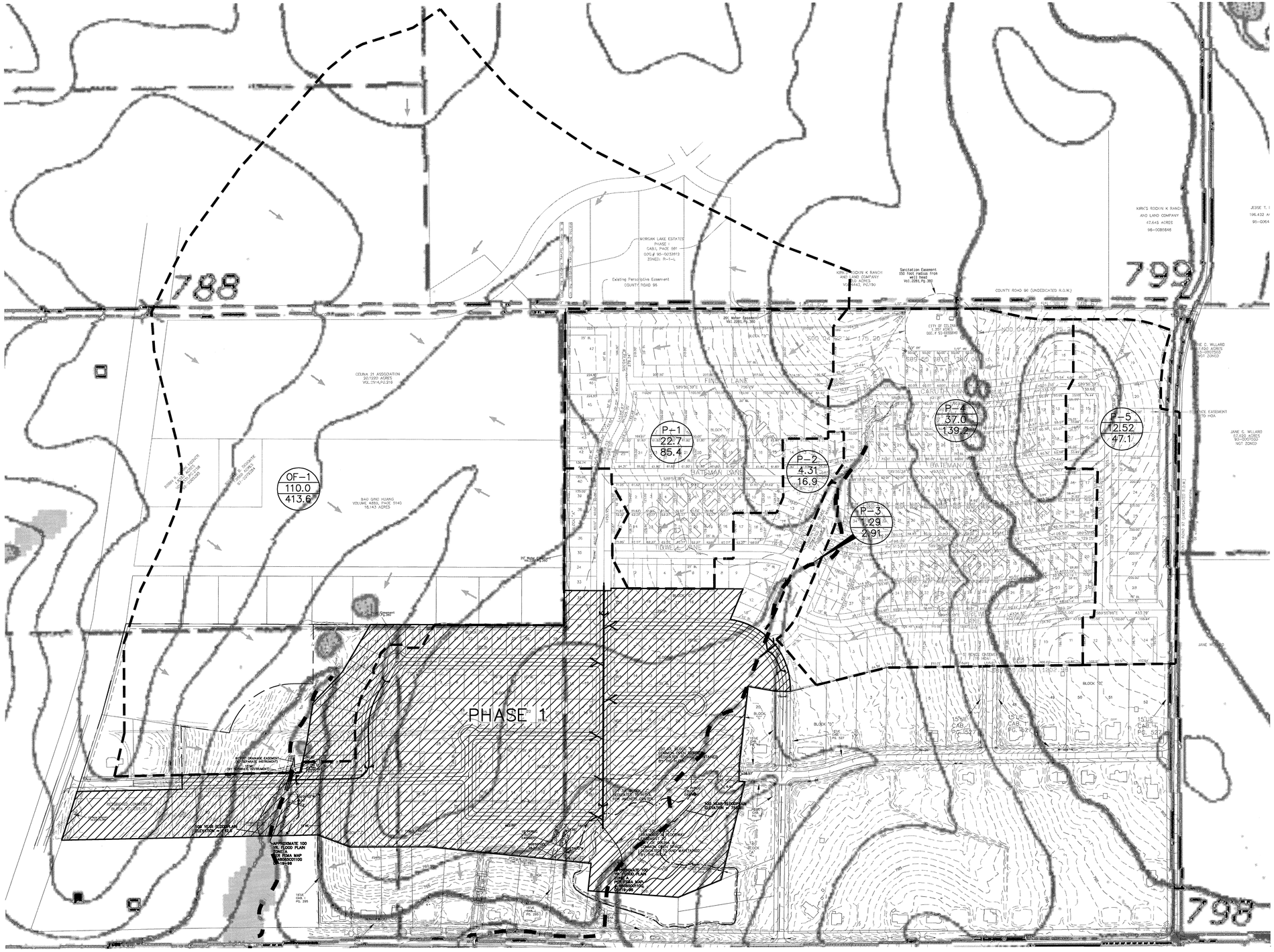
Jones & Boyd, Inc.
16800 Dallas Parkway, Suite 240
Dallas, Texas 75248
Tel: 972-248-7676
Fax: 972-248-1414
- Engineering
- Planning
- Landscape Architecture
- Surveying

DRAINAGE AREA MAP
ON SITE
HERITAGE, PHASE 1
City of Celina, Collin County, Texas

PROJECT NO. WI401
SHEET NO. 14

P-200305-01

Drawing Info: KAB H:\projects\WI401\dwg\WI401DAM.dwg 10/30/02 4:52 pm
Plot Info: Drawing: WI401DAM.dwg H:\Projects\WI401\dwg\ Plotted by: GJH Plot date: 10/7/02 Plot time: 3:24 pm



N

GRAPHIC SCALE

200 0 100 200 400 800

(IN FEET)
1 inch = 200 ft.

LEGEND

D1 / ACRES / CFS	DRAINAGE AREA NUMBER AREA (Acres) RUNOFF (c.f.s.)
	OFF-SITE DRAINAGE DIVIDE
	PROP. ON-SITE FLOW DIRECTION
	EXIST. OFF-SITE FLOW DIRECTION
575	EXIST. 5' INTERVAL CONTOUR
	EXIST. 1' INTERVAL CONTOUR
	PROP. STORM SEWER AND INLET

RECORD DRAWING
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JONES & BOYD, INC.
BY:
DATE: 5-12-03

BENCHMARKS:

1. "D" Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road. Elev. 764.92'
2. "D" Cut on top centerline headwall on Northeast corner Missouri East and Redbud Road. Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE	NO.	REVISIONS DURING PLAN REVIEW	BY	DATE

11/6/02
STATE OF TEXAS
JEFFERY M. WINKLER
90358
LICENSED
PROFESSIONAL ENGINEER

The seal appearing on this document was authorized by Jeffery M. Winkler, P.E. 90358. Alteration of a sealed document without proper notification to the responsible engineer is an offense under the Texas Engineering Practice Act.

FOR CITY REVIEW
For Approval 11/27/02
For Construction 12/9/02

Jones & Boyd, Inc.
16800 Dallas Parkway, Suite 240
Dallas, Texas 75248
Tel: 972-248-7676
Fax: 972-248-1414
- Engineering
- Planning
- Landscape Architecture
- Surveying

DRAINAGE AREA MAP

OFF-SITE

HERITAGE, PHASE 1

City of Celina, Collin County, Texas

PROJECT NO. WI401

SHEET NO. 15

Plot Info: Drawing: WI401DAM.dwg H:\Projects\WI401\dwg\ Plotted by: GJH Plot date: 10/7/02 Plot time: 3:24 pm
Drawing Info: KAB H:\projects\WI401\dwg\WI401DAM.dwg 10/30/02 4:52 pm

P-200305-01

INLET CALCULATIONS

INLET		AREA RUNOFF Q=CIA													SELECTED INLET					
No.	Location	Drainage Area No.	Design Storm Freq. (yrs.)	Time of Conc. (min.)	Intensity I (in./hr.)	Runoff Coeff. "C"	Area (Ac.)	Q (c.f.s.)	Inlet Bypass and Crossover (c.f.s.)	From	Total Gutter Flow (c.f.s.)	Gutter Slope (%)	Gutter Capacity (c.f.s.)	Crown Type	Length "Li" (Feet)	Type	Inlet Capacity (c.f.s.)	Carry-Over Downstream (c.f.s.)	Q100	Drainage Area
E2	MISSOURI STREET (9+29.31, Lt.)	A	100	15	7.52	0.55	0.85	3.5	0.0	NA	3.5	0.8	10.16	5" Para.	8	Std-Grade	5.2	0.0	3.5	A
E1	MISSOURI STREET (9+29.31, Rt.)	B	100	15	7.52	0.55	0.42	1.7	0.0	NA	1.7	0.8	10.16	5" Para.	8	Std-Grade	5.2	0.0	1.7	B
A12	MISSOURI STREET (1+50.52, Lt.)	C	100	15	7.52	0.55	1.38	5.7	0.0	NA	5.7	1.5	12.44	5" Para.	10	Std-Grade	6.4	0.0	5.7	C
A13	MISSOURI STREET (1+50.52, Rt.)	D	100	15	7.52	0.55	1.38	5.7	0.0	NA	5.7	1.5	12.44	5" Para.	10	Std-Grade	6.4	0.0	5.7	D
A8	HUNTER LANE (1+50.52, Lt.)	E	100	15	7.52	0.55	1.44	6.0	0.0	NA	6.0	0.5	7.18	5" Para.	10	Std-Grade	7.2	0.0	6.0	E
A9	HUNTER LANE (1+50.52, Rt.)	F	100	15	7.52	0.55	0.48	2.0	0.0	NA	2.0	0.5	7.18	5" Para.	10	Std-Grade	7.2	0.0	2.0	F
A15	STANFORD LANE (9+50.48, Rt.)	G	100	15	7.52	0.55	0.86	3.6	0.0	NA	3.6	0.5	7.18	5" Para.	12	Std-Grade	8.0	0.0	3.6	G
A14	STANFORD LANE (9+50.48, Lt.)	H	100	15	7.52	0.55	2.26	9.3	0.0	NA	9.3	0.5	7.18	5" Para.	12	Std-Grade	8.0	1.3	9.3	H
A4	STANFORD LANE (1+50.52, Rt.)	I	100	15	7.52	0.55	0.87	3.6	0.0	NA	3.6	0.5	7.18	5" Para.	10	Std-Grade	7.2	0.0	3.6	I
A3	STANFORD LANE (1+50.52, Lt.)	J	100	15	7.52	0.55	1.36	5.6	1.4	A6 / A14	7.0	0.5	7.18	5" Para.	10	Std-Grade	7.2	0.0	5.6	J
A10	STONE LANE (18+13.90, Lt.)	K	100	15	7.52	0.55	1.52	6.3	0.0	NA	6.3	0.5	7.18	5" Para.	10	Std-Grade	7.2	0.0	6.3	K
A11	STONE LANE (18+13.90, Rt.)	L	100	15	7.52	0.55	1.67	6.9	0.0	NA	6.9	0.5	7.18	5" Para.	10	Std-Grade	7.2	0.0	6.9	L
A6	MILLER LANE (6+08.48, Lt.)	M	100	15	7.52	0.55	1.97	8.1	0.0	NA	8.1	1.6	12.85	5" Para.	12	Std-Grade	8.0	0.1	8.1	M
A7	MILLER LANE (6+08.48, Rt.)	N	100	15	7.52	0.55	0.63	2.6	0.0	NA	2.6	1.6	12.85	5" Para.	10	Std-Grade	6.3	0.0	2.6	N
A5		O	100	15	7.52	0.55	1.52	6.3	0.0	NA	6.3				8	2'X2' "Y" Inlet	17.0	0.0	6.3	O
A1	DRAKE LANE (6+08.48, Lt.)	P	100	15	7.52	0.55	1.84	7.6	0.0	NA	7.6	1.5	12.44	5" Para.	12	Std-Grade	8.0	0.0	7.6	P
A2	DRAKE LANE (6+08.48, Rt.)	Q	100	15	7.52	0.55	1.84	7.6	0.0	NA	7.6	1.5	12.44	5" Para.	12	Std-Grade	8.0	0.0	7.6	Q
A16		OF-2	100	15	7.52	0.3	4.04	9.1	0.0	NA	9.1				8	2'X2' "Y" Inlet	17.0	0.0	9.1	OF-2
B5	STONE LANE (5+30.90, Lt.)	R	100	15	7.52	0.55	1.11	4.6	0.0	NA	4.6	0.5	7.18	5" Para.	8	Std-Grade	5.5	0.0	4.6	R
B6	STONE LANE (5+30.90, Rt.)	S	100	15	7.52	0.55	1.05	4.3	0.0	NA	4.3	0.5	7.18	5" Para.	8	Std-Grade	5.5	0.0	4.3	S
B4	STONE LANE (1+50.50, Rt.)	T	100	15	7.52	0.55	1.69	7.0	0.0	NA	7.0	0.5	7.18	5" Para.	10	Std-Grade	7.2	0.0	7.0	T
B3	STONE LANE (1+50.50, Lt.)	U	100	15	7.52	0.55	0.55	2.3	0.0	NA	2.3	0.5	7.18	5" Para.	10	Std-Grade	7.2	0.0	2.3	U
B1	FOUNDERS LANE (7+51.00, Lt.)	V	100	15	7.52	0.55	1.35	5.6	0.0	NA	5.6	1.0	10.16	5" Para.	12	Std-Sag	25.5	0.0	5.6	V
B2	FOUNDERS LANE (7+51.00, Rt.)	W	100	15	7.52	0.55	3.50	14.5	0.0	NA	14.5	1.0	10.16	5" Para.	12	Std-Sag	25.5	0.0	14.5	W

STORM CALCULATIONS

Uptream Station	Downstream Station	Pipe Length, L	Dr. Area	Area (Ac)	Runoff Coeff © *	Increm. CA	Accum. CA	Time @ upstream station	Design Storm (Yrs)	Intensity (in/hr)	Runoff (cfs)	Slope Hydraulic Gradient, S	Pipe D (in)	Velocity (fps)	"L" X "S"	Flow Time (min)	Time @ downstream station
Line "A"																	
1115.09	991.53	123.56	P-1	22.71	0.50	11.36	11.36	15.00	100	7.52	85.4	0.0050	45	7.73	0.61	0.27	15.27
991.53	936.30	55.23	G & H	2.80	0.55	1.54	12.90	15.27	100	7.49	96.6	0.0045	48	7.68	0.25	0.12	15.39
936.30	781.33	154.97	C & D	2.76	0.55	1.52	14.41	15.39	100	7.47	107.7	0.0056	48	8.57	0.87	0.30	15.69
781.33	626.30	155.03	K & L	3.19	0.55	1.75	16.17	15.69	100	7.44	120.3	0.0070	48	9.57	1.08	0.27	15.96
626.30	470.75	155.55	E & F	1.92	0.55	1.06	17.22	15.96	100	7.41	127.6	0.0048	4' x 4' RCB	8.15	0.75	0.32	16.28
470.75	297.89	172.86	M & N	2.56	0.55	1.41	18.63	16.28	100	7.37	137.3	0.0056	4' x 4' RCB	8.77	0.96	0.33	16.60
297.89	191.57	106.32	O	1.52	0.55	0.84	19.47	16.60	100	7.33	142.7	0.0060	4' x 4' RCB	9.12	0.64	0.19	16.80
191.57	135.75	55.82	I & J	2.56	0.55	1.41	20.88	16.80	100	7.31	152.6	0.0069	4' x 4' RCB	9.75	0.38	0.10	16.89
135.75	100.00	35.75	P & Q	3.68	0.55	2.02	22.90	16.89	100	7.30	167.1	0.0082	4' x 4' RCB	10.68	0.29	0.06	16.95
Line "B"																	
825.65	446.17	379.48	R & S	2.16	0.55	1.19	1.19	15.00	100	7.52	8.9	0.0072	18	5.06	2.73	1.25	16.25
446.17	438.08	8.09	T	1.69	0.55	0.93	2.12	16.25	100	7.37	15.6	0.0097	21	6.49	0.08	0.02	16.27
438.08	111.61	326.47	U	0.55	0.55	0.30	2.42	16.27	100	7.37	17.8	0.0126	21	7.42	4.12	0.73	17.01
111.61	100.00	11.61	V & W	4.85	0.55	2.67	5.09	17.01	100	7.28	37.1	0.0267	24	11.79	0.31	0.02	17.02
Line "C"																	
886.30	875.94	10.36	P-4	33.66	0.55	18.51	18.51	15.00	100	7.52	139.2	0.0093	48	11.08	0.10	0.02	15.02
875.94	839.97	35.97	P-3	0.70	0.55	0.39	18.90	15.02	100	7.52	142.1	0.0097	48	11.31	0.35	0.05	15.07
839.97	801.30	38.67	LINE D & E	4.09	0.55	2.25	21.15	15.07	100	7.51	158.9	0.0122	48	12.64	0.47	0.05	15.12
Line "D"																	
163.10	100.00	63.10	P-2	4.09	0.55	2.25	2.25	15.00	100	7.52	16.9	0.0056	24	5.38	0.35	0.20	15.20
Line "E"																	
200.00	100.00	100.00	A & B	1.27	0.55	0.70	0.70	15.00	100	7.52	5.3	0.0005	24	1.67	0.05	1.00	16.00
Line "F"																	
180.00	141.07	38.93	OF -1	110.00	0.50	55.00	55.00	15.00	100	7.52	413.6	0.0045	2 - 6' x 4' RCB	8.87	0.17	0.07	15.07
141.07	95	46.07	LINE B	8.97	0.55	4.93	59.93	15.07	100	7.51	450.2	0.0053	2 - 6' x 4' RCB	9.65	0.24	0.08	15.15

*Weighted C value

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JONES & BOYD, INC.
BY:
DATE: 5-12-03

BENCHMARKS:

1. "D" Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road. Elev. 764.92'
2. "D" Cut on top centerline headwall on Northeast corner Missouri East and Redbud Road. Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE

NO.	REVISIONS DURING PLAN REVIEW	BY	DATE
1	REVISED HYDRAULIC DATA	GJH	11/25/02

11/27/02
STATE OF TEXAS
JEFFERY M. WINKLER
90358
LICENSED
PROFESSIONAL ENGINEER

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For Approval
For Construction 12/9/02

Jones & Boyd, Inc.
16800 Dallas Parkway, Suite 240
Dallas, Texas 75248
Tel: 972-248-7676
Fax: 972-248-1414
- Engineering
- Planning
- Landscape Architecture
- Surveying

INLET & STORM CALCULATIONS

HERITAGE, PHASE 1

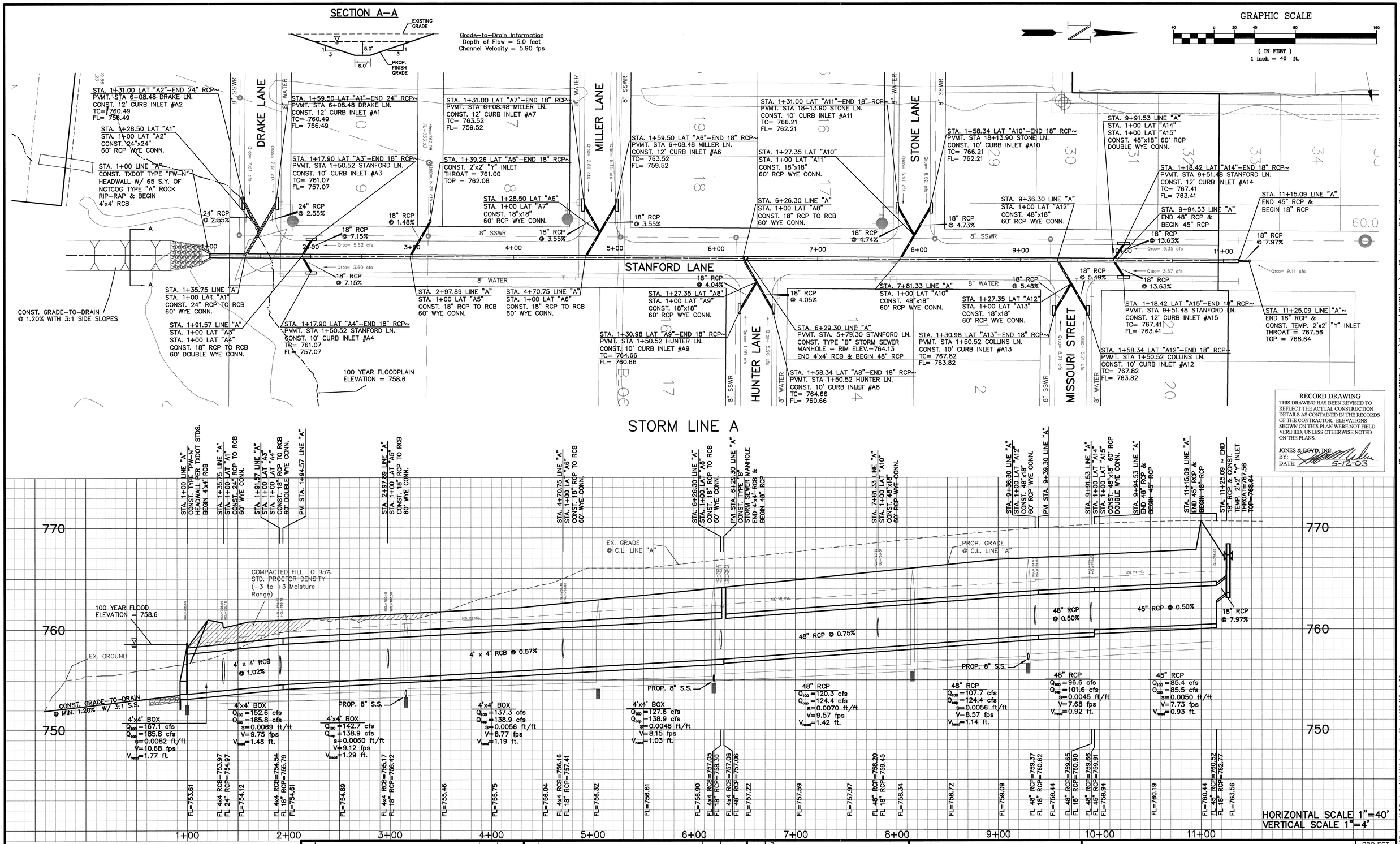
City of Celina, Collin County, Texas

PROJECT NO. W1401

SHEET NO. 16

P-200305-01

Plot Info: Drawing: W401ST.dwg H:\Projects\W401\dwg\ Plotted by: GJH Plot date: 11/26/02 Plot time: 9:34 am
Drawing Info: GJH W401ST.dwg H:\Projects\W401\dwg\ 1=40 11/26/02 9:24 am



BENCHMARKS:

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NO.	REVISIONS DURING CONSTRUCTION	BY	DATE

NO.	REVISIONS DURING PLAN REVIEW	BY	DATE
1	REVISED 100 YR. HGL & SIZE OF LAT "A1"	GJH	11/25/02

11/27/02
STATE OF TEXAS
JEFFERY M. WINKLER
90358
LICENSED
PROFESSIONAL ENGINEER

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• Engineering
• Planning
• Landscape Architecture
• Surveying

STORM SEWER PLAN & PROFILE

LINE A

HERITAGE, PHASE 1

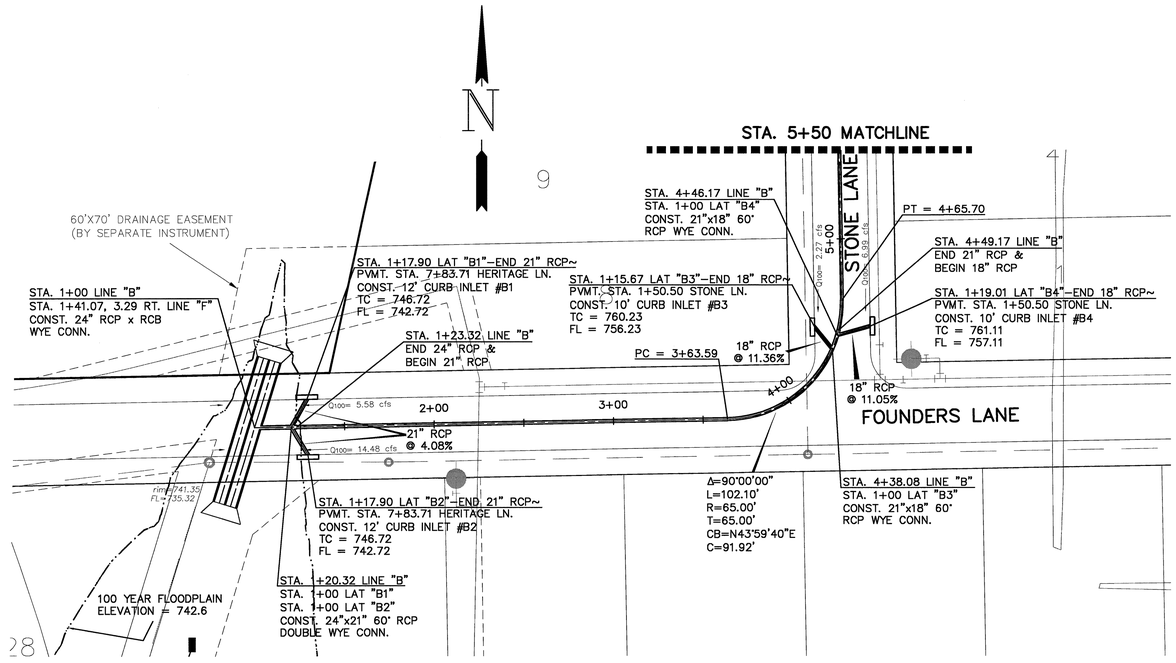
City of Celina, Collin County, Texas

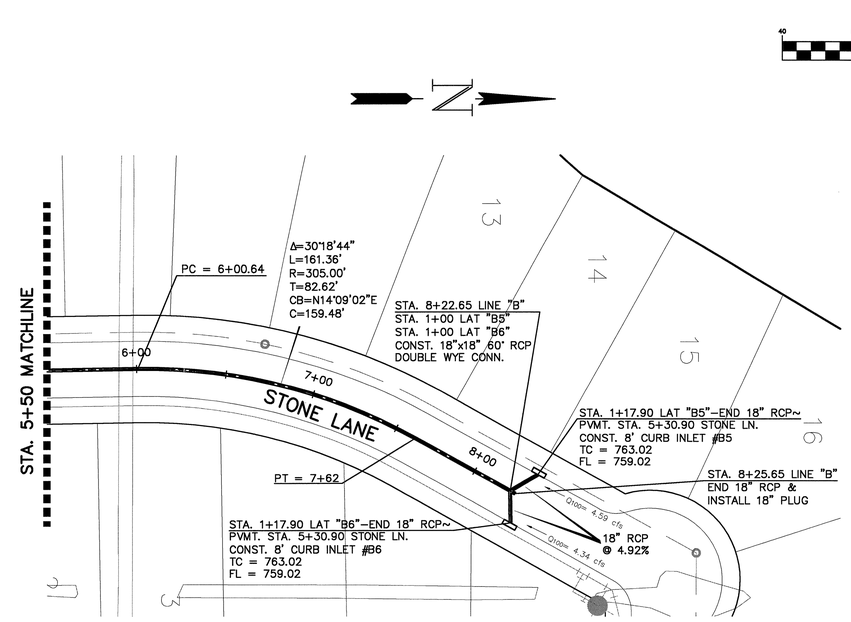
PROJECT NO. W1401

SHEET NO. 17

P-200305-01

Drawing Info: GJH W1401ST.dwg H:\Projects\W1401\dwg\ 1"=40' 11/26/02 9:52 am Plot Info: Drawing: W401ST.dwg H:\Projects\W401\dwg\ Plotted by: GJH Plot date: 11/26/02 Plot time: 10:04 am





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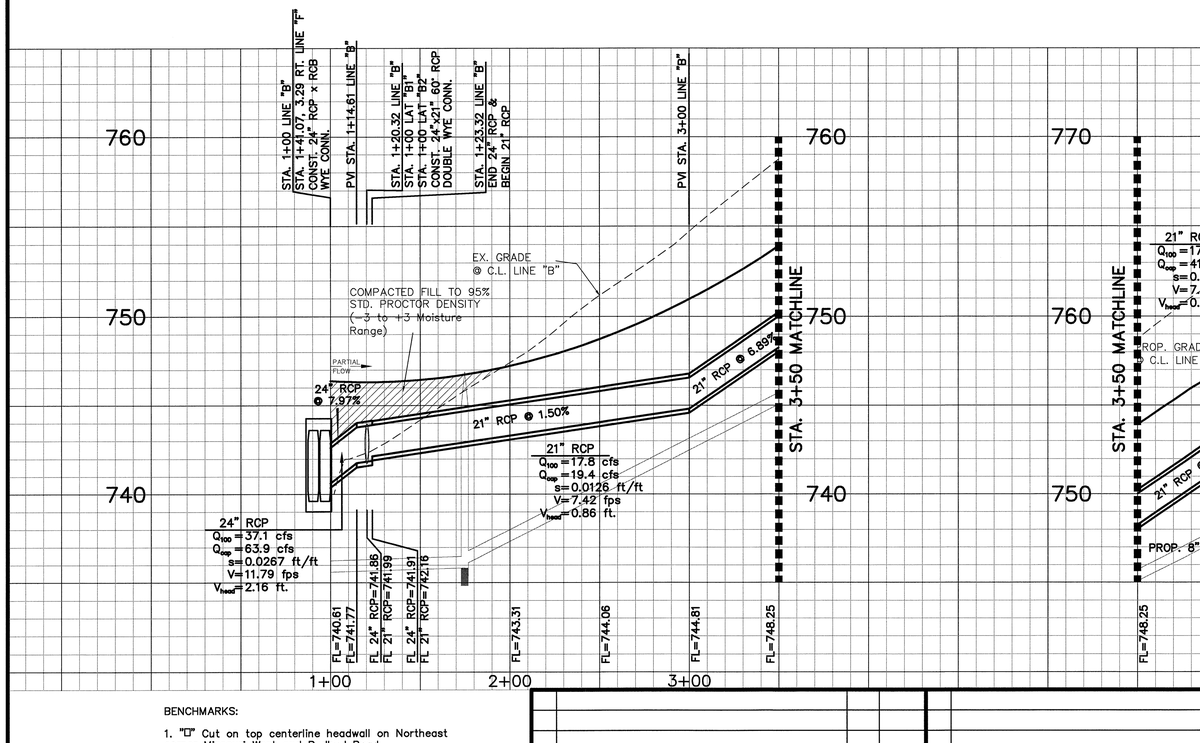
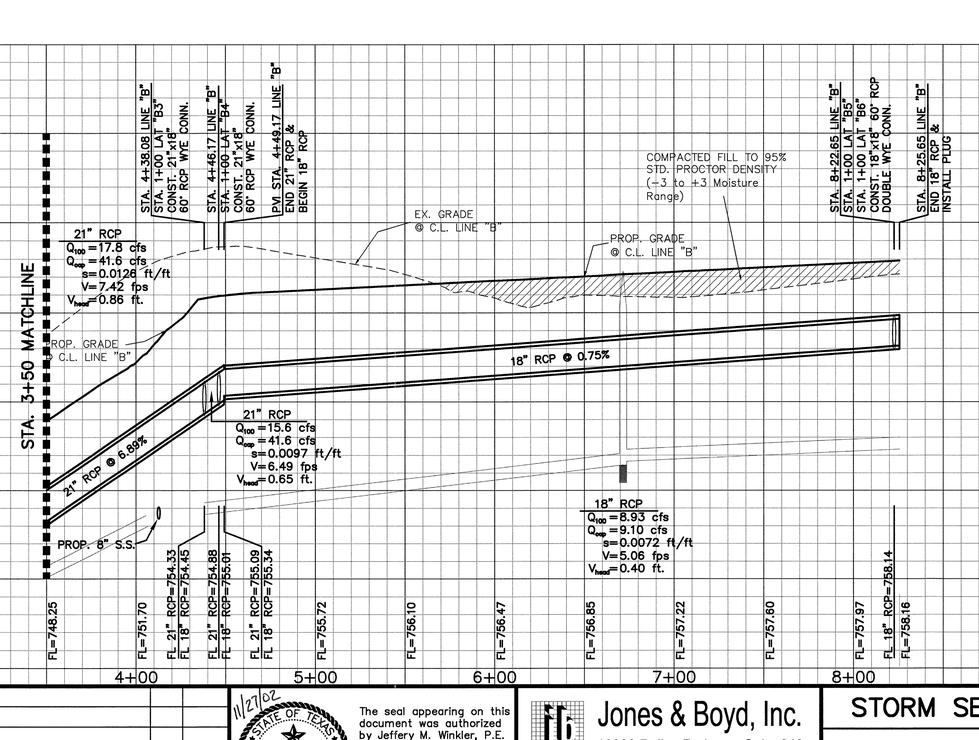
JONES & BOYD, INC.
BY:
DATE: 5-12-03

STORM LINE B





HORIZONTAL SCALE 1"=40'
VERTICAL SCALE 1"=4'

BENCHMARKS:

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NO.	REVISIONS DURING CONSTRUCTION	BY	DATE

NO.	REVISIONS DURING PLAN REVIEW	BY	DATE
1	REVISED 100 YR. HGL	GJH	11/25/02

11/27/02 STATE OF TEXAS JEFFERY M. WINKLER 90358 LICENSED PROFESSIONAL ENGINEER

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For Construction 12/9/02

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Fax: 972-248-1414
- Engineering
- Planning
- Landscape Architecture
- Surveying

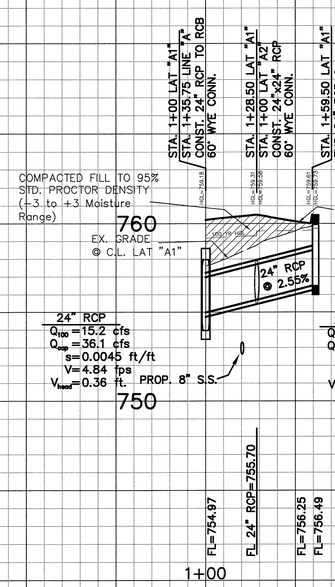
STORM SEWER PLAN & PROFILE
LINE B
HERITAGE, PHASE 1
City of Celina, Collin County, Texas

PROJECT NO. W1401
SHEET NO. 18

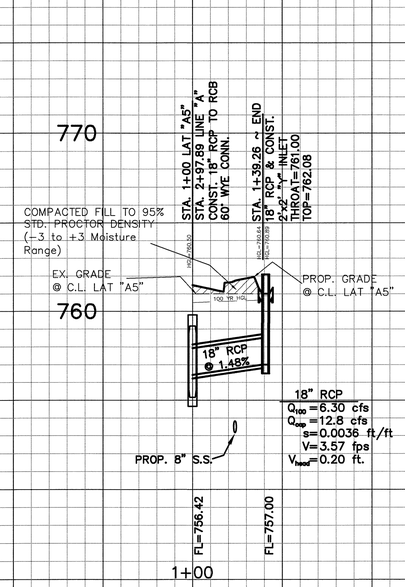
Plot Info: Drawing: W401ST.dwg H:\Projects\W401\dwg\ 1=40 11/26/02 9:52 am Plotted by: GJH Plot date: 11/26/02 Plot time: 10:05 am
Drawing Info: GJH W401ST.dwg H:\Projects\W401\dwg\

P-200305-01

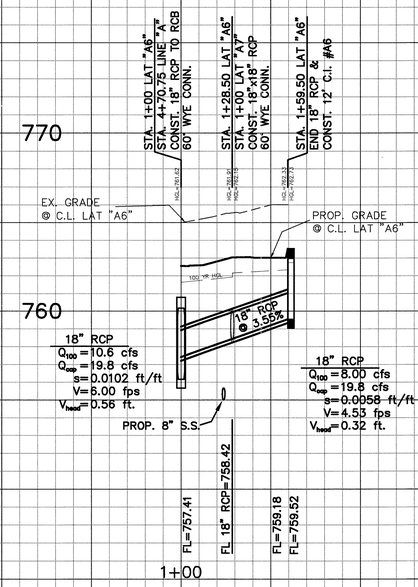
LATERAL A1



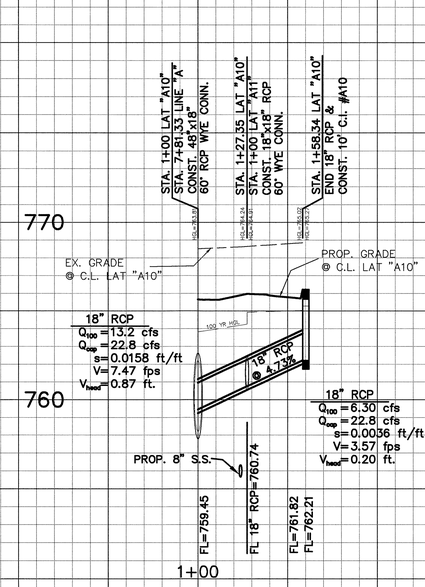
LATERAL A5



LATERAL A6



LATERAL A10



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HORIZONTAL SCALE 1"=40'
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NO.	REVISIONS DURING CONSTRUCTION	BY	DATE

NO.	REVISIONS DURING PLAN REVIEW	BY	DATE
1	REVISED 100 YR. HGL & HYDRAULIC DATA	GJH	11/25/02

11/21/02 STATE OF TEXAS JEFFERY M. WINKLER 90358 LICENSED PROFESSIONAL ENGINEER

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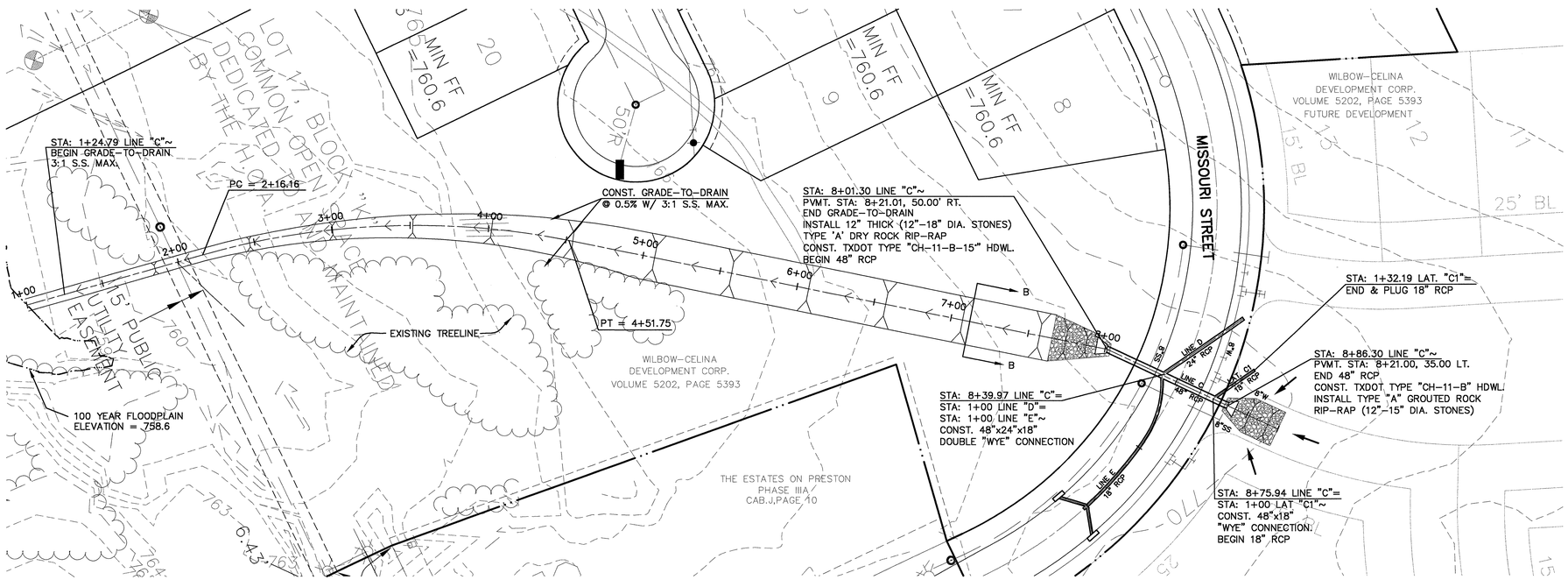
- Surveying

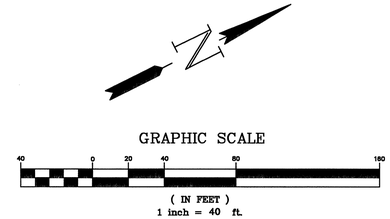
STORM SEWER PROFILES
STORM LATERALS A1, A5, A6, & A10
HERITAGE, PHASE 1
City of Celina, Collin County, Texas

PROJECT NO. WI401
SHEET NO. 19

Drawing Info: GJH W401ST.dwg H:\Projects\WI401\dwg\ 1=40 11/26/02 9:35 am
Plot Info: Drawing: W401ST.dwg H:\Projects\WI401\dwg\ Plotted by: GJH Plot date: 11/26/02 Plot time: 9:42 am

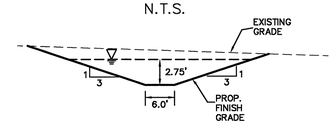
P-200305-01





SECTION B-B

N.T.S.



Grade-to-Drain Information
Depth of Flow = 2.75 ft.
Channel Velocity = 4.22 fps

RECORD DRAWING
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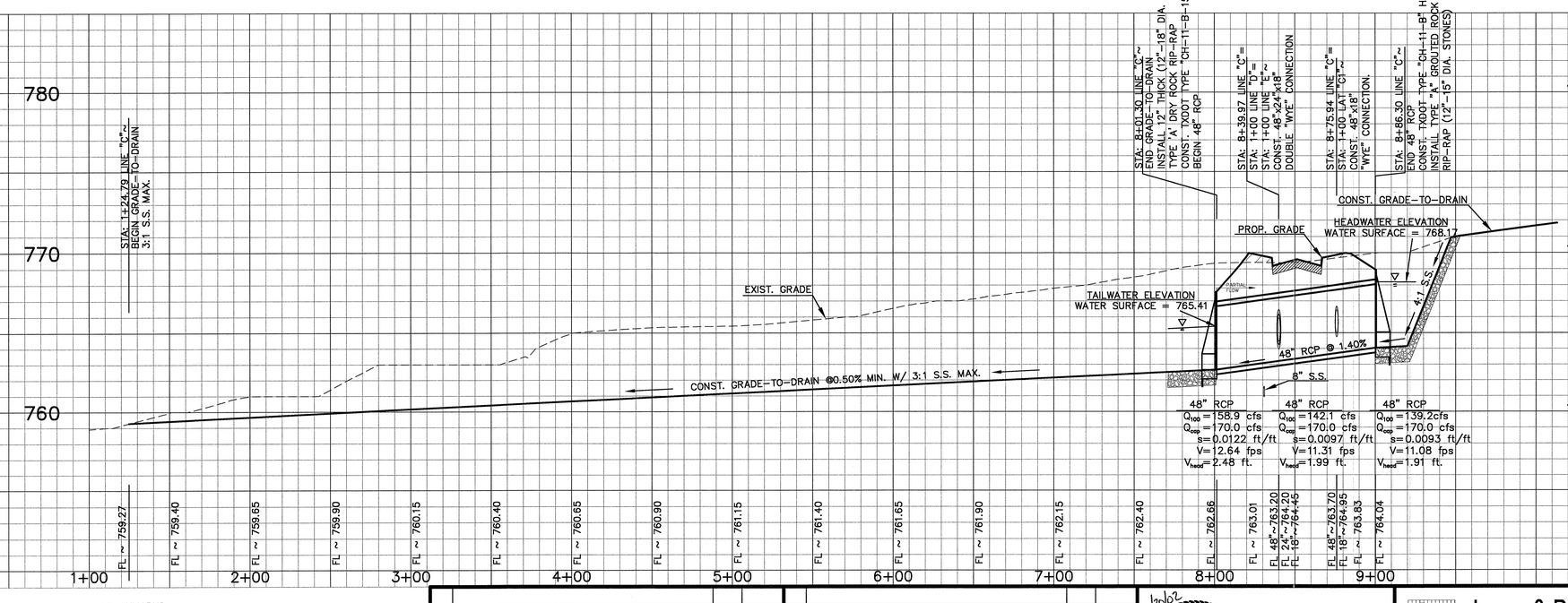
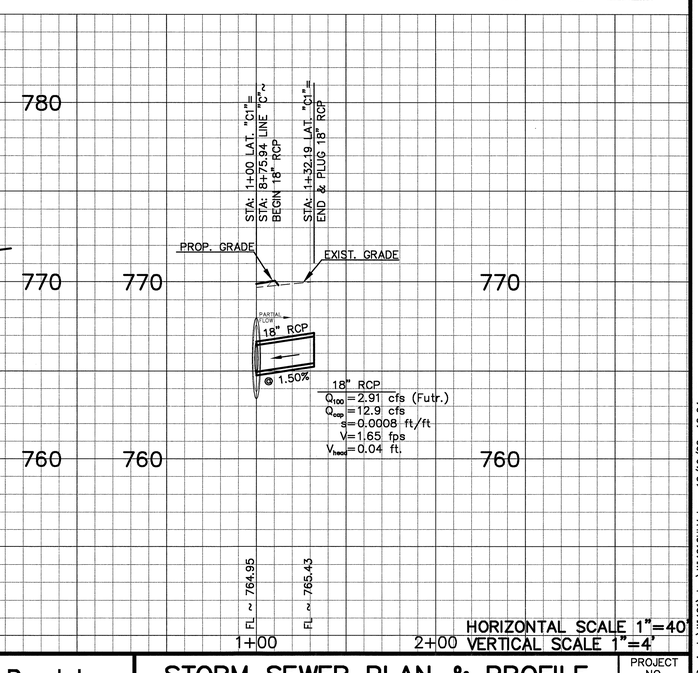
JONES & BOYD, INC.
BY:
DATE: 5-12-03

LINE C



LAT C1



HORIZONTAL SCALE 1"=40'
VERTICAL SCALE 1"=4'

BENCHMARKS:

1. "□" Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road.
Elev. 764.92'
2. "□" Cut on top centerline headwall on Northeast corner Missouri East and Redbud Road.
Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE
1	Realign Line C profile with stations.	SJS	12/19/02

NO.	REVISIONS DURING PLAN REVIEW	BY	DATE
1	REVISED HYDRAULIC DATA	GJH	11/25/02

12/20/02
STATE OF TEXAS
JEFFERY M. WINKLER
90358
LICENSED
PROFESSIONAL ENGINEER

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For CONSTRUCTION

Jones & Boyd, Inc.
16800 Dallas Parkway, Suite 240
Dallas, Texas 75248
Tel: 972-248-7676
Fax: 972-248-1414
- Engineering
- Planning
- Landscape Architecture
- Surveying

STORM SEWER PLAN & PROFILE

LINE C & LAT. C1

HERITAGE

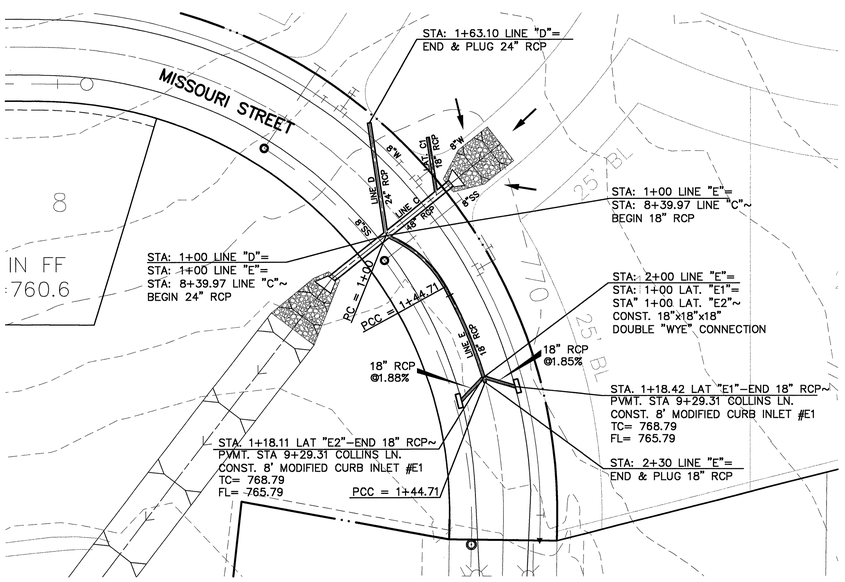
City of Celina, Collin County, Texas

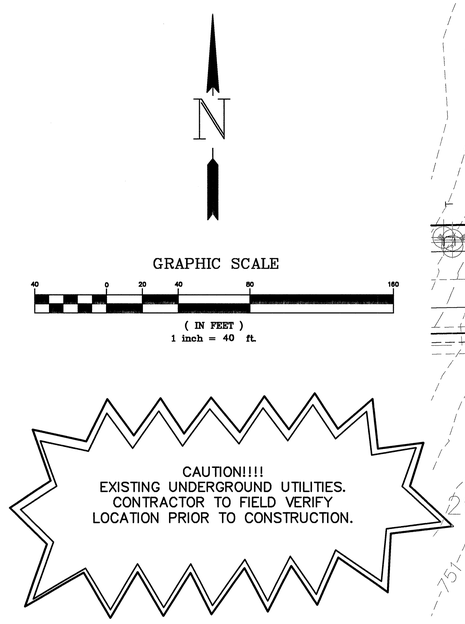
PROJECT NO. WI401

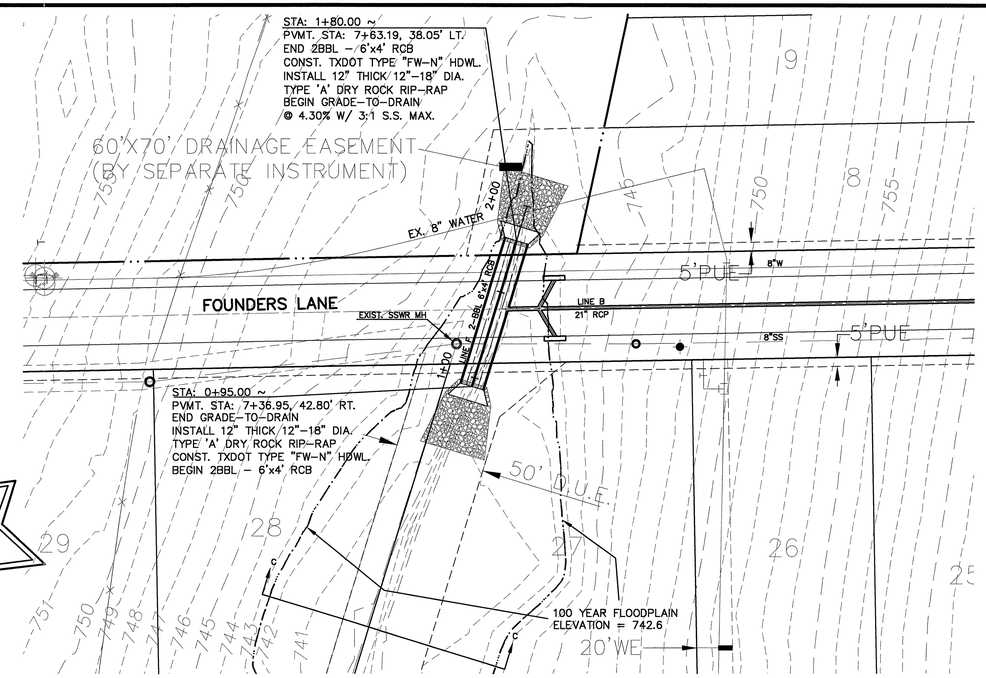
SHEET NO. 20

Plot Info: Drawing: H:\Projects\WI401\dwg\WI401CULV.dwg Plotted by: ss Plot date: 12/19/02 Plot time: 12:04 pm
Drawing Info: ss H:\Projects\WI401\dwg\WI401CULV.dwg 12/19/02 12:04 pm

P-200305-01

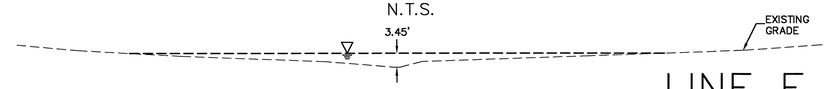






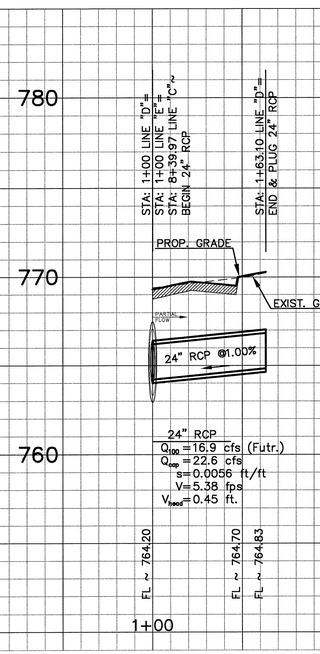
SECTION C–C

N.T.S.

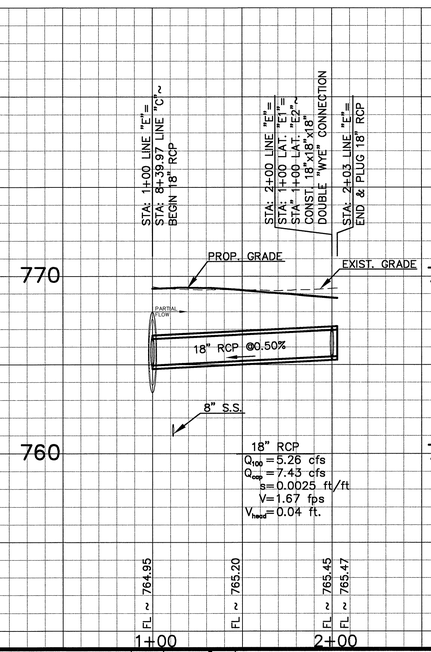


Channel Information
Depth of Flow = 3.45 ft.
Channel Velocity = 4.97 fps

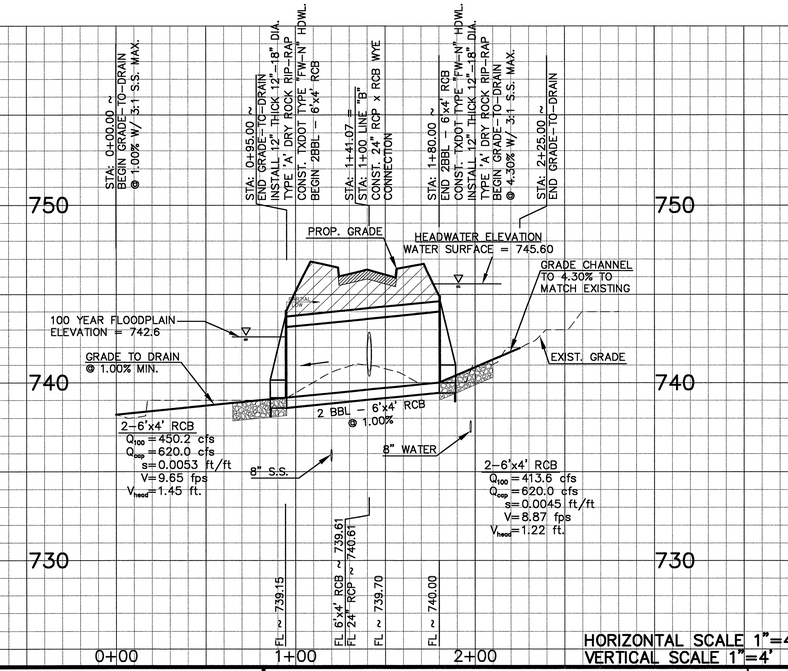
LINE D



LINE E



LINE F



HORIZONTAL SCALE 1"=40'
VERTICAL SCALE 1"=4'

RECORD DRAWING
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JONES & BOYD, INC.
BY:
DATE: 5-12-03

BENCHMARKS:

1. "□" Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road.
Elev. 764.92'
2. "□" Cut on top centerline headwall on Northeast corner Missouri Eest and Redbud Road.
Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE
1	Revised Line F headwalls to Type "FW–N".	SJS	12/19/02

NO.	REVISIONS DURING PLAN REVIEW	BY	DATE
1	REVISED HYDRAULIC DATA	GJH	11/25/02

12/20/02
STATE OF TEXAS
JEFFERY M. WINKLER
90358
LICENSED
PROFESSIONAL ENGINEER
FOR CONSTRUCTION

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Fax: 972-248-1414
Engineering
Planning
Landscape Architecture
Surveying

STORM SEWER PLAN & PROFILE

LINES D – E – F

HERITAGE

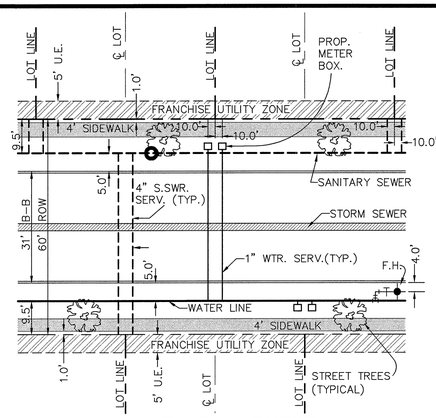
City of Celina, Collin County, Texas

PROJECT NO. WI401

SHEET NO. 21

Plot Info: Drawing: H:\Projects\WI401\dwg\WI401CULV.dwg Plotted by: ss Plot date: 12/19/02 Plot time: 12:04 pm
Drawing Info: ss H:\Projects\WI401\dwg\WI401CULV.dwg 12/19/02 12:04 pm

P-200305-01



UTILITY PLACEMENT HERITAGE

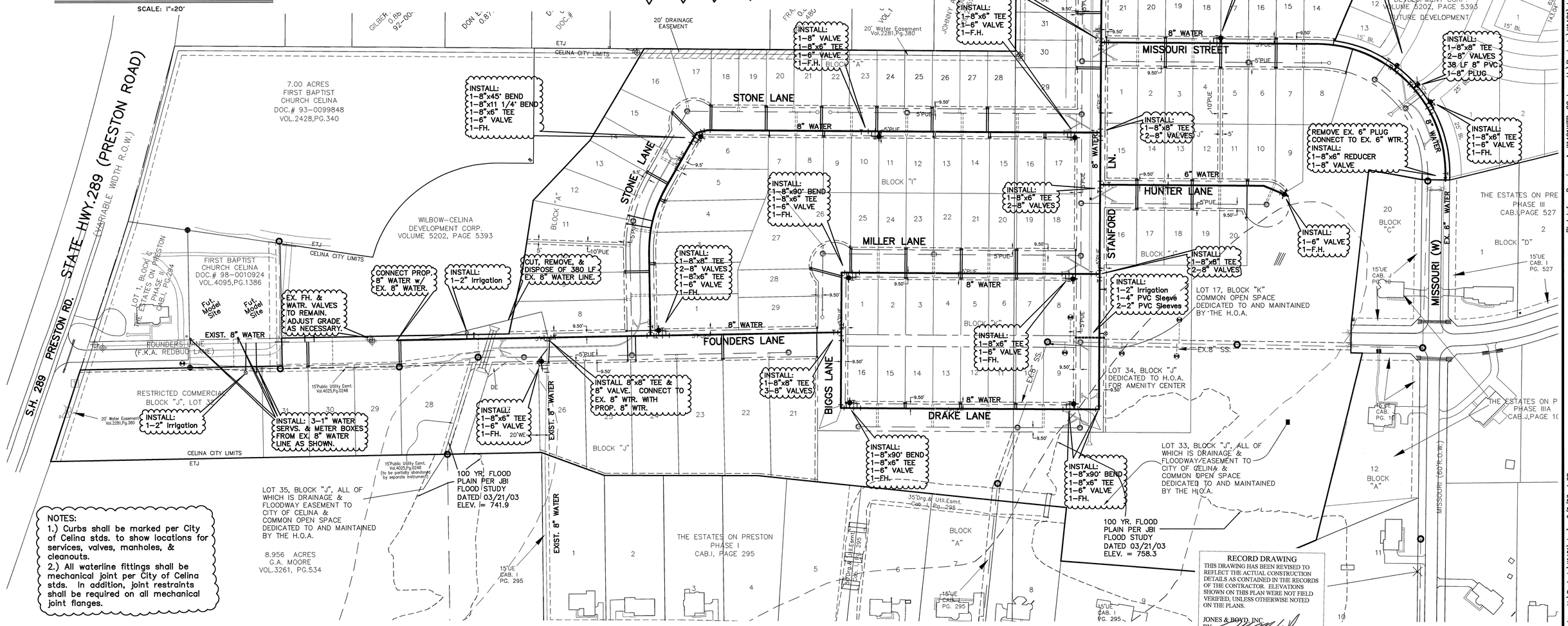
SCALE: 1"=20'

LEGEND

- FH — Exist. Fire Hydrant
- WTR MH — Exist. Water Manhole
- Exist. Sanitary Sewer Manhole
- Exist. Storm Sewer
- WV — Exist. Water Valve
- PP — Exist. Utility pole
- TEL PED — Exist. Telephone Pedestal
- Prop. Sanitary Sewer Main & Flow Direction
- Prop. Sanitary Sewer Manhole
- Prop. Sanitary Sewer Cleanout
- Prop. Storm Sewer
- Prop. Fire Hydrant
- Prop. Water Meter
- Prop. Irrigation Meter
- Prop. Water Line & Valve

(IN FEET)
1 inch = 100 ft.

CAUTION!!!!
EXISTING UNDERGROUND UTILITIES.
CONTRACTOR TO FIELD VERIFY
LOCATION PRIOR TO CONSTRUCTION.



NOTES:
1.) Curbs shall be marked per City of Celina stds. to show locations for services, valves, manholes, & cleanouts.
2.) All waterline fittings shall be mechanical joint per City of Celina stds. In addition, joint restraints shall be required on all mechanical joint flanges.

RECORD DRAWING
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JONES & BOYD, INC.
BY:
DATE: 5-12-03

BENCHMARKS:
1. "D" Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road. Elev. 764.92'
2. "D" Cut on top centerline headwall on Northeast corner Missouri Eest and Redbud Road. Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE
2	Record Drawings.	JMW	5/9/03
1	Revise Service Location Detail (FH's & services).	JMW	12/26/02

NO.	REVISIONS DURING PLAN REVIEW	BY	DATE
2	Move FH's & add dom/irr services per comments.	JMW	12/9/02
1	Extended proposed water along Founders per city.	SJS	11/27/02

5/9/03 STATE OF TEXAS JEFFERY M. WINKLER 90358 LICENSED PROFESSIONAL ENGINEER

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RECORD DRAWINGS

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- Engineering
- Planning
- Landscape Architecture
- Surveying

WATER PLAN

HERITAGE, PHASE 1

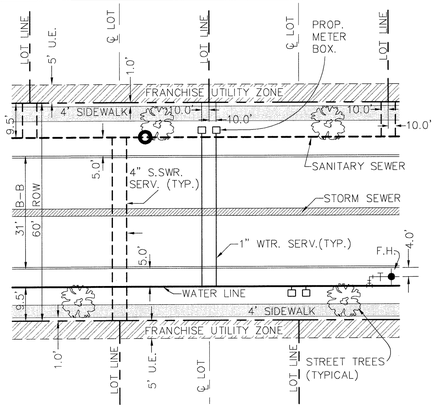
City of Celina, Collin County, Texas

PROJECT NO. W1401

SHEET NO. 22

Plot Info: Drawing: A-W1401WTR-22.dwg H:\Projects\W1401\dwg\ Plotted by: JMW Plot date: 5/9/03 Plot time: 1:37 pm
Drawing Info: JMW A-W1401WTR-22.dwg H:\Projects\W1401\dwg\ 5/9/03 1:37 pm

P-200305-01



UTILITY PLACEMENT HERITAGE

SCALE: 1"=20'

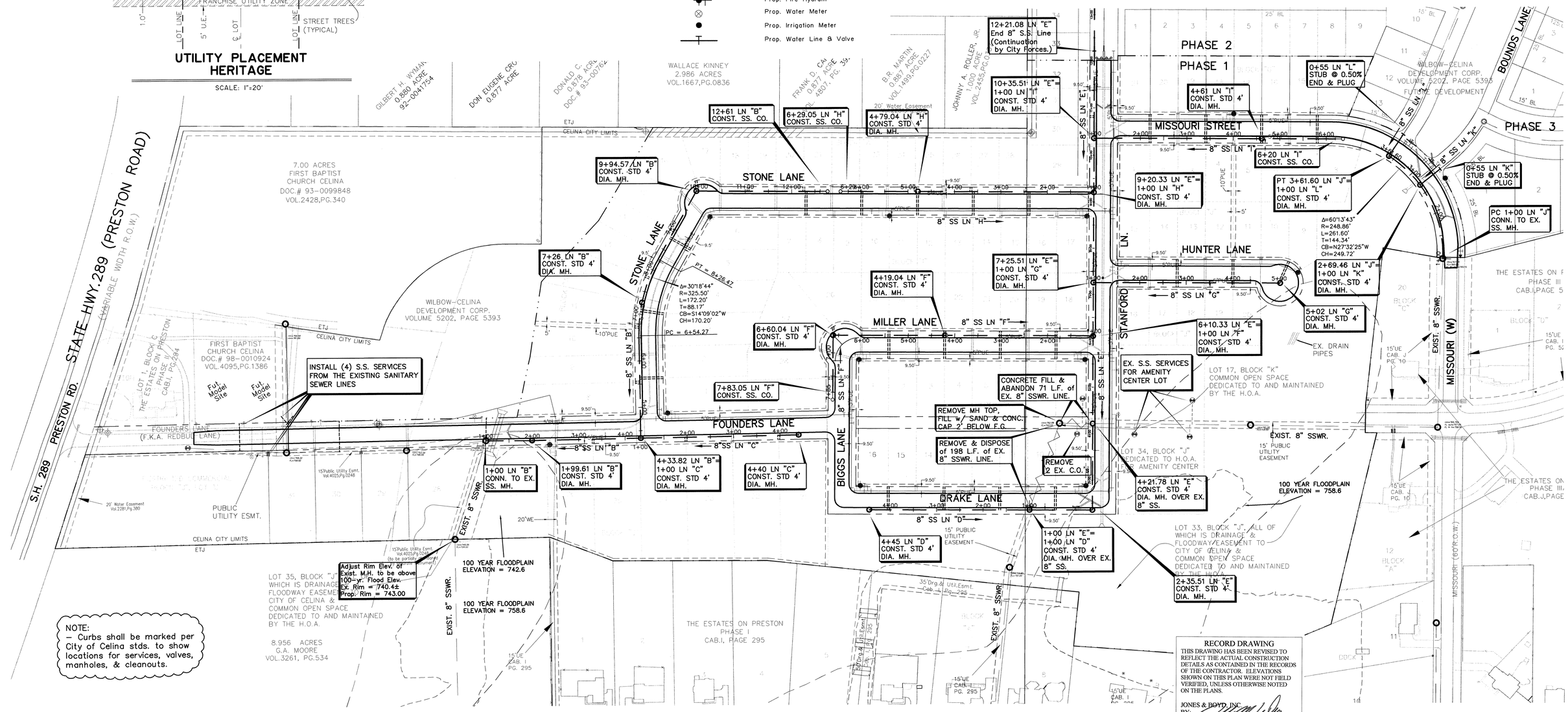
LEGEND

- FH — Exist. Fire Hydrant
- WTR MH — Exist. Water Manhole
- Exist. Sanitary Sewer Manhole
- Exist. Storm Sewer
- WV — Exist. Water Valve
- PP — Exist. Utility pole
- TEL PED — Exist. Telephone Pedestal
- Prop. Sanitary Sewer Main & Flow Direction
- Prop. Sanitary Sewer Manhole
- Prop. Sanitary Sewer Cleanout
- Prop. Storm Sewer
- Prop. Fire Hydrant
- Prop. Water Meter
- Prop. Irrigation Meter
- Prop. Water Line & Valve

CAUTION!!!!
EXISTING UNDERGROUND UTILITIES.
CONTRACTOR TO FIELD VERIFY
LOCATION PRIOR TO CONSTRUCTION.

N

(IN FEET)
1 inch = 100 ft.



NOTE:
– Curbs shall be marked per City of Celina stds. to show locations for services, valves, manholes, & cleanouts.

RECORD DRAWING
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JONES & BOYD, INC.
BY:
DATE: 5-12-03

BENCHMARKS:

1. "D" Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road. Elev. 764.92'
2. "D" Cut on top centerline headwall on Northeast corner Missouri Eest and Redbud Road. Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE
3	Record Drawings.	JMW	5/9/03
2	Revise Service Location Detail (FH's & services).	JMW	12/26/02
1	Adjust limits of sanitary sewer Line "E".	SJS	12/19/02

NO.	REVISIONS DURING PLAN REVIEW	BY	DATE
3	Revise notes for limits of work by this contract.	JMW	12/11/02
2	Add sewer services for future use per comment.	JMW	12/9/02
1	Revised sidewalk location in utility detail per city.	SJS	11/27/02

5/9/03 STATE OF TEXAS JEFFERY M. WINKLER 90358 LICENSED PROFESSIONAL ENGINEER

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SANITARY SEWER PLAN

HERITAGE, PHASE 1

City of Celina, Collin County, Texas

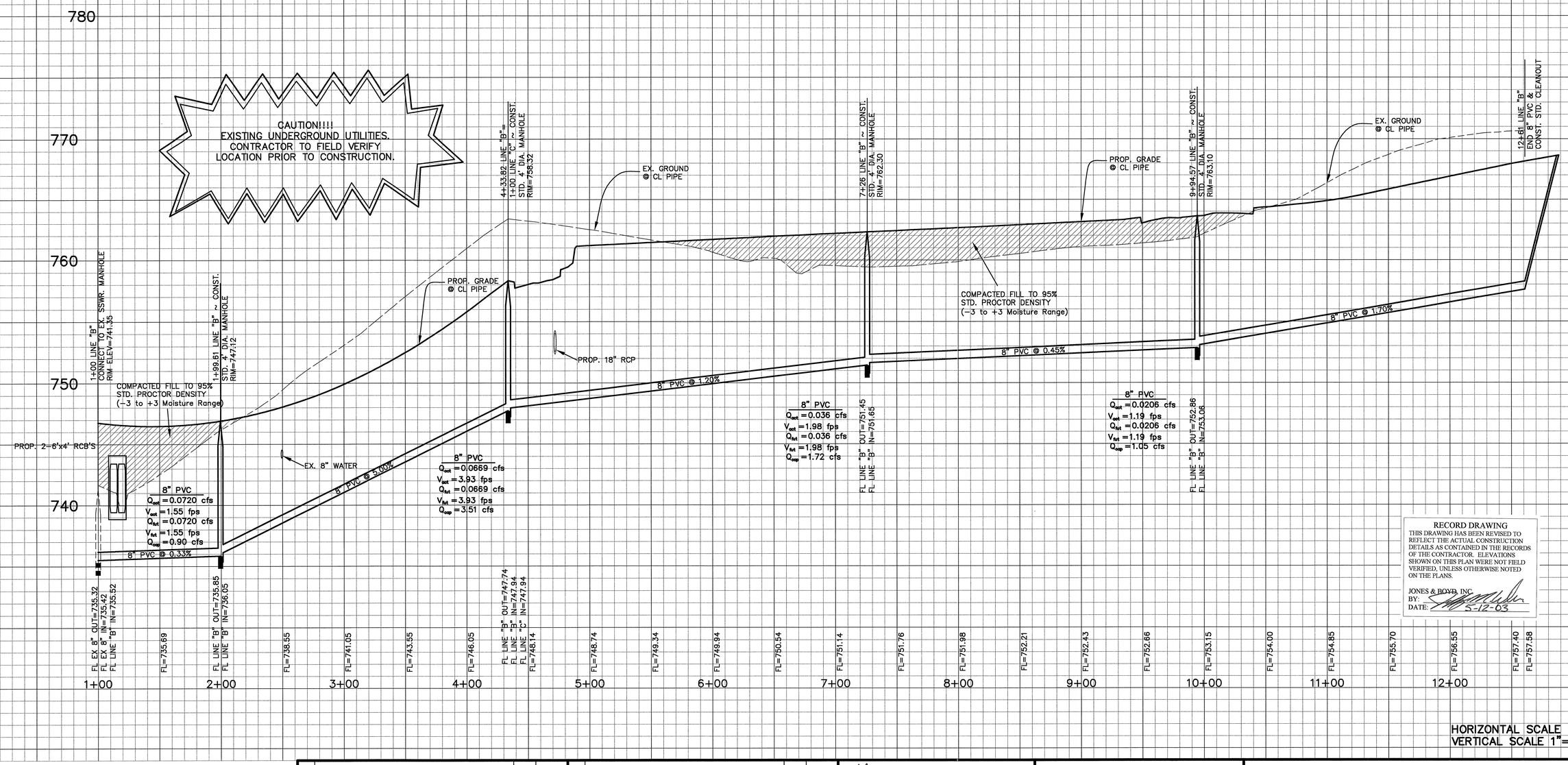
PROJECT NO. WI401

SHEET NO. 23

P-200305-01

Plot Info: Drawing: WI401SWR-P1.dwg H:\Projects\WI401\dwg\ 12/31/02 10:41 am Drawing Info: JMW WI401SWR-P1.dwg H:\Projects\WI401\dwg\ Plotted by: JMW Plot date: 5/9/03 Plot time: 1:52 pm

LINE B



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JONES & BOYD, INC.
BY:
DATE: 5-12-03

HORIZONTAL SCALE 1"=40'
VERTICAL SCALE 1"=4'

BENCHMARKS:

1. "□" Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road. Elev. 764.92'
2. "□" Cut on top centerline headwall on Northeast corner Missouri East and Redbud Road. Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE
1	Adjusted 9+94.57 Line "B" MH rim elevation.	SJS	12/19/02

NO.	REVISIONS DURING PLAN REVIEW	BY	DATE

12/20/02
STATE OF TEXAS
JEFFERY M. WINKLER
90358
LICENSED
PROFESSIONAL ENGINEER

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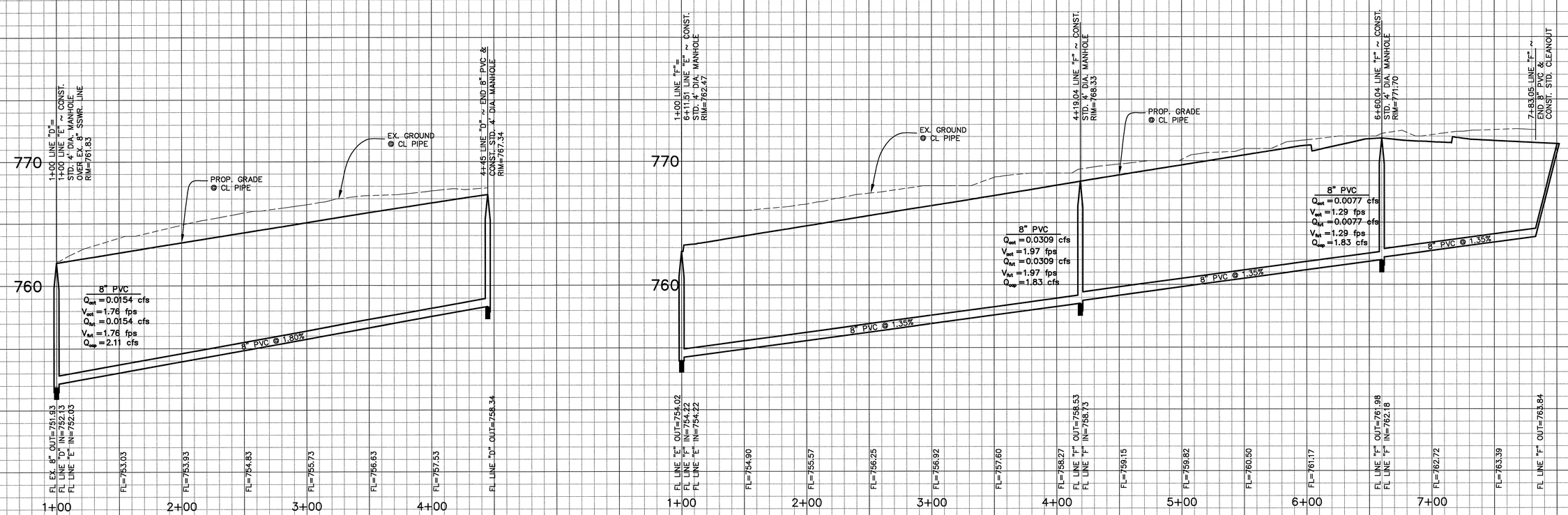
SANITARY SEWER PROFILES
LINE B
HERITAGE, PHASE 1
City of Celina, Collin County. Texas

PROJECT NO. WI401
SHEET NO. 24



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JONES & BOYD, INC.
BY:
DATE: 5-12-03

HORIZONTAL SCALE 1"=40'
VERTICAL SCALE 1"=4'

BENCHMARKS:

1. "□" Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road. Elev. 764.92'
2. "□" Cut on top centerline headwall on Northeast corner Missouri East and Redbud Road. Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE
1	Adjusted 6+60.04 Line "F" MH rim elevation.	SJS	12/19/02

NO.	REVISIONS DURING PLAN REVIEW	BY	DATE

12/20/02
STATE OF TEXAS
JEFFERY M. WINKLER
90358
LICENSED
PROFESSIONAL ENGINEER

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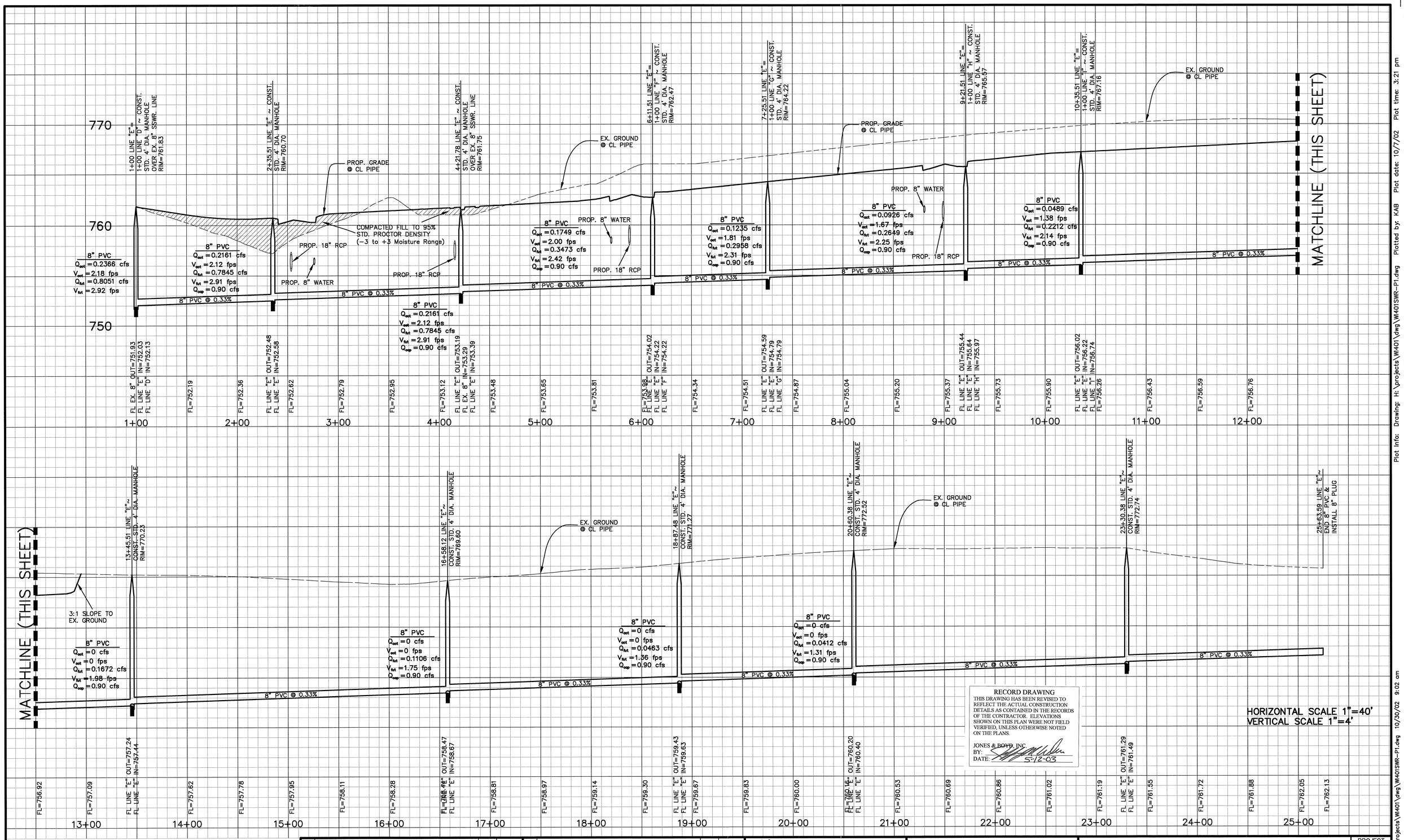
SANITARY SEWER PROFILES
LINES D & F
HERITAGE, PHASE 1
City of Celina, Collin County, Texas

PROJECT NO. WI401
SHEET NO. 25

Plot Info: Drawing: H:\Projects\WI401\dwg\WI401SWR-P1.dwg Plotted by: ss Plot date: 12/19/02 Plot time: 2:58 pm
Drawing Info: ss H:\Projects\WI401\dwg\WI401SWR-P1.dwg 12/19/02 2:58 pm

P-200305-01



RECORD DRAWING
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JONES & BOYD, INC.
BY:
DATE: 5-12-03

BENCHMARKS:

1. "D" Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road. Elev. 764.92'
2. "D" Cut on top centerline headwall on Northeast corner Missouri East and Redbud Road. Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE

NO.	REVISIONS DURING PLAN REVIEW	BY	DATE

11/6/02
STATE OF TEXAS
JEFFERY M. WINKLER
90358
LICENSED PROFESSIONAL ENGINEER

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FOR CITY REVIEW
For Approval 11/27/02
For Construction 12/9/02

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16800 Dallas Parkway, Suite 240
Dallas, Texas 75248
Tel: 972-248-7676
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- Engineering
- Planning
- Landscape Architecture
- Surveying

SANITARY SEWER PROFILES

LINE E

HERITAGE, PHASE 1

City of Celina, Collin County, Texas

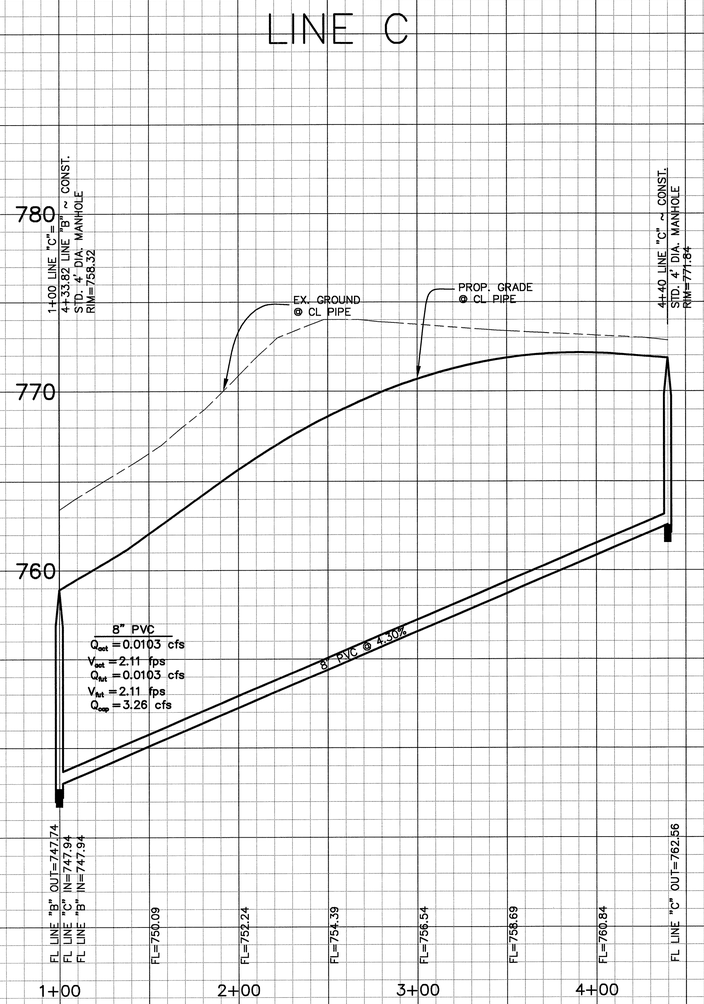
PROJECT NO. WI401

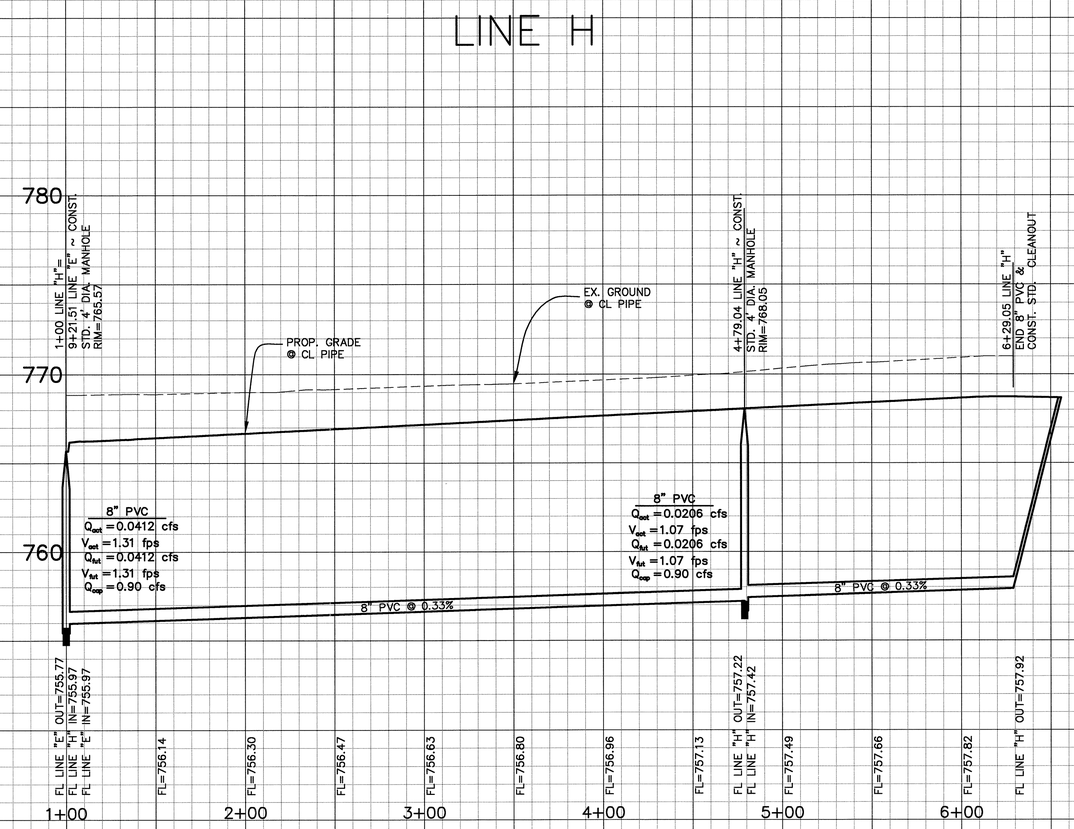
SHEET NO. 26

P-200305-01

Plot Info: Drawing: H:\projects\WI401\dwg\WI401SWR-P1.dwg Plotted by: KAB Plot date: 10/7/02 Plot time: 3:21 pm

Drawing Info: KAB H:\projects\WI401\dwg\WI401SWR-P1.dwg 10/30/02 9:02 am





RECORD DRAWING
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JONES & BOYD, INC.
BY:
DATE: 5-12-03

HORIZONTAL SCALE 1"=40'
VERTICAL SCALE 1"=4'

BENCHMARKS:

1. "□" Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road. Elev. 764.92'
2. "□" Cut on top centerline headwall on Northeast corner Missouri East and Redbud Road. Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE

NO.	REVISIONS DURING PLAN REVIEW	BY	DATE

11/6/02
STATE OF TEXAS
JEFFERY M. WINKLER
90358
LICENSED PROFESSIONAL ENGINEER

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FOR CITY REVIEW
For Approval 11/27/02
For Construction 12/9/02

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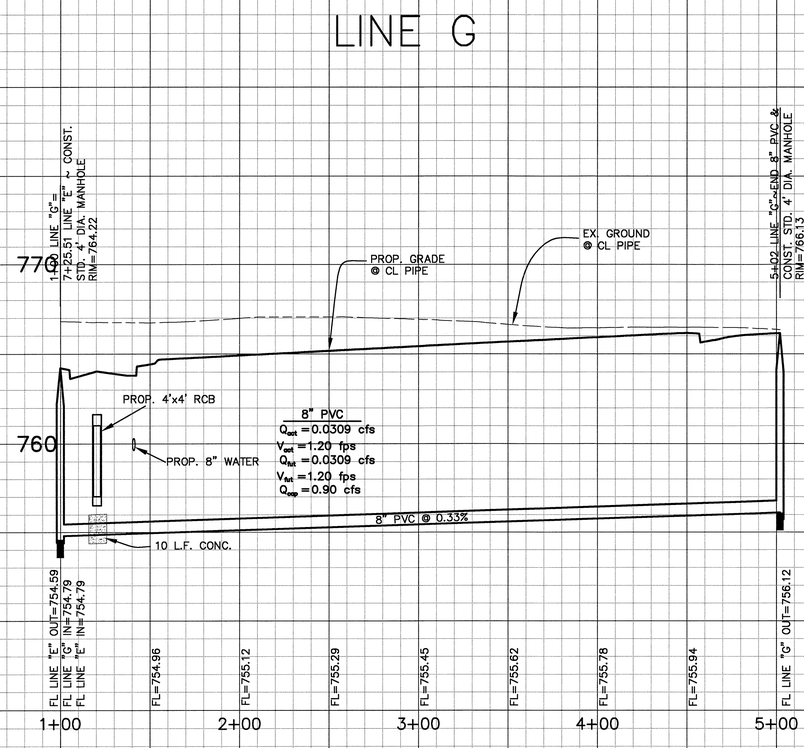
- Surveying

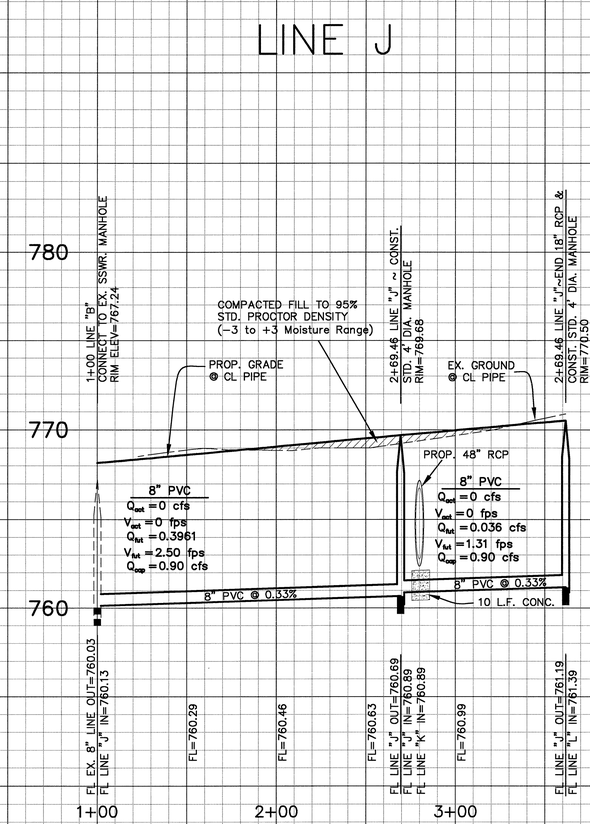
SANITARY SEWER PROFILES
LINES C & H
HERITAGE, PHASE 1
City of Celina, Collin County, Texas

PROJECT NO. WI401
SHEET NO. 27

Drawing Info: KAB H:\projects\WI401\dwg\WI401SWR-P1.dwg 10/30/02 9:02 am
Plot Info: Drawing: H:\projects\WI401\dwg\WI401SWR-P1.dwg Plotted by: KAB Plot date: 10/7/02 Plot time: 3:21 pm

P-200305-01





RECORD DRAWING
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JONES & BOYD, INC.
BY:
DATE: 5-12-03

HORIZONTAL SCALE 1"=40'
VERTICAL SCALE 1"=4'

BENCHMARKS:

1. "D" Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road. Elev. 764.92'
2. "D" Cut on top centerline headwall on Northeast corner Missouri East and Redbud Road. Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE	NO.	REVISIONS DURING PLAN REVIEW	BY	DATE

11/6/02
STATE OF TEXAS
JEFFERY M. WINKLER
90358
LICENSED PROFESSIONAL ENGINEER

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FOR CITY REVIEW
For Approval 11/27/02
For Construction 12/9/02

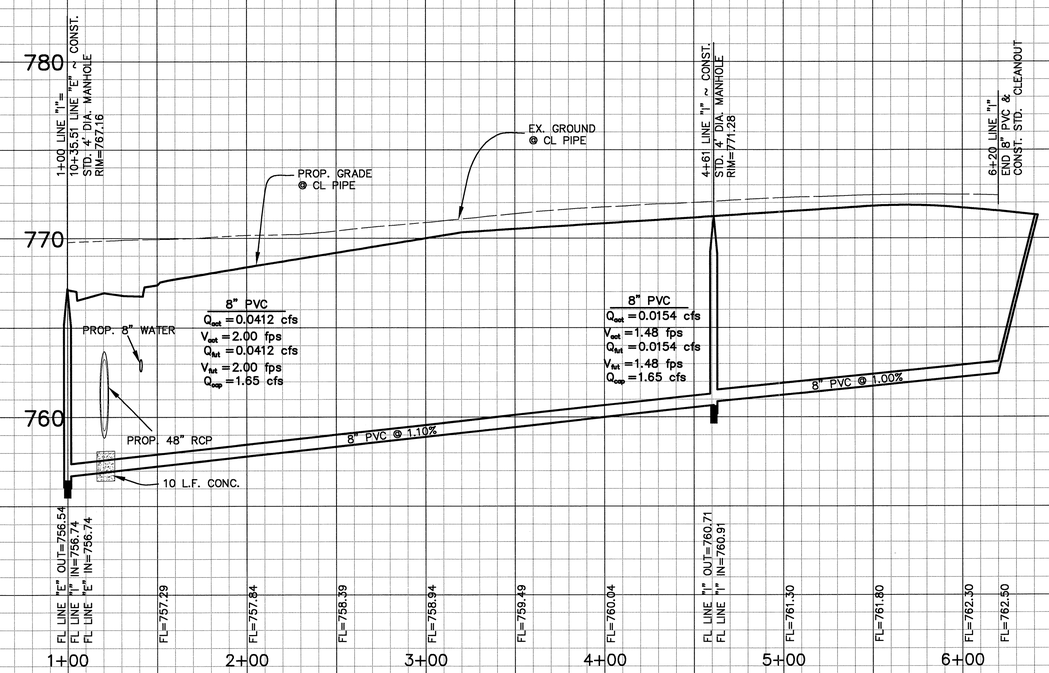
Jones & Boyd, Inc.
16800 Dallas Parkway, Suite 240
Dallas, Texas 75248
Tel: 972-248-7676
Fax: 972-248-1414
- Engineering
- Planning
- Landscape Architecture
- Surveying

SANITARY SEWER PROFILES
LINES G & J
HERITAGE, PHASE 1
City of Celina, Collin County, Texas

PROJECT NO. WI401
SHEET NO. 28

P-200305-01

Plot Info: Drawing: H:\projects\WI401\dwg\WI401SWR-P1.dwg Plotted by: KAB Plot date: 10/7/02 Plot time: 3:21 pm
Drawing Info: KAB H:\projects\WI401\dwg\WI401SWR-P1.dwg 10/30/02 9:02 am



RECORD DRAWING
THIS DRAWING HAS BEEN REVISED TO REFLECT THE ACTUAL CONSTRUCTION DETAILS AS CONTAINED IN THE RECORDS OF THE CONTRACTOR. ELEVATIONS SHOWN ON THIS PLAN WERE NOT FIELD VERIFIED, UNLESS OTHERWISE NOTED ON THE PLANS.
JONES & BOYD, INC.
BY:
DATE: 5-12-03

HORIZONTAL SCALE 1"=40'
VERTICAL SCALE 1"=4'

BENCHMARKS:

1. "D" Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road. Elev. 764.92'
2. "D" Cut on top centerline headwall on Northeast corner Missouri East and Redbud Road. Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE	NO.	REVISIONS DURING PLAN REVIEW	BY	DATE

11/6/02
STATE OF TEXAS
JEFFERY M. WINKLER
90358
LICENSED
PROFESSIONAL ENGINEER

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FOR CITY REVIEW
For Approval 11/27/02
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SANITARY SEWER PROFILES
LINE I
HERITAGE, PHASE 1
City of Celina, Collin County, Texas

PROJECT NO. W1401
SHEET NO. 29

P-200305-01

Plot Info: Drawing: H:\projects\W401\dwg\W401SWR-P1.dwg Plotted by: KAB Plot date: 10/7/02 Plot time: 3:21 pm
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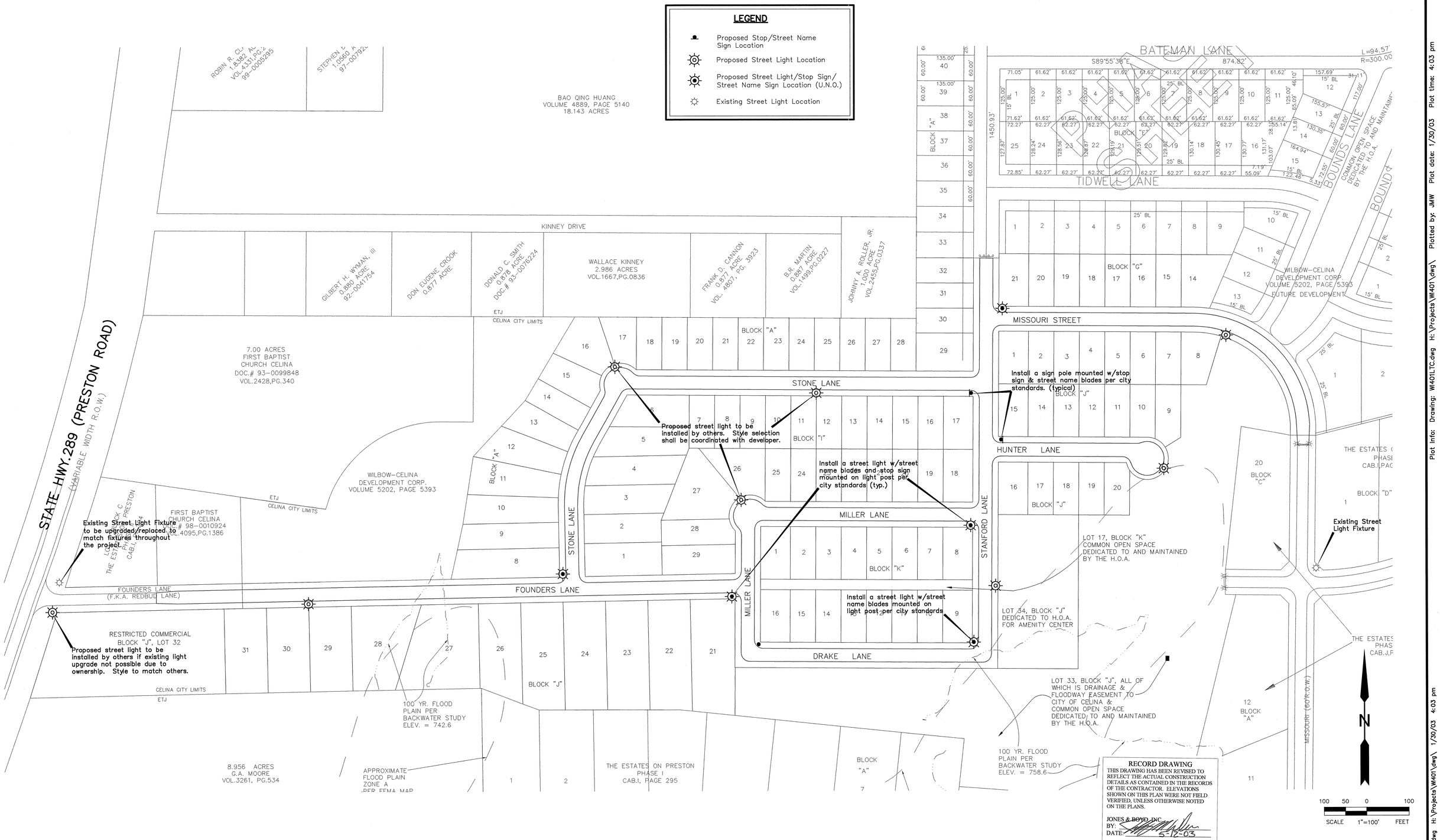

BENCHMARKS:

1. "□" Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road. Elev. 764.92'
2. "□" Cut on top centerline headwall on Northeast corner Missouri Eest and Redbud Road. Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE
A	Street Light/Sign Combination per Client	MAG	2/18/03

NO.	REVISIONS DURING PLAN REVIEW	BY	DATE
2	Show existing street lights on Missouri & Redbud.	JMW	1/30/03
1	Added two street lights per staff comments.	JMW	1/27/03

2/18/03 STATE OF TEXAS JEFFERY M. WINKLER 90358 LICENSED PROFESSIONAL ENGINEER

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FOR APPROVAL

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Fax: 972-248-1414
▪ Engineering ▪ Planning ▪ Landscape Architecture ▪ Surveying

TRAFFIC SIGNAGE & ILLUMINAGTION

HERITAGE

City of Celina, Collin County, Texas

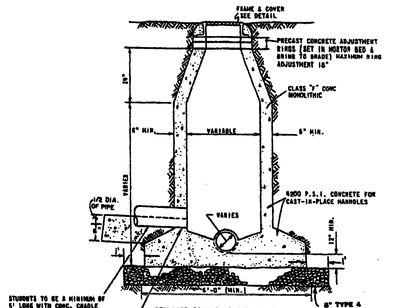
PROJECT NO. W1401

SHEET NO. 30

Plot Info: Drawing: W1401LTC.dwg H:\Projects\W1401\dwg\ Plotted by: JMW Plot date: 1/30/03 Plot time: 4:03 pm

Drawing Info: JMW W1401LTC.dwg H:\Projects\W1401\dwg\ 1/30/03 4:03 pm

P-200305-01



STANDARD CAST IN PLACE MANHOLE

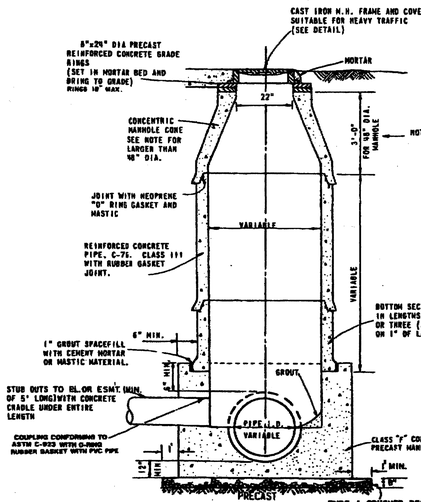
CAST-IN-PLACE NOTES:

COUPLING CONFORMING TO ASTM C-923 WITH O-RING GASKET, NOR-W-SEAL, A-LOK OR APPROVED EQUAL

1. REWAYS REQUIRED FOR ALL CONSTRUCTION JOINTS.
2. P.V.C. WATER STOP REQUIRED FOR ALL JOINTS IN LINER 17'-0" OF MANHOLES.
3. CONCRETE SHALL BE CLASS F P.S.I (4200 P.S.I)

GENERAL NOTES

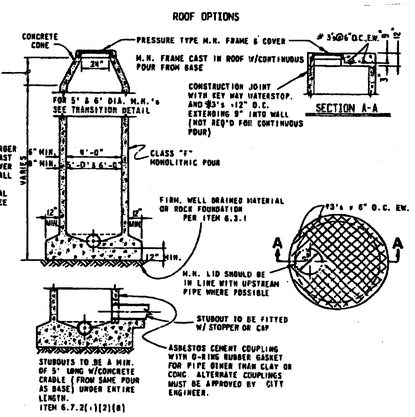
1. All Sanitary Sewer Pipe Shall Be Vitrified Clay Or PVC SDR-35 Pipe. Other Pipes Shall Be Subject To Approval By The City Engineer
2. Sanitary Sewer Pipe Joints Shall Conform To Current ASTM Designations For Vitrified Clay Pipe And For PVC Pipe
3. All Sanitary Sewer Laterals Shall Include 4" Tee Wye Bend, Pipe And Stopper Installed 10' Feet Downstream From The Water Main Service On Each Lot, Unless Otherwise Indicated On Plans. 8" Laterals Require MH At Main Sewer Pipe
4. Unless Otherwise Noted, All Material And Construction Shall Conform To The Standard Specifications And/or Special Provisions.
5. In The Event An Item Is Not Covered In The City Specifications, The City Engineer Decision Shall Apply
6. Drop Manhole Required For Connection Of 18" Or Greater.
7. All Manholes Shall Be Vacuum Tested In Accordance With The Specs.
8. All Pipes Entering & Leaving A Manhole Shall Be Cradled For A Distance Of 5' Outside of M.H.

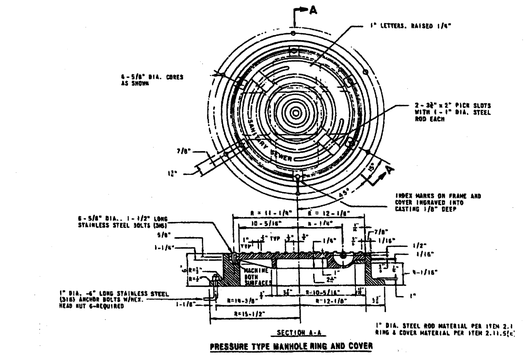


PRECAST CONCRETE PIPE MANHOLE

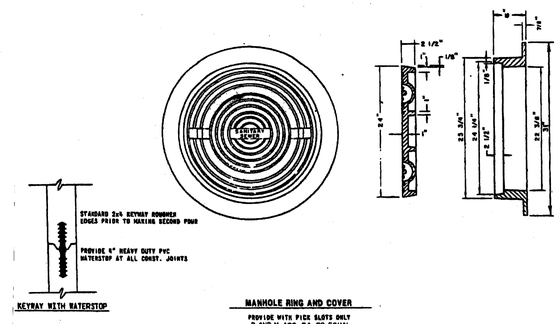
TYPE 4 CRUSHED ROCK

NOTE A: MANHOLE DIAMETER LARGER THAN 48" I.D. PRE-CAST FLAT TOP MANHOLE COVER AS PER ASTM C478 SHALL BE INSTALLED. FOR HEAVY TRAFFIC SPECIAL DESIGN REQUIRED. SEE DETAIL BELOW.





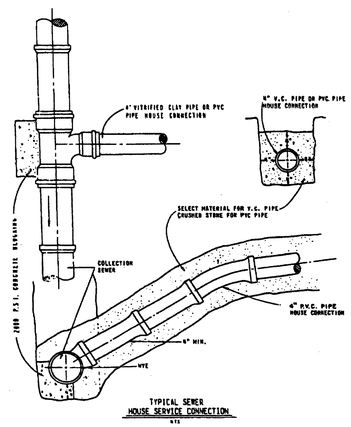
PRESSURE TYPE MANHOLE RING AND COVER



KEYWAY WITH WATERSTOP

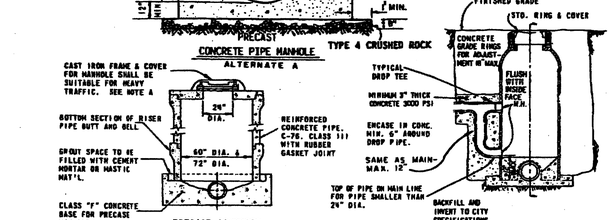
MANHOLE RING AND COVER

PROVIDE WITH PICK SLOTS ONLY B AND H 400-24 OR EQUAL



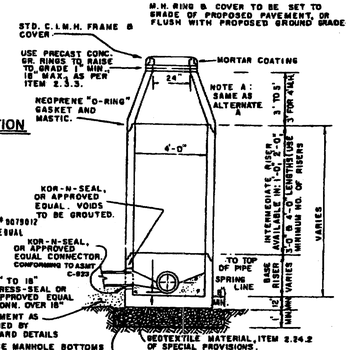
TYPICAL SEWER HOUSE SERVICE CONNECTION

NTS



PRECAST CONCRETE FLAT TOP MANHOLE

MANHOLE DROP CONNECTION

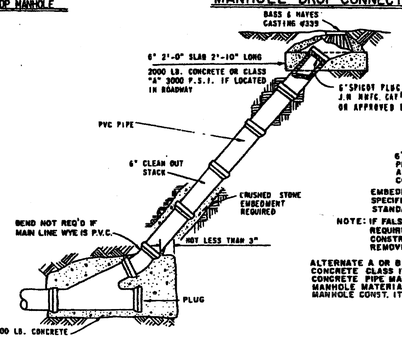


NOTE: IF FALSE MANHOLE BOTTOMS REQUIRED, THEY SHALL BE CONSTRUCTED, INSTALLED & REMOVED.

ALTERNATE A OR B:
CONCRETE CLASS ITEM 7.4.3
CONCRETE PIPE MATERIAL ITEM 2.12.4
MANHOLE MATERIAL ITEM 2.19
MANHOLE CONST. ITEM 6.7.2.(1)(2)(3)

PRECAST CONCRETE MANHOLE

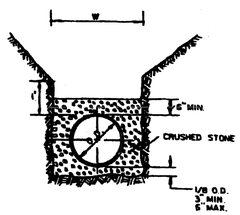
ALTERNATE B



STANDARD CLEANOUT

NTS

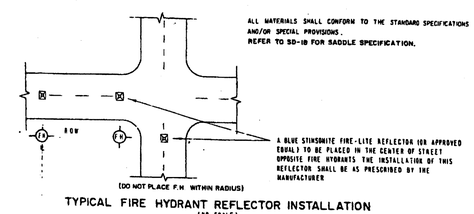
NOTE: Shallower Parallel Line Required When Flow Line Of Sanitary Sewer Exceeds 12 Ft. Depth. Vertical Drop Connections Not Permitted.



CLASS H EMBEDMENT

P.V.C. PIPE ONLY

STD. P.V.C. SEWER INSTALLATION
STD. P.V.C., R.C.C.P & DUCTILE WATER INSTALLATION.



TYPICAL FIRE HYDRANT REFLECTOR INSTALLATION

(NO SCALE)

GENERAL NOTES:

ALL CALCULATIONS ARE BASED ON TOTAL INTERNAL PRESSURE OF 150 PSI

ALLOWABLE SOIL BEARING PRESSURES MUST BE AT LEAST ONE TON PER SQUARE FOOT FOR THE THRUST BLOCKS SHOWN. IN SOILS OF LESSER CAPACITY, INCREASE SIZE AND BEARING AREA PROPORTIONATELY. VOLUMES OF VERTICAL BEND THRUST BLOCKS ARE KEY VOLUMES OF CONCRETE TO BE FURNISHED AND THE CORRESPONDING WEIGHT OF THE CONCRETE (AT 4,000#/C.Y.) EQUALS THE VERTICAL COMPONENT OF THRUST ON THE VERTICAL BEND. ALL BEARING SURFACES OF THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED EARTH.

CONCRETE FOR BLOCKING SHALL BE MINIMUM 2000 PSI CONCRETE

DIMENSIONS MAY BE VARIED AS REQUIRED BY FIELD CONDITIONS WHERE AND AS DIRECTED BY THE ENGINEER BUT SHALL NOT BE LESS THAN THE DIMENSIONS SHOWN HERE

POLYPIG SHALL BE PULLED THROUGH WATER LINES BEFORE LINES ARE ACCEPTED BY CITY.

WATER METER BOXES SHALL BE PROTECTED BY A 8"-CURB OR BALLARDS WHEN PLACED IN A PAVED AREA

RECORD DRAWING

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JONES & BOYD, INC.
BY:
DATE: 5-12-03

BENCHMARKS:

1. " ⊡ Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road. Elev. 764.92'
2. " ⊡ Cut on top centerline headwall on Northeast corner Missouri Eest and Redbud Road. Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE	NO.	REVISIONS DURING PLAN REVIEW	BY	DATE
1	Record Drawings.	JMW	5/9/03				

STATE OF TEXAS
JEFFERY M. WINKLER
90358
LICENSED PROFESSIONAL ENGINEER
5/9/03

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RECORD DRAWINGS

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16800 Dallas Parkway, Suite 240
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Tel: 972-248-7676
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- Engineering
- Planning
- Landscape Architecture
- Surveying

WATER & SANITARY SEWER DETAILS

HERITAGE, PHASE 1

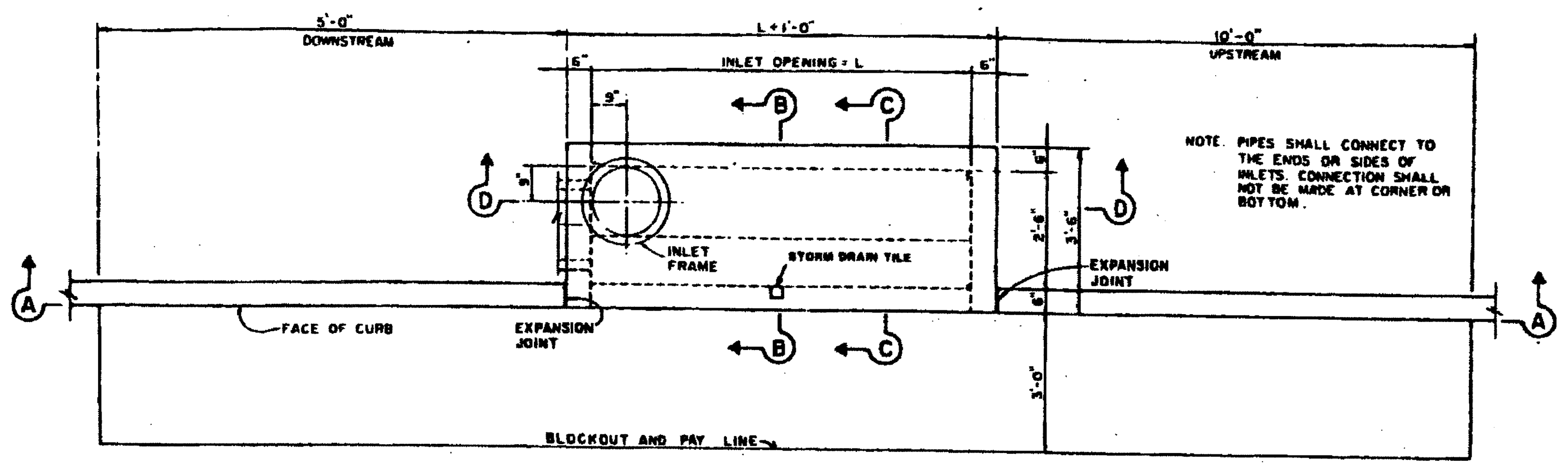
CITY OF CELINA
COLLIN COUNTY, TEXAS

PROJECT NO. WI401

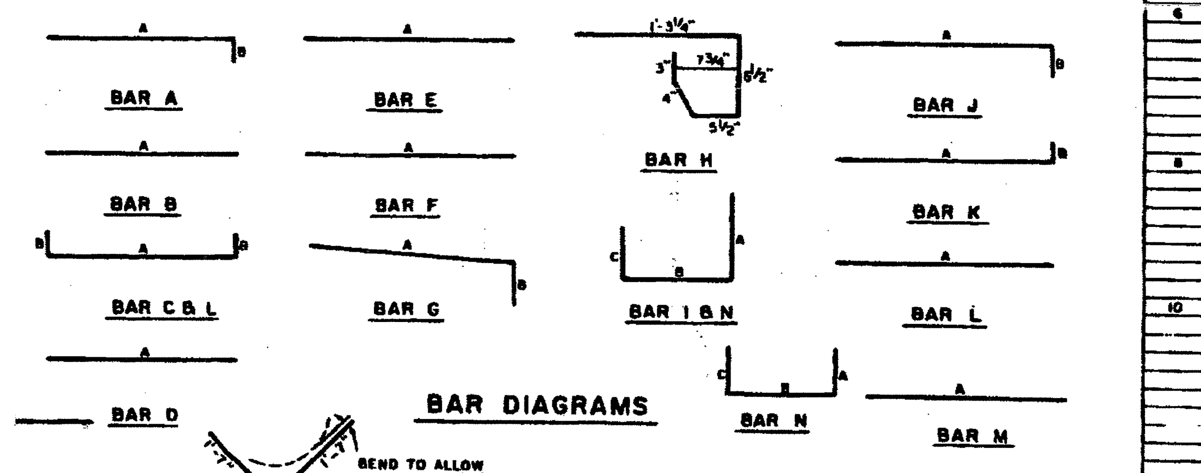
SHEET NO. D1

P-200305-01

JMW A-WI401DET-D1.dwg H:\Projects\WI401\dwg\ 5/9/03 1:25 pm



PLAN - STANDARD INLET



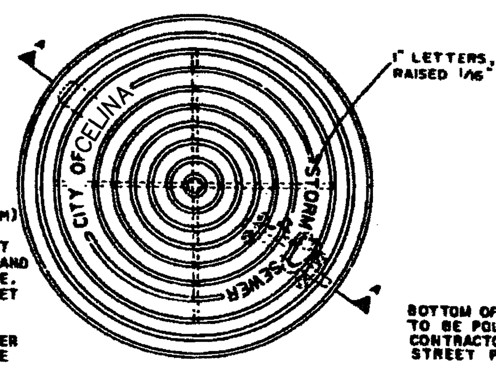
BAR DIAGRAMS

REINFORCING STEEL SCHEDULE

DIMENSIONS SHOWN ARE FOR MAXIMUM SIZE INLETS

INLET LENGTH	BAR TYPE	BAR DIA. (1/8 IN.)	NO. REQ'D	BAR DIMENSIONS A	B	C
6	A	3	9	3'-2"	0'-3"	-
	B	3	1	4'-10"	-	-
	C	4	15	6'-8"	0'-6"	-
	D	4	5	4'-8"	-	-
	F	4	1	3'-2"	-	-
	G	3	5	2'-0"	1'-3"	-
	H	3	3	*	*	*
	N	3	3	3'-2"	3'-2"	3'-2"
8	A	3	12	3'-2"	0'-3"	-
	B	3	1	6'-10"	-	-
	C	4	15	8'-8"	0'-6"	-
	D	4	5	4'-8"	-	-
	F	4	1	3'-2"	-	-
	G	3	5	2'-0"	1'-3"	-
	H	3	4	*	*	*
	N	3	3	3'-2"	3'-2"	3'-2"
10	A	3	10	3'-2"	0'-3"	-
	B	3	2	8'-10"	-	-
	C	4	16	10'-8"	0'-6"	-
	D	4	4	4'-8"	-	-
	E	5	6	10'-8"	-	-
	G	3	5	2'-0"	1'-3"	-
	H	3	15	*	*	*
	I	4	8	4'-8	3'-2"	3'-2"
	L	4	5	4'-3"		

* SEE DIAGRAM FOR DIMENSIONS. 4', 6', 8' AND 10' INLETS



PLAN OF FRAME

NOTES FOR PRECAST INLET

(1) THE FLOOR OF THE EXCAVATION MUST PROVIDE A FIRM, LEVEL BED FOR THE BASE SECTION TO REST UPON.

(2) A MINIMUM OF 6 INCHES OF 1" DIAMETER (MAXIMUM) ROCK OR GRAVEL SHALL BE USED TO PREPARE THE BEDDING TO FINAL GRADE OR IN LIEU OF THIS, AT LEAST 6 INCHES OF 2-SACK CEMENT STABILIZED SAND SHALL BE USED TO PREPARE THE BEDDING TO GRADE. CEMENT STABILIZED-SAND SHALL BE ALLOWED TO SET BY KEEPING HOLE PUMPED DRY.

(3) AFTER CASTING HAS BEEN INSTALLED ON THE PROPER BEDDING, THE BACKFILL MATERIAL, WHICH IS FREE FLOWING AND CLEAR OF ROCKS, IN EXCESS OF 4" DIAMETER AND OTHER LUMPS WHICH WOULD PROHIBIT PROPER COMPACTION, SHALL BE COMMENCED IN LIFTS OF NO MORE THAN 18". THE MATERIAL USED FOR BACKFILL SHOULD BE OF A TYPE SUITABLE TO OBTAIN THE DENSITY REQUIREMENTS FOR THE SPECIFIC JOB.

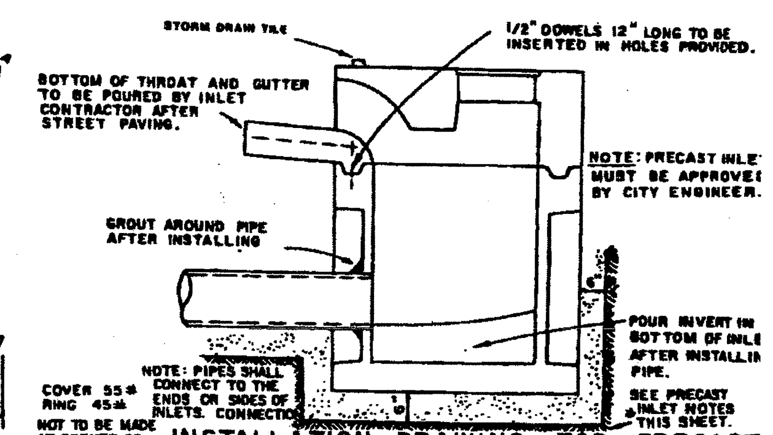
(4) PRECAST INLETS MUST BE APPROVED BY CITY ENGINEER.

(5) CONCRETE TO BE MIN. 4200 PSI.

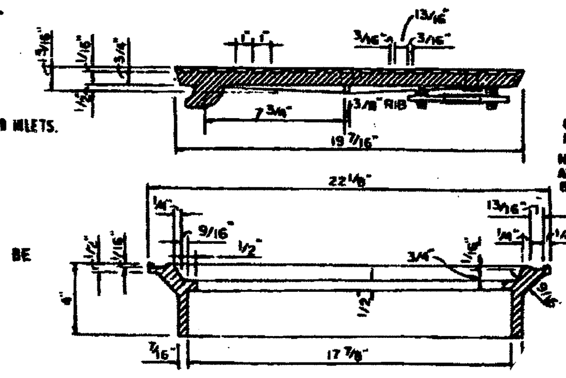
(6) LOCKING DEVICE IS REQUIRED ON ALL STORM SEWER LIDS.

(7) "NO DUMPING" WARNING PLAQUE TO BE INSTALLED ON ALL STANDARD AND RECESSED INLETS.

NOTE:
CAST-IN-PLACE INLETS TO BE MIN. 4200 PSI CONCRETE



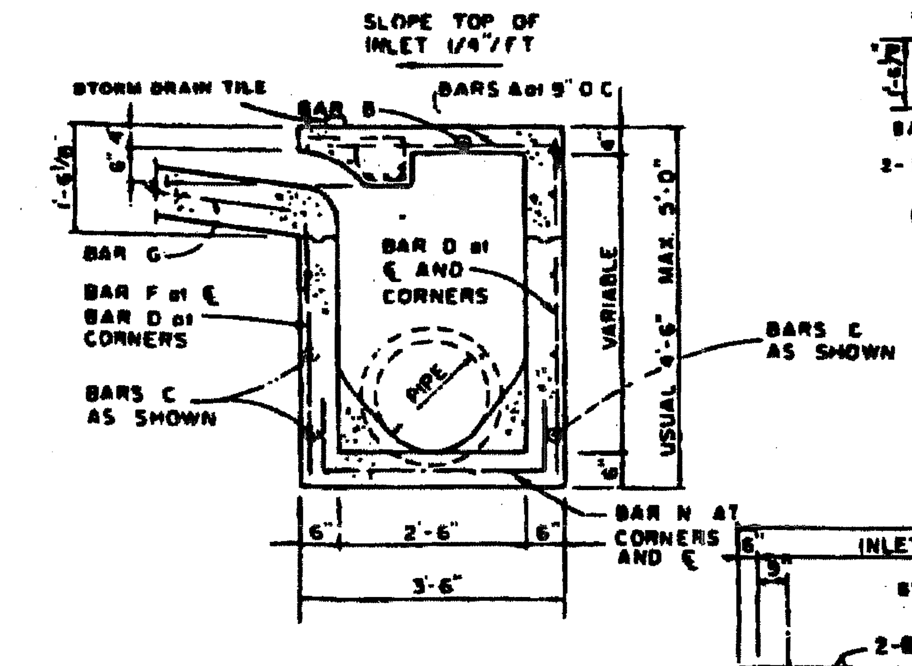
INSTALLATION DRAWING FOR PRECAST 10' CURB INLETS



SECTION OF FRAME AND COVER

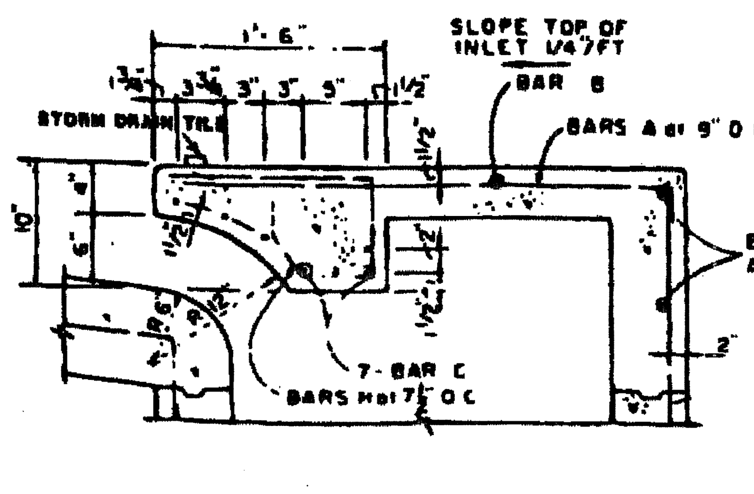
INLET FRAME AND COVER

6, 8 AND 10 FOOT INLETS



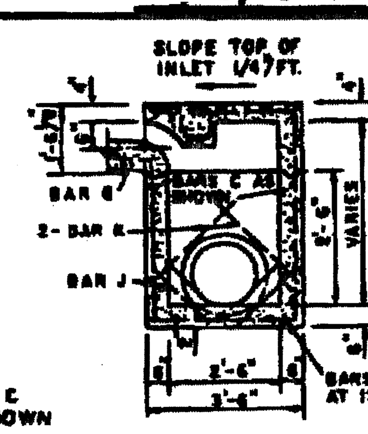
SECTION B-B

8 AND 10 FT. INLETS

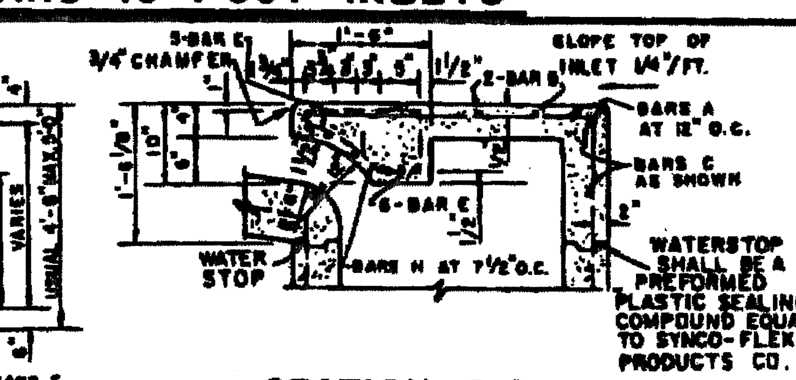


SECTION C-C

8 AND 10 FOOT INLETS

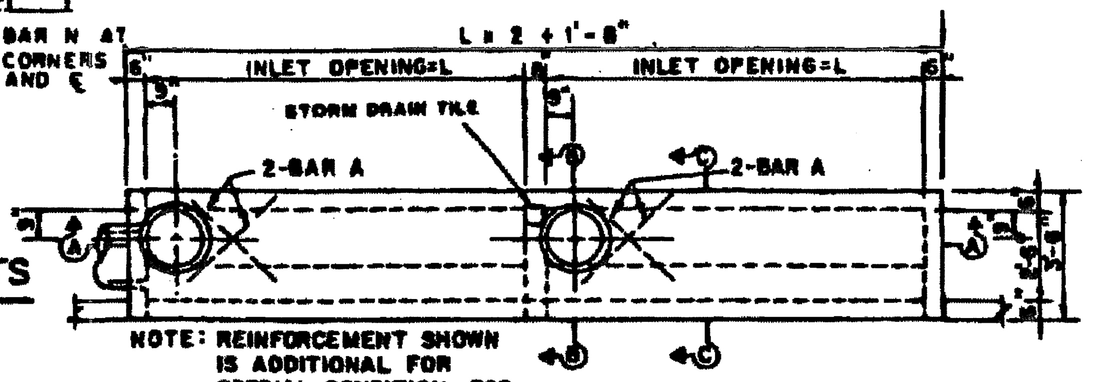


SECTION B-B



SECTION C-C

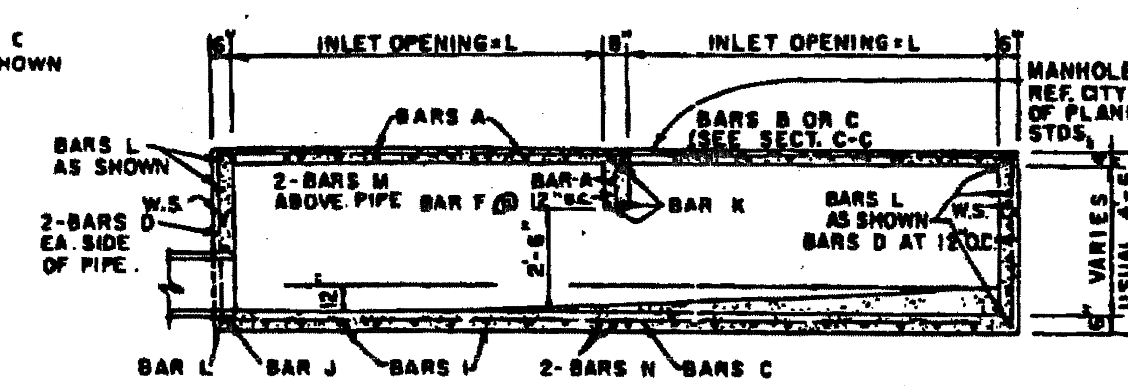
12, 14, 16 AND 20 FOOT INLETS



NOTE: REINFORCEMENT SHOWN IS ADDITIONAL FOR SPECIAL CONDITION, FOR REMAINDER OF REINF. SEE SECTIONS.

PLAN

12 FOOT INLETS



SECTION D D

12 FOOT INLETS

REINFORCING STEEL SCHEDULE

DOUBLE INLETS

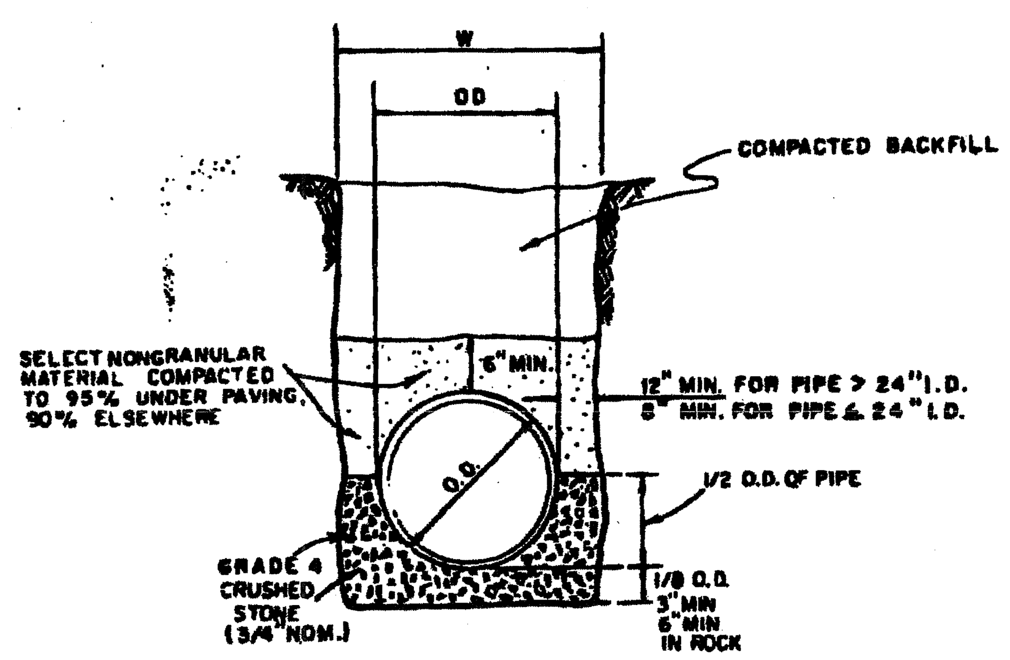
DIMENSIONS SHOWN ARE FOR MAXIMUM SIZE INLETS

INLET LENGTH L	BAR TYPE	BAR DIA. (1/8" IN.)	NO REQD.	BAR DIMENSIONS A	B	C
6 FT.	A	3	15	3'-2"	0'-6"	---
	B	3	2	11'-6"	---	---
	C	4	16	13'-4"	0'-6"	---
	D	4	9	4'-8"	---	---
	E	5	6	13'-4"	---	---
	F	4	5	1'-2"	---	---
	G	3	12	2'-0"	1'-3"	---
	H	3	26	#	#	#
	I	4	12	4'-8"	3'-2"	3'-2"
	J	5	1	#	#	#
	K	5	6	3'-2"	0'-6"	---
	L	4	11	3'-2"	0'-6"	---
	M	4	2	3'-0"‡	---	---
	N	4	2	4'-8"	3'-2"	4'-8"

INLET LENGTH L	BAR TYPE	BAR DIA. (1/8" IN.)	NO REQD.	BAR DIMENSIONS A	B	C
8 FT.	A	3	19	3'-2"	0'-8"	---
	B	3	2	15'-6"	---	---
	C	4	16	17'-4"	0'-6"	---
	D	4	9	4'-8"	---	---
	E	5	6	17'-4"	---	---
	F	4	5	1'-2"	---	---
	G	3	12	2'-0"	1'-3"	---
	H	3	26	#	#	#
	I	4	16	4'-8"	3'-2"	3'-2"
	J	5	1	#	#	#
	K	5	6	3'-2"	0'-6"	---
	L	4	11	3'-2"	0'-6"	---
	M	4	2	3'-0‡	---	---
	N	4	2	4'-8"	3'-2"	4'-8"
10 FT.	A	3	23	3'-2"	0'-6"	---
	B	3	2	19'-6"	---	---
	C	4	16	21'-4"	0'-6"	---
	D	4	9	4'-8"	---	---
	E	5	6	21'-4"	---	---
	F	4	5	1'-2"	---	---
	G	3	15	2'-0"	1'-3"	---
	H	3	32	#	#	#
	I	4	20	4'-8"	3'-2"	3'-2"
	J	5	1	#	#	#
	K	5	6	3'-2"	0'-6"	---
	L	4	11	3'-2"	0'-6"	---
	M	4	2	3'-0"	---	---
	N	4	2	4'-8"	3'-2"	4'-8"

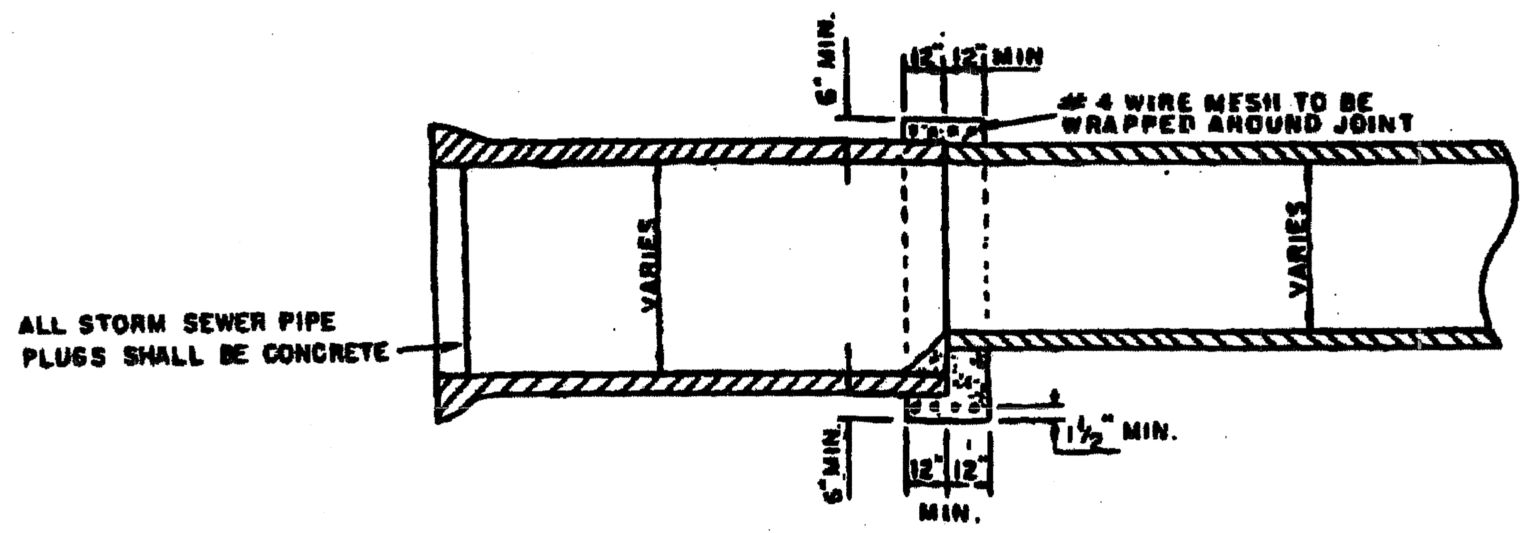
SEE DIAGRAM FOR DIMENSIONS
‡ = FIELD CUT AS REQD. TO ACCOMMODATE DRAIN PIPE.

12' INLETS

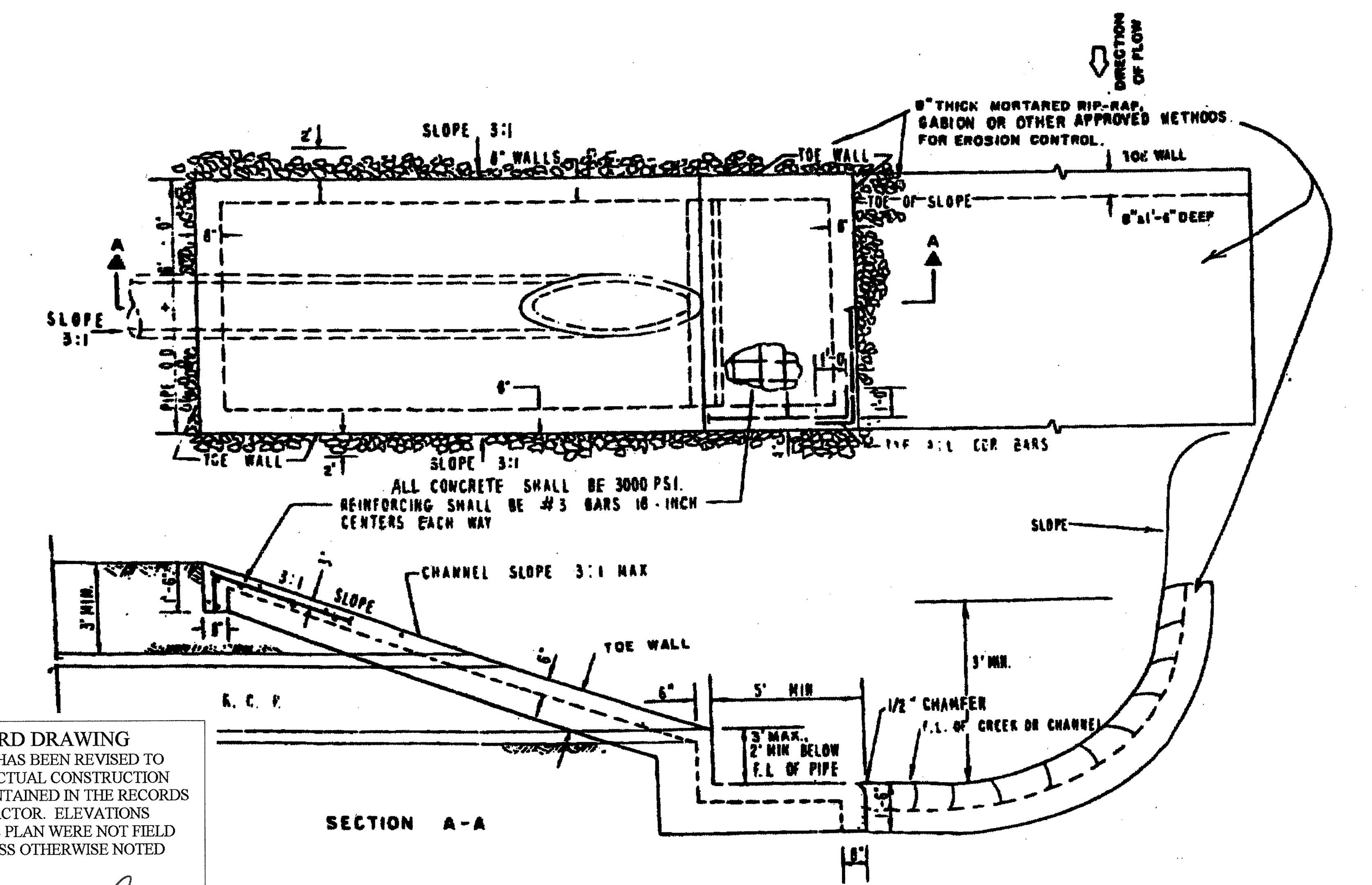


STORM SEWER PIPE BEDDING DETAIL

DEPTH OF TRENCH BELOW PIPE:
3" MIN. FOR 27" PIPE & SMALLER
4" MIN. FOR 30" TO 60" PIPE
6" MIN. FOR 66" PIPE & LARGER



DETAIL OF CONCRETE COLLAR FOR PIPE CONNECTIONS



TYPE C HEADWALL

CAN BE MODIFIED WITH PERMISSION OF CITY ENGINEER

RECORD DRAWING
THIS DRAWING HAS BEEN REVISED TO REFLECT THE ACTUAL CONSTRUCTION DETAILS AS CONTAINED IN THE RECORDS OF THE CONTRACTOR. ELEVATIONS SHOWN ON THIS PLAN WERE NOT FIELD VERIFIED, UNLESS OTHERWISE NOTED ON THE PLANS.

JONES & BOYD, INC.
BY: [signature]
DATE: 5-12-03

BENCHMARKS:

1. " □ Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road.
Elev. 764.92'
2. " □ Cut on top centerline headwall on Northeast corner Missouri Eest and Redbud Road.
Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE	NO.	REVISIONS DURING PLAN REVIEW	BY	DATE
1	Record Drawings.	JMW	5/9/03	1	Revised frame & cover detail per staff.	JMW	11/21/02

5/9/03
STATE OF TEXAS
JEFFERY M. WINKLER
90358
LICENSED
PROFESSIONAL ENGINEER

The seal appearing on this document was authorized by Jeffery M. Winkler, P.E. 90358. Alteration of a sealed document without proper notification to the responsible engineer is an offense under the Texas Engineering Practice Act.

RECORD DRAWINGS

Jones & Boyd, Inc.
16800 Dallas Parkway, Suite 240
Dallas, Texas 75248
Tel: 972-248-7676
Fax: 972-248-1414
- Engineering
- Planning
- Landscape Architecture
- Surveying

STORM WATER DETAILS

HERITAGE, PHASE 1

CITY OF CELINA
COLLIN COUNTY, TEXAS

PROJECT NO. WI401

SHEET NO. D2

JMW A-WI401DET-D2.dwg H:\Projects\WI401\dwg\ 5/9/03 1:28 pm

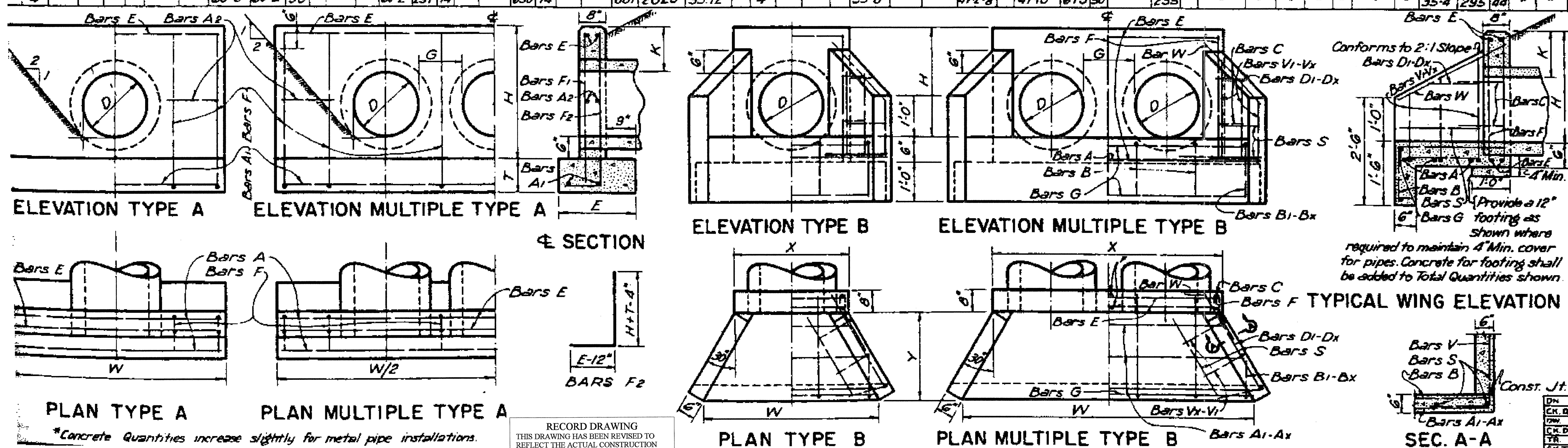
P-200305-01

TABLE OF DIMENSIONS AND QUANTITIES FOR TWO TYPE A HEADWALLS

NO. OF PIPES	DIAM OF PIPES	G	K	T	E	H	W	BARS A_1 4-#3 Lgth	Wt	BARS A_2 #3 @ 18"± No	Lgth	Wt	BARS E 4-#5 Lgth	Wt	BARS F_1 @ 12"± No	Size	Lgth	Wt	BARS F_2 @ 12"± No	Size	Lgth	Wt	TOTAL QUANTITIES STEEL LBS.	CONC. C.Y.
1	12"	~	12"	9"	1'-9"	2'-6"	7'-0"	6'-8"	10	8	2'-6"	8	6'-8"	28	12	#4	2'-11"	23	12	#4	3'-8"	29	98	1.48
2	"	10"	"	"	"	"	8'-10"	8'-6"	13	"	"	"	8'-6"	35	14	"	"	27	14	"	"	34	117	1.81
3	"	"	"	"	"	"	10'-8"	10'-4"	16	"	"	"	10'-4"	43	16	"	"	31	16	"	"	39	137	2.15
4	"	"	"	"	"	"	12'-6"	12'-2"	18	"	"	"	12'-2"	51	18	"	"	35	18	"	"	44	156	2.48
1	15"	~	12"	9"	1'-9"	2'-9"	8'-3"	7'-11"	12	8	3'-0"	9	7'-11"	33	12	#4	3'-2"	25	12	#4	3'-11"	31	110	1.82
2	"	1'-0"	"	"	"	"	10'-6"	10'-2"	15	"	"	"	10'-2"	42	14	"	"	30	14	"	"	37	133	2.24
3	"	"	"	"	"	"	12'-9"	12'-5"	19	"	"	"	12'-5"	52	16	"	"	34	16	"	"	42	156	2.66
4	"	"	"	"	"	"	15'-0"	14'-8"	22	"	"	"	14'-8"	61	18	"	"	38	18	"	"	47	177	3.09
1	18"	~	12"	9"	1'-9"	3'-0"	9'-6"	9'-2"	14	8	3'-8"	11	9'-2"	38	20	#4	3'-5"	46	20	#4	4'-2"	56	165	2.19
2	"	1'-2"	"	"	"	"	12'-2"	11'-10"	18	"	"	"	11'-10"	49	22	"	"	50	22	"	"	61	189	2.70
3	"	"	"	"	"	"	14'-10"	14'-6"	22	"	"	"	14'-6"	60	24	"	"	55	24	"	"	67	215	3.21
4	"	"	"	"	"	"	17'-6"	17'-2"	26	"	"	"	17'-2"	72	26	"	"	59	26	"	"	72	240	3.73
1	24"	~	12"	9"	2'-0"	3'-6"	12'-0"	11'-8"	18	8	4'-6"	14	11'-8"	49	24	#4	3'-11"	63	24	#4	4'-11"	79	223	3.17
2	"	1'-5"	"	"	"	"	15'-5"	15'-1"	23	"	"	"	15'-1"	63	26	"	"	68	26	"	"	85	253	3.89
3	"	"	"	"	"	"	18'-10"	18'-6"	28	"	"	"	18'-6"	77	28	"	"	73	28	"	"	92	284	4.62
4	"	"	"	"	"	"	22'-3"	21'-11"	33	"	"	"	21'-11"	91	30	"	"	79	30	"	"	99	316	5.35
1	30"	~	12"	9"	2'-3"	4'-0"	14'-6"	14'-2"	21	16	5'-6"	33	14'-2"	59	28	#4	4'-5"	83	28	#4	5'-8"	106	302	4.31
2	"	1'-8"	"	"	"	"	18'-8"	18'-4"	28	"	"	"	18'-4"	76	32	"	"	94	32	"	"	121	352	5.28
3	"	"	"	"	"	"	22'-10"	22'-6"	34	"	"	"	22'-6"	94	36	"	"	106	36	"	"	136	403	6.26
4	"	"	"	"	"	"	27'-0"	26'-8"	40	"	"	"	26'-8"	111	40	"	"	118	40	"	"	152	454	7.24
1	36"	~	12"	12"	2'-6"	4'-6"	17'-0"	16'-8"	25	16	6'-6"	39	16'-8"	70	32	#4	5'-2"	111	32	#4	6'-8"	143	388	6.40
2	"	1'-11"	"	"	"	"	21'-11"	21'-7"	32	"	"	"	21'-7"	90	36	"	"	124	36	"	"	160	445	7.89
3	"	"	"	"	"	"	26'-10"	26'-6"	40	"	"	"	26'-6"	111	40	"	"	138	40	"	"	178	506	9.37
4	"	"	"	"	"	"	31'-9"	31'-5"	47	"	"	"	31'-5"	131	44	"	"	152	44	"	"	196	565	10.85
1	42"	~	12"	12"	2'-9"	5'-0"	19'-6"	19'-2"	29	16	7'-6"	45	19'-2"	80	36	#4	5'-8"	136	36	#4	7'-5"	178	468	8.10
2	"	2'-2"	"	"	"	"	25'-2"	24'-10"	37	"	"	"	24'-10"	104	40	"	"	152	40	"	"	198	536	9.96
3	"	"	"	"	"	"	30'-10"	30'-6"	46	"	"	"	30'-6"	127	44	"	"	167	44	"	"	218	603	11.80
4	"	"	"	"	"	"	36'-6"	36'-2"	54	"	"	"	36'-2"	151	48	"	"	182	48	"	"	238	670	13.68
1	48"	~	15"	12"	3'-0"	5'-9"	23'-0"	22'-8"	34	24	8'-9"	79	22'-8"	95	40	#5	6'-5"	288	40	#5	8'-5"	351	827	10.74
2	"	2'-5"	"	"	"	"	29'-5"	29'-1"	44	"	"	"	29'-1"	121	44	"	"	295	44	"	"	386	925	13.08
3	"	"	"	"	"	"	35'-10"	35'-6"	53	"	"	"	35'-6"	148	48	"	"	321	48	"	"	422	1023	15.43
4	"	"	"	"	"	"	42'-3"	41'-11"	63	"	"	"	41'-11"	175	52	"	"	348	52	"	"	457	1122	17.77
1	54"	~	15"	12"	3'-3"	6'-3"	25'-6"	25'-2"	38	24	9'-9"	88	25'-2"	105	44	#5	6'-11"	318	44	#5	9'-2"	421	970	12.87
2	"	2'-10"	"	"	"	"	32'-10"	32'-6"	49	"	"	"	32'-6"	136	50	"	"	361	50	"	"	478	1112	15.77
3	"	"	"	"	"	"	40'-2"	39'-10"	60	"	"	"	39'-10"	166	56	"	"	404	56	"	"	536	1254	18.66
4	"	"	"	"	"	"	47'-6"	47'-2"	71	"	"	"	47'-2"	197	62	"	"	447	62	"	"	593	1396	21.55
1	60"	~	15"	12"	3'-6"	6'-9"	28'-0"	27'-8"	42	24	10'-9"	97	27'-8"	115	48	#5	7'-5"	371	48	#5	9'-11"	497	1122	15.20
2	"	3'-0"	"	"	"	"	36'-0"	35'-8"	54	"	"	"	35'-8"	149	54	"	"	418	54	"	"	559	1277	18.55
3	"	"	"	"	"	"	44'-0"	43'-8"	66	"	"	"	43'-8"	182	60	"	"	464	60	"	"	621	1430	21.89
4	"	"	"	"	"	"	52'-0"	51'-8"	78	"	"	"	51'-8"	216	66	"	"	511	66	"	"	683	1585	25.24
1	66"	~	15"	12"	3'-9"	7'-3"	30'-6"	30'-2"	45	32	11'-9"	141	30'-2"	126	52	#5	7'-11"	430	52	#5	10'-8"	579	1321	17.72
2	"	3'-1"	"	"	"	"	39'-1"	38'-9"	58	"	"	"	38'-9"	162	58	"	"	479	58	"	"	645	1485	21.49
3	"	"	"	"	"	"	47'-8"	47'-4"	78	"	"	"	47'-4"	198	64	"	"	529	64	"	"	712	1651	25.27
4	"	"	"	"	"	"	56'-3"	55'-11"	84	"	"	"	55'-11"	233	70	"	"	578	70	"	"	779	1815	29.05
1	72"	~	15"	12"	4'-0"	7'-9"	33'-0"	32'-8"	49	32	12'-9"	153	32'-8"	136	56	#5	8'-5"	492	56	#5	11'-5"	667	1497	20.42
2	"	3'-2"	"	"	"	"	42'-2"	41'-10"	63	"	"	"	41'-10"	175	62	"	"	544	62	"	"	738	1673	24.66
3	"	"	"	"	"	"	51'-4"	51'-0"	77	"	"	"	51'-0"	213	68	"	"	597	68	"	"	810	1850	28.89
4	"	"	"	"	"	"	60'-6"	60'-2"	90	"	"	"	60'-2"	251	74	"	"	650	74	"	"	881	2025	33.12

TABLE OF DIMENSIONS AND QUANTITIES FOR TWO TYPE B HEADWALLS

NO. OF PIPES	DIAM. OF PIPES	G	K	X	H	Y	W	BARS A_1-A_x #4 @ 12"± No	Av. Lgth	Wt	BARS B #3 @ 18"± No	Lgth	Wt	BARS B_1-B_x #3 @ 18"± No	Av. Lgth	Wt	C=2'-0" #4 @ 12"± No.	Wt	BARS D_1-D_x #3 @ 12"± No	Av. Lgth	Wt	BARS E 8-#5 Lgth	Wt	BARS F No	Size	Lgth	Wt	BARS G 4-#3 Lgth	Wt	BARS S 12-#4 Lgth	Wt	BARS V_1-V_x #4 @ 12"± No	Av. Lgth	Wt	BARS W 4-#5 Lgth	Wt	*TOTAL QUANTITIES STEEL LBS.	CONC. C.Y.
1	12"	~	12"	2'-4"	2'-0"	1'-0"	2'-4"	2	2'-8"	4	6	2'-6"	6	–	–	–	4	5	–	–	–	2'-0"	17	8	#4	2'-2"	12	2'-8"	4	8"	5	4	2'-11"	8	1'-8"	7	68	.52
2	"	10"	"	4'-2"	"	"	4'-2"	"	4'-6"	6	8	"	8	–	–	–	"	"	–	–	–	3'-10"	32	12	"	"	17	4'-6"	7	"	"	"	"	"	"	"	95	.82
3	"	"	"	6'-0"	"	"	6'-0"	"	6'-4"	8	10	"	9	–	–	–	"	"	–	–	–	5'-8"	47	16	"	"	23	6'-4"	10	"	"	"	"	"	"	"	122	1.11
4	"	"	"	7'-10"	"	"	7'-10"	"	8'-2"	11	12	"	11	–	–	–	"	"	–	–	–	7'-6"	63	20	"	"	29	8'-2"	12	"	"	"	"	"	"	"	151	1.40
1	15"	~	12"	2'-7½"	2'-3"	1'-6"	3'-2½"	4	3'-0"	8	6	3'-0"	7	4	1'-10"	3	8	11	–	–		2'-3"	19	8	#4	2'-5"	13	3'-7"	5	1'-3"	10	8	3'-0"	16	2'-3"	9	101	.75
2	"	1'-0"	"	4'-10½"	"	"	5'-5½"	"	5'-3"	14	8		9	"	"	"	"	"	–	–		4'-6"	38	12	"	"	19	5'-10"	9	"	"	"	"	"	"	"	138	1.16
3	"	"	"	7'-1½"	"	"	7'-8½"	"	7'-6"	20	10	"	11	"	"	"	"	"	–	–		6'-9"	56	16	"	"	26	8'-1"	12	"	"	"	"	"	"	"	174	1.57
4	"	"	"	9'-4½"	"	"	9'-11½"	"	9'-9"	26	14	"	16	"	"	"	"	"	–	–		9'-0"	75	20	"	"	32	10'-4"	16	"	"	"	"	"	"	"	214	1.98
1	18"	~	12"	2'-11"	2'-6"	2'-0"	4'-0⅛"	4	3'-10"	10	6	3'-6"	8	4	1'-10"	3	8	11	4	1'-0"	2	2'-7"	22	8	#4	2'-8"	14	4'-5"	7	1'-10"	15	12	3'-2"	25	2'-11"	12	129	1.00
2	"	1'-2"	"	5'-7"	"	"	6'-8⅜"	"	6'-6"	17	8	"	11	"	"	"	"	"	"	"	"	5'-3"	44	12	"	"	21	7'-1"	11	"	"	"	"	"	"	"	172	1.55
3	"	"	"	8'-3"	"	"	9'-4⅝"	"	9'-2"	25	12	"	16	"	"	"	"	"	"	"	"	7'-11"	66	16	"	"	29	9'-9"	15	"	"	"	"	"	"	"	219	2.11
4	"	"	"	10'-11"	"	"	12'-0⅞"	"	11'-10"	32	16	"	21	"	"	"	"	"	"	"	"	10'-7"	88	20	"	"	36	12'-5"	19	"	"	"	"	"	"	"	264	2.65
1	24"	~	12"	3'-6"	3'-0"	3'-0"	5'-9¼"	6	5'-0"	20	6	4'-6"	10	4	1'-10"	3	8	11	4	1'-0"	2	3'-2"	26	8	#4	3'-2"	17	6'-2"	9	3'-0"	24	16	3'-5"	37	4'-2"	17	176	1.62
2	"	1'-5"	"	6'-11"	"	"	9'-2¾"	"	8'-5"	34	10	"	17	"	"	"	"	"	"	"	"	6'-7"	55	12	"	"	25	9'-7"	14	"	"	"	"	"	"	"	239	2.46
3	"	"	"	10'-4"	"	"	12'-7¾"	"	11'-10"	47	16	"	27	"	"	"	"	"	"	"	"	9'-10"	82	16	"	"	34	13'-0"	20	"	"	"	"	"	"	"	304	3.32
4	"	"	"	13'-9"	"	"	16'-0¾"	"	15'-3"	61	20	"	34	"	"	"	"	"	"	"	"	13'-5"	112	20	"	"	42	16'-5"	25	"	"	"	"	"	"	"	368	4.18
1	30"	~	12"	4'-1"	3'-6"	4'-0"	7'-6⅝"	8	6'-2"	33	6	5'-6"	12	8	3'-1"	9	12	16	8	2'-2"	7	3'-9"	31	8	#4	3'-8"	20	7'-11"	12	4'-2"	33	20	3'-8"	49	5'-5"	23	245	2.34
2	"	1'-8"	"	8'-3"	"	"	11'-8⅞"	"	10'-4"	55	12	"	25	"	"	"	"	"	"	"	"	7'-11"	56	16	"	"	39	12'-1"	18	"	"	"	"	"	"	"	340	3.58
3	"	"	"	12'-5"	"	"	15'-10⅞"	"	14'-6"	77	18	"	37	"	"	"	"	"	"	"	"	12'-1"	101	24	"	"	59	16'-3"	24	"	"	"	"	"	"	"	435	4.80
4	"	"	"	16'-7"	"	"	20'-0⅝"	"	18'-8"	100	24	"	50	"	"	"	"	"	"	"	"	16'-3"	136	32	"	"	78	20'-5"	31	"	"	"	"	"	"	"	532	6.04
1	36"	~	12"	4'-8"	4'-0"	5'-0"	9'-3½"	10	7'-4"	49	8	6'-6"	20	8	3'-1"	9	12	16	8	2'-2"	7	4'-4"	36	8	#4	4'-2"	22	9'-8"	15	5'-4"	43	24	3'-11"	63	6'-8"	28	308	3.23
2	"	1'-11"	"	9'-7"	"	"	14'-2½"	"	12'-3"	82	14	"	34	"	"	"	"	"	"	"	"	9'-3"	77	16	"	"	45	14'-7"	22	"	"	"	"	"	"	"	426	4.89
3	"	"	"	14'-6"	"	"	19'-1½"	"	17'-2"	115	20	"	49	"	"	"	"	"	"	"	"	14'-2"	118	24	"	"	67	19'-6"	29	"	"	"	"	"	"	"	544	6.55
4	"	"	"	19'-5"	"	"	24'-0½"	"	22'-1"	147	28	"	68	"	"	"	"	"	"	"	"	19'-1"	159	32	"	"	89	24'-5"	37	"	"	"	"	"	"	"	666	8.22
1	42"	~	12"	5'-3"	4'-6"	6'-0"	11'-0¼"	12	8'-6"	68	8	7'-6"	23	12	4'-5"	20	16	21	12	3'-3"	15	4'-11"	41	8	#4	4'-8"	25	11'-5"	17	6'-5"	51	28	4'-2"	78	7'-11"	33	392	4.23
2	"	2'-2"	"	10'-11"	"	"	16'-8¼"	"	14'-2"	114	16	"	45	"	"	"	"	"	"	"	"	10'-7"	88	16	"	"	50	17'-1"	26	"	"	"	"	"	"	"	541	6.40
3	"	"	"	16'-7"	"	"	22'-4¼"	"	19'-10"	159	24	"	68	"	"	"	"	"	"	"	"	16'-3"	136	24	"	"	75	22'-9"	34	"	"	"	"	"	"	"	690	8.56
4	"	"	"	22'-3"	"	"	28'-0¼"	"	25'-6"	204	32	"	90	"	"	"	"	"	"	"	"	21'-11"	183	32	"	"	100	28'-5"	43	"	"	"	"	"	"	"	838	10.74
1	48"	~	15"	5'-10"	5'-3"	7'-0"	12'-9⅝"	14	9'-8"	90	10	8'-6"	32	12	4'-5"	20	16	21	12	3'-4"	15	5'-6"	46	8	#5	5'-5"	45	13'-2"	20	7'-7"	61	32	4'-5"	94	9'-3"	39	483	5.43
2	"	2'-5"	"	12'-3"	"	"	19'-2⅝"	"	16'-1"	150	18	"	58	"	"	"	"	"	"	"	"	11'-11"	99	16	"	"	90	19'-7"	29	"	"	"	"	"	"	"	676	8.25
3	"	"	"	18'-8"	"	"	25'-7⅝"	"	22'-6"	210	26	"	83	"	"	"	"	"	"	"	"	18'-4"	153	24	"	"	136	26'-0"	39	"	"	"	"	"	"	"	871	11.07
4	"	"	"	25'-1"	"	"	32'-0⅝"	"	28'-11"	270	36	"	115	"	"	"	"	"	"	"	"	24'-9"	207	32	"	"	181	32'-5"	49	"	"	"	"	"	"	"	1072	13.89
1	54"	~	15"	6'-5"	5'-9"	8'-0"	14'-6"	16	10'-10"	116	10	9'-6"	36	12	4'-5"	20	20	27	16	4'-5"	27	6'-1"	51	8	#5	5'-11"	49	14'-10"	22	8'-9"	70	40	4'-8"	125	10'-5"	43	586	6.71
2	"	2'-10"	"	13'-9"	"	"	21'-10"	"	18'-2"	194	20	"	71	"	"	"	"	"	"	"	"	13'-5"	112	20	"	"	123	22'-2"	33	"	"	"	"	"	"	"	845	10.28
3	"	"	"	21'-1"	"	"	29'-2"	"	25'-6"	273	30	"	107	"	"	"	"	"	"	"	"	20'-9"	173	32	"	"	198	29'-6"	44	"	"	"	"	"	"	"	1107	13.84
4	"	"	"	28'-5"	"	"	36'-6"	"	32'-10"	351	40	"	143	"	"	"	"	"	"	"	"	28'-1"	234	44	"	"	272	36'-10"	55	"	"	"	"	"	"	"	1367	17.42
1	60"	~	15"	7'-0"	6'-3"	9'-0"	16'-2⅞"	18	12'-0"	144	10	10'-6"	39	16	5'-9"	35	20	27	16	4'-5"	27	6'-8"	56	8	#5	6'-5"	54	16'-7"	25	9'-11"	80	44	4'-11"	145	11'-8"	49	681	8.11
2	"	3'-0"	"	15'-0"	"	"	24'-2⅞"	"	20'-0"	240	22	"	87	"	"	"	"	"	"	"	"	14'-8"	122	20	"	"	134	25'-7"	38	"	"	"	"	"	"	"	984	12.34
3	"	"	"	23'-0"	"	"	32'-2⅞"	"	28'-0"	337	32	"	126	"	"	"	"	"	"	"	"	22'-8"	189	32	"	"	214	32'-7"	49	"	"	"	"	"	"	"	1278	16.57
4	"	"	"	31'-0"	"	"	40'-2⅞"	"	36'-5"	438	44	"	174	"	"	"	"	"	"	"	"	30'-8"	256	44	"	"	295	40'-8"	61	"	"	"	"	"	"	"	1587	20.82
1	66"	~	15"	7'-7"	6'-9"	10'-0"	17'-11¾"	20	13'-2"	176	12	11'-6"	52	16	5'-9"	35	24	32	20	5'-7"	42	7'-3"	60	8	#5	6'-11"	58	18'-4"	28	11'-1"	89	48	5'-2"	166	13'-0"	54	792	9.65
2	"	3'-1"	"	16'-2"	"	"	26'-6¾"	"	21'-9"	231	24	"	104	"	"	"	"	"	"	"	"	15'-10"	132	20	"	"	144	26'-11"	40	"	"	"	"	"	"	"	1129	14.54
3	"	"	"	24'-9"	"	"	35'-1¾"	"	30'-4"	405	34	"	147	"	"	"	"	"	"	"	"	24'-5"	204	32	"	"	231	35'-6"	53	"	"	"	"	"	"	"	1458	19.42
4	"	"	"	33'-4"	"	"	43'-8¾"	"	39'-8"	530	46	"	199	"	"	"	"	"	"	"	"	33'-0"	275	44	"	"	318	44'-2"	67	"	"	"	"	"	"	"	1807	24.31
1	72"	~	15"	8'-2"	7'-3"	11'-0"	19'-8⅝"	22	14'-4"	211	12	12'-6"	56	16	5'-9"	35	24	32	20	5'-7"	42	7'-10"	65	8	#5	7'-5"	62	20'-1"	30	12'-3"	98	52	5'-5"	188	14'-3"	59	878	11.32
2	"	3'-2"	"	17'-4"	"	"	28'-10⅝"	"	23'-6"	345	24	"	113	"	"	"	"	"	"	"	"	17'-0"	142	20	"	"	155	29'-3"	44	"	"	"	"	"	"	"	1253	16.91
3	"	"	"	26'-6"	"	"	38'-0⅝"	"	32'-10"	482	38	"	179	"	"	"	"	"	"	"	"	26'-2"	218	32	"	"	248	38'-5"	58	"	"	"	"	"	"	"	1639	22.52
4	"	"	"	35'-8"	"	"	47'-2⅝"	"	41'-10"	615	50	"	235	"	"	"	"	"	"	"	"	35'-4"	295	44	"	"	341	47'-6"	72	"	"	"	"	"	"	"	2017	28.11



*Concrete Quantities increase slightly for metal pipe installations.

A_1 = W + 4½"
A_2 = W - 9⅜"
This dimension reduced 1'-1⅞" for each successive bar.
BARS A_1-A_x

B = Y + 4"
B_1 = 8"
This dimension increased 2'-7" for each successive bar.
BARS B & B_1-B_x

BARS C

GENERAL NOTES:-

All exposed corners shall be chamfered ¾".

Reinforcing steel shall be placed with the center of the outside layer of bars 2" from the surface of the concrete. Total Quantities include one 20 diameter lap for all bars over 60'-0" in length.

TEXAS HIGHWAY DEPARTMENT

CONCRETE HEADWALLS FOR PIPE CULVERTS

12 TO 72 INCHES IN DIAMETER

CH-II

DN	T.H.D.	DRAWING	DATE
CK. DN.	T.H.D.	Original	Feb. 1950
DW.	M.D.A.		
CK. DW.	K.M.	Rev. 11-67 Concrete	
TR.	O.C.K.		

STATE: TEXAS — 6

BENCHMARKS:

1. " ☐ Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road.
Elev. 764.92'
2. " ☐ Cut on top centerline headwall on Northeast corner Missouri Eest and Redbud Road.
Elev. 764.92'

RECORD DRAWING
THIS DRAWING HAS BEEN REVISED TO REFLECT THE ACTUAL CONSTRUCTION DETAILS AS CONTAINED IN THE RECORDS OF THE CONTRACTOR. ELEVATIONS SHOWN ON THIS PLAN WERE NOT FIELD VERIFIED, UNLESS OTHERWISE NOTED ON THE PLANS.
JONES & BOYD, INC.
BY: [signature]
DATE: 5-12-03

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE	NO.	REVISIONS DURING PLAN REVIEW	BY	DATE
1	Record Drawings.	JMW	5/9/03				

5/9/03 — STATE OF TEXAS — JEFFERY M. WINKLER — 90358 — LICENSED PROFESSIONAL ENGINEER

The seal appearing on this document was authorized by Jeffery M. Winkler, P.E. 90358. Alteration of a sealed document without proper notification to the responsible engineer is an offense under the Texas Engineering Practice Act.

RECORD DRAWINGS

Jones & Boyd, Inc.
- Engineering
- Planning
- Landscape Architecture
- Surveying

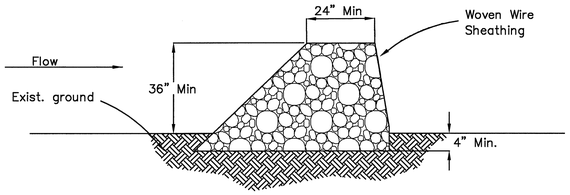
16800 Dallas Parkway, Suite 240
Dallas, Texas 75248
Tel: 972-248-7676
Fax: 972-248-1414

TXDOT DETAIL SHEET
HEADWALLS FOR PIPE CULVERTS
HERITAGE, PHASE 1
CITY OF CELINA
COLLIN COUNTY, TEXAS

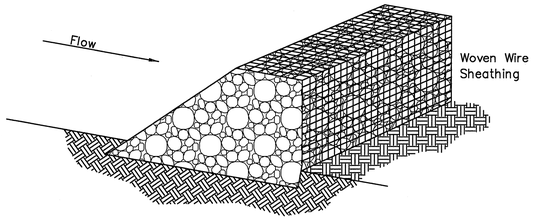
PROJECT NO. WI401
SHEET NO. D3

JMW A-WI401DET-D3.dwg H:\Projects\WI401\dwg\ 5/9/03 1:30 pm

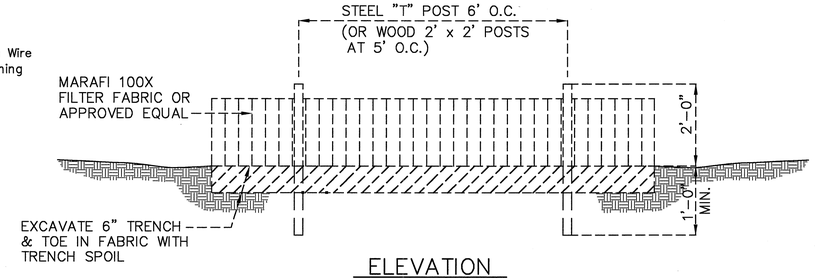
P-200305-01



SECTION
N.T.S.

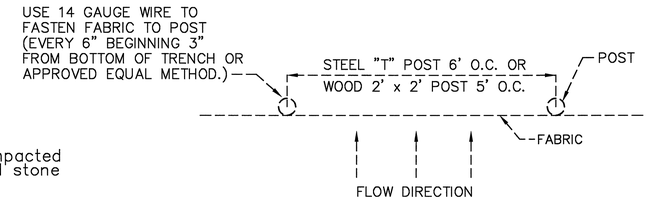


ISOMETRIC PLAN
N.T.S.



ELEVATION

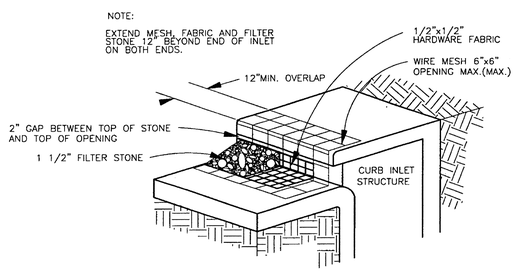
STONE OUTLET STRUCTURE:
1. Rock shall be open graded rock 4–8 inches in diameter.
2. Rock berm shall be enclosed by a woven wire sheathing with a maximum opening of one inch and a minimum wire size of 20 gauge.
3. When silt reaches a depth equal to one–third of the height of the berm or one foot, whichever is less, the silt shall be removed and disposed of at an acceptable location.



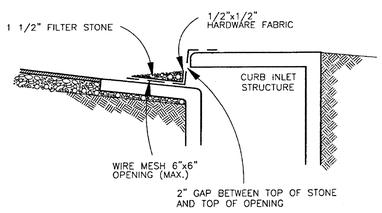
PLAN VIEW
SILT FENCE DETAIL

GENERAL NOTES FOR THE EROSION CONTROL PLAN

1. All operators and/or contractors shall conform to the terms and conditions of the National Pollution Discharge Elimination Systems (NPDES) General Permit as published in the Federal Register, Vol. 63, No. 128, July 6, 1998, by the Environmental Protection Agency (EPA).
2. The Notice of Intent (NOI), as required by the General Permit, must be properly displayed on site at all times by each operator.
3. All releases of reportable quantities of hazardous substances shall be reported immediately to the facility operator and EPA.
4. The Contractor shall inspect the site at least once every fourteen days and within 24 hours of a 1/2–inch or greater rainfall event. The Contractor shall document the results. Copies of the inspection reports shall accompany the Contractor's monthly pay request. The Contractor shall not be paid until said reports are presented to the Owner/Owner's Represenative. The Earthwork Contractor shall be responsible for inspection until the Utility Contractor begins his work. The Utility Contractor shall be responsible for inspections until the Paving Contractor begins his work. The Paving Contractor shall be responsible for inspections until the Earthwork Contractor begins lot benching operations. The Earthwork Contractor shall make remaining inspections until project is accepted by the City.
5. Modifications to the Storm Water Pollution Prevention Plan shall be implemented and be in–place within a seven calendar day period.
6. If any contractor sees a violation by an operator or another contractor, he shall notify the operator and contractor in violation, as well as the facility operator.
7. Erosion control shall be installed prior to any grading.
8. Accumulated silt deposits shall be removed from silt fences and hay bale dikes when silt depth reaches six inches. Removal of silt deposits by the contractor shall be incidental to the performance of the contract and a separate bid item shall not be included.
9. The contractor shall add or delete erosion protection at the request and direction of the Operator or the City.
10. After installation of pavement, final lot benching and general cleanup, the grass groundcover shall be established in all street parkways, lots and all other disturbed areas. Materials shall be as specified in Item 2.15 and seeding shall be in accordance with Item 3.10 of the NCTCOG Standard Specifications. Depending upon schedule for house construction, grass establishment may be waived on a single lot basis if house construction begins immediately on that lot.
11. It shall be the contractor's responsibility to control and limit silt and sediment leaving the site. Specifically, the contractor shall protect all public streets, alleys, streams and storm drainage systems from erosion deposits.
12. If any erosion control is removed for construction and/or access purposes, the contractor shall replace it at the end of the work day.
13. It shall be the contractor's responsibility to provide a dumpster (or equal) to collect solid waste materials during construction.

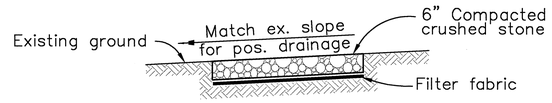


ISOMETRIC PLAN VIEW

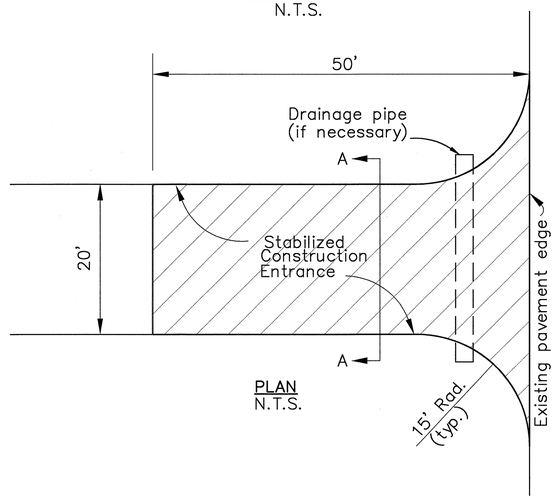


INLET SECTION

TYPE A CURB INLET PROTECTION
N.T.S.



SECTION A–A
N.T.S.

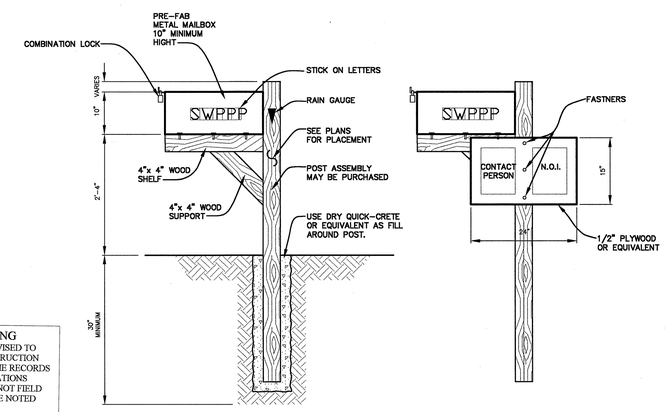


PLAN
N.T.S.

STABILIZED CONSTRUCTION ENTRANCE

SILT FENCE GENERAL NOTES:

1. Steel posts which support the silt fence shall be installed on a slight angle toward the anticipated runoff source.
2. The toe of the silt fence shall be trenched in with a spade or mechanical trencher, so that the downslope face of the trench is flat and perpendicular to the line of flow.
3. The trench should be a minimum of six inches deep and four inches wide to allow for the silt fence to be laid in the ground and backfilled.
4. Silt fence should be securely fastened to each support post.
5. Inspection shall be frequent and repair or replacement shall be made promptly as needed.
6. Silt fence shall be removed when it has served its usefulness, so as not to block or impede storm flow or drainage.
7. Sediment trapped by this practice shall be disposed of in an approved site in a manner that will not contribute to additional siltation.
8. Accumulated silt shall be removed when it reaches a depth of six inches and disposed of in an approved spoil site or as in No. 7 above.
9. At point of surface flow concentration reinforce silt fence with wire mesh backing on downstream side of fence.
10. Filter fabric is to be Marafi 100X or approved equal. (Marafi, Inc.: 800–438–1855)



TYPICAL SWPPP POST DETAIL
N.T.S.

STABILIZED CONST. ENTRANCE GENERAL NOTES:
1. Crushed stone for construction entrance shall be 2"–3" at greatest dimension and shall be installed to a compacted depth of six inches.
2. Filter fabric is to be Marafi 100X or equal. (Marafi, Inc.: 800–438–1855)
3. If construction entrance crosses a drainage ditch, swale, etc., a drainage pipe shall be installed with min. 12 inches cover of crushed stone.

RECORD DRAWING
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JONES & BOYD, INC.
BY:
DATE: 5-12-03

BENCHMARKS:
1. "□" Cut on top centerline headwall on Northeast corner Missouri West and Redbud Road. Elev. 764.92'
2. "□" Cut on top centerline headwall on Northeast corner Missouri Eest and Redbud Road. Elev. 764.92'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE	NO.	REVISIONS DURING PLAN REVIEW	BY	DATE
1	Record Drawings.	JMW	5/9/03				

5/9/03 STATE OF TEXAS JEFFERY M. WINKLER 90358 LICENSED PROFESSIONAL ENGINEER
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RECORD DRAWINGS

Jones & Boyd, Inc.
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Dallas, Texas 75248
Tel: 972-248-7676
Fax: 972-248-1414
• Engineering • Planning • Landscape Architecture • Surveying

EROSION CONTROL DETAILS

HERITAGE, PHASE 1

City of Celina, Collin County, Texas

PROJECT NO. W1401
SHEET NO. D4

Plot Info: Drawing: A–W401ER–13–D4.dwg Hi:\Projects\W401\dwg\ Plotted by: JMW Plot date: 5/9/03 Plot time: 1:22 pm
Drawing Info: JMW A–W401ER–13–D4.dwg Hi:\Projects\W401\dwg\ 5/9/03 1:19 pm

P-200305-01