CIVIL CONSTRUCTION PLANS
for
SHOPS AT CARTER RANCH

SHELBY GLASS SURVEY, Abstract No. 346
City of Celina, Collin County, Texas

GENERAL NOTES

1. Prior to any construction the Contractor shall familiarize himself with the Contract Documents and Specifications, the Plans including all notes, and other applicable standards or specifications relevant to the proper completion of the work specified. Failure on the part of the Contractor to familiarize himself with all Standards or Specifications pertaining to this work shall in no way relieve the Contractor of responsibility for performing the work in accordance with all such applicable Standards and Specifications.

2. Contractor shall have in his possession, prior to construction, all necessary permits, licenses, etc. Contractor shall have at least one set of approved Engineering Plans and Specif .ations on-site at all times.

3. ALL work shall conform to the North Texas Central Texas Council of Governments (NCTCOG) Standard Specifications for Public Works Construction. The Engineer's decision shall apply in the event an item is not covered by NCTCOG. The Engineer shall have final decision on all construction materials, methods, and procedures.

4. Construction inspection will be performed by representatives of the Owner, Engineer, Geotechnical Engineer, and reviewing authorities and agencies. Unrestricted access shall be provided to them at all times. Contractor is responsible for understanding and scheduling required inspections.

5. All contractors must confine their activities to the work area. No encroachments onto developed or undeveloped areas will be allowed, unless specifically noted on plans. Any damage resulting there from, shall be Contractor's responsibility to repair.

6. It will be the responsibility of each contractor to protect all existing public and private utilities throughout the construction of this project. Contractor shall contact the appropriate utility companies for line locations prior to commencement of construction and shall assume full liability to those companies for any damages caused to their facilities. Call 1-800-DIG-TESS.

7. One time construction staking will be performed by Owner's Engineer.

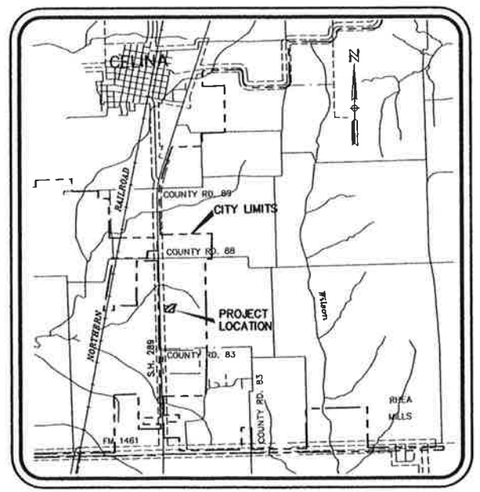
8. If unforeseen problems or conflicts are encountered in the construction, for which an immediate solution is not apparent, the Engineer and Owner shall be notified immediately.

9. Contractors shall be responsible for precise utility field locations and working around existing utilities and improvements.

10. Traffic control measures shall be installed for any work activity that takes place on or adjacent to any public street or roadway. Traffic control measures shall conform to Part IV of the TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

11. After topsoil is stripped and stockpiled, fill shall be compacted as recommended by Reed Engineering Group in their Geotechnical Engineering Report for this project dated January 2005. Subgrade to receive moisture conditioned clay should be scarified to a depth of 6 inches and compacted to 92-98% of the materials Standard Proctor dry density (ASTM D698) at a workable moisture content of +1 to +5 percentage points above optimum. The clays to be used as fill can then be placed in loose lifts less than 10 inches, compacted to similar density and moisture content.

12. Site excavated soils should be placed in maximum eight-inch loose lifts and compacted to the moisture and density requirements as stated above.



VICINITY MAP
N.T.S.

June 22, 2005

SHT. NO.	SHEET NAME
	COVER SHEET
	FINAL PLAT
C1	PAVING AND HORIZONTAL CONTROL PLAN
C2	GRADING PLAN
C3	EROSION CONTROL PLAN
C4	DRAINAGE AREA MAP
C5	STORM DRAINAGE PLAN
C6	WATER AND WASTEWATER PLAN
C7	UTILITY PROFILES
C8	PAVING DETAILS
C9	EROSION CONTROL DETAILS
C10	UTILITY DETAILS
C11-C16	TxDot DETAILS
LP.01	LANDSCAPE PLAN
IR.01	IRRIGATION PLAN
DT.01	LANDSCAPE DETAILS

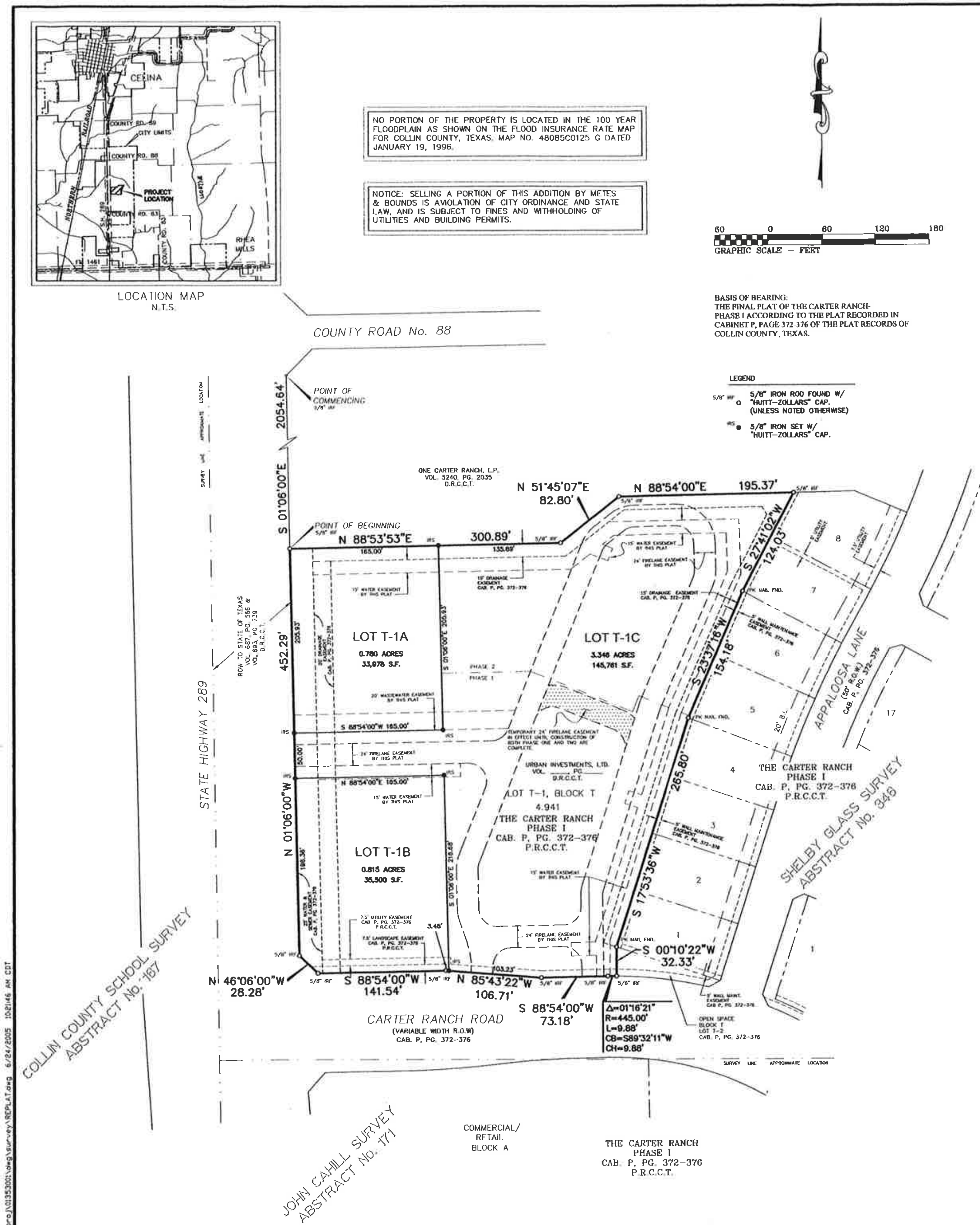
STATE OF TEXAS
ODIE L. VEST
80069
REGISTERED PROFESSIONAL ENGINEER
6/23/05

CITY OF CELINA, TEXAS
APPROVED FOR CONSTRUCTION
DATE: 7-5-05
BY: P.A.C.

OWNER:
Mark R. Smith Company, Inc.
810 Lomo Alto, Suite 230
Dallas, Texas 75225
(214) 346-0733
(214) 369-2447 Fax

HUITT-ZOLLARS
Huitt-Zollars, Inc. Denton
2220 San Jacinto Blvd., Suite 330
Denton, Texas 76205-7540
Phone (214) 871-3311 Fax (940) 483-1127

P-200505-01



STATE OF TEXAS
COUNTY OF COLLIN

OWNER'S DEDICATION

WHEREAS, Urban Investments, Ltd., is the owner a tract of land situated in the Shelby Glass Survey, Abstract No 346, City of Celina, Collin County Texas as recorded in Volume ____, Page ____ of the Deed Records of Collin County, Texas, said tract being all of Lot T-1, Block T, of the Final Plat of The Carter Ranch-Phase I, an addition to the City of Celina, Collin County Texas as recorded in Cabinet P, Page 372-376 of the Plat Records of Collin County, Texas, and being more particularly described as follows:

COMMENCING at a five-eighths inch iron rod found with "Huitt-Zollars" cap at the most westerly northwest corner of a tract of land as described in instrument to S.H. 289 Investment Partners, as recorded in Volume 4971, Page 3584 of the Deed Records of Collin County, Texas, said point being on the east right-of-way line of State Highway 289 at the southwest end of a right-of-way clip for County Road No. 88;

THENCE, South 01 degree 06 minutes 00 seconds East along the east right-of-way line of State Highway No. 289 a distance of 2,054.64 feet to a five-eighths inch iron rod found with "Huitt-Zollars" cap for the **POINT OF BEGINNING,** said point being the northwest corner of said Lot T-1, Block T;

THENCE, North 88 degrees 53 minutes 53 seconds East departing the east right-of-way line of State Highway No. 289 and along the north line of Lot T-1, a distance of 300.89 feet to a five-eighths inch iron rod found with "Huitt-Zollars" cap;

THENCE, North 51 degrees 45 minutes 07 seconds East, continuing along the north line of Lot T-1 a distance of 82.80 feet to a five-eighths inch iron rod found with "Huitt-Zollars" cap;

THENCE, North 88 degrees 54 minutes 00 seconds East, continuing along the north line of Lot T-1, a distance of 195.37 feet to a five-eighths inch iron rod found with "Huitt-Zollars" cap at the northeast corner of Lot T-1;

THENCE, South 27 degrees 41 minutes 02 seconds West, along the easterly line of Lot T-1, a distance of 124.03 feet to a "PK" nail found in a stone retaining wall;

THENCE, South 23 degrees 37 minutes 16 seconds West, continuing along the easterly line of Lot T-1, a distance of 154.18 feet to a "PK" nail found in a stone retaining wall;

THENCE, South 17 degrees 53 minutes 36 seconds West, continuing along the easterly line of Lot T-1 a distance of 265.80 feet to a "PK" nail found in a stone retaining wall;

THENCE, South 00 degrees 10 minutes 22 seconds West, continuing along the easterly line of Lot T-1, a distance of 32.33 feet to a five-eighths inch iron rod found with "Huitt-Zollars" cap at the southeast corner of Lot T-1 and being on the north right-of-way line of Carter Ranch Road (a variable width right-of-way) and being the beginning of a non-tangent curve to the left;

THENCE, along the north right-of-way line of Carter Ranch Road and the south line of Lot T-1 and along said curve to the left through central angle of 01 degrees 16 minutes 21 seconds having a radius of 445.00 feet and an arc length of 9.88 feet, being subtended by a chord of South 89 degrees 32 minutes 11 seconds West a distance of 9.88 feet to a five-eighths inch iron rod found with "Huitt-Zollars" cap;

THENCE, South 88 degrees 54 minutes 00 seconds West, continuing along the north right-of-way line of Carter Ranch Road and the south line of Lot T-1, a distance of 73.18 feet to a five-eighths inch iron rod found with "Huitt-Zollars" cap;

THENCE, North 85 degrees 43 minutes 22 seconds West, continuing along the north right-of-way line of Carter Ranch Road and the south line of Lot T-1, a distance of 106.71 feet to a five-eighths inch iron rod found with "Huitt-Zollars" cap;

THENCE, South 88 degrees 54 minutes 00 seconds West, continuing along the north right-of-way line of Carter Ranch Road and the south line of Lot T-1, a distance of 141.54 feet to a five-eighths inch iron rod found with "Huitt-Zollars" cap;

THENCE, North 46 degrees 06 minutes 00 seconds West, continuing along the north right-of-way line of Carter Ranch Road and the south line of Lot T-1, a distance of 28.28 feet to a five-eighths inch iron rod found with "Huitt-Zollars" cap on the easterly right-of-way line of said State Highway No. 289 and the west line of Lot T-1;

THENCE, North 01 degrees 06 minutes 00 seconds West along the easterly right-of-way line of said State Highway No. 289 and the west line of Lot T-1, a distance of 452.29 feet to the **POINT OF BEGINNING** and **CONTAINING** 4.941 acres of land, more or less.

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS:

That URBAN INVESTMENTS, LTD., acting herein by and through his(its) duly authorized officer(s), does hereby adopt this plat designating the herein above described property as **THE CARTER RANCH PHASE IR**, 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 constructed or placed upon, over or across the easements as shown, except that landscape improvements may by 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 easements 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 utilities 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 ________ day of ____________, 2005.

By:

____
Authorized Signature of Owner

____
Printed Name and Title

STATE OF TEXAS
COUNTY OF ______________

Before me, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared ______________________, 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 _______day of ______________,2005.

____
Notary Public in and for the State of Texas

____
My Commission Expires On:

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

______________________ Chairperson | ______________ Date

APPROVED BY: | City Council, City of Celina, Texas

______________________ Mayor, City of Celina | ______________ Date

ATTEST:

______________________ City Secretary, City of Celina | ______________ Date

KNOW ALL MEN BY THESE PRESENTS:

THAT, I, Eric J. Yahoudy do hereby certify that I prepared this plat from an actual and accurate survey of the land and that the corner monuments shown thereon were properly placed under my personal supervision, in accordance with the subdivision regulations of the City of Celina, Texas.

PRELIMINARY THIS PLAT SHALL NOT BE RECORDED FOR ANY PURPOSE.

____
Eric J. Yahoudy, Registered Professional Land Surveyor
Texas Registration No. 4862

____
Date

STATE OF TEXAS
COUNTY OF ______________

Before me, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared Eric J. Yahoudy, 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 ________ day of ______________, 2005

____
Notary Public in and for the State of Texas

____
My Commission Expires On:

CITY OF CELINA, TEXAS
APPROVED FOR CONSTRUCTION
DATE: 7-5-05
BY: P.A.C.

THE CARTER RANCH-PHASE IR

BEING A REPLAT OF LOT T-1, BLOCK T

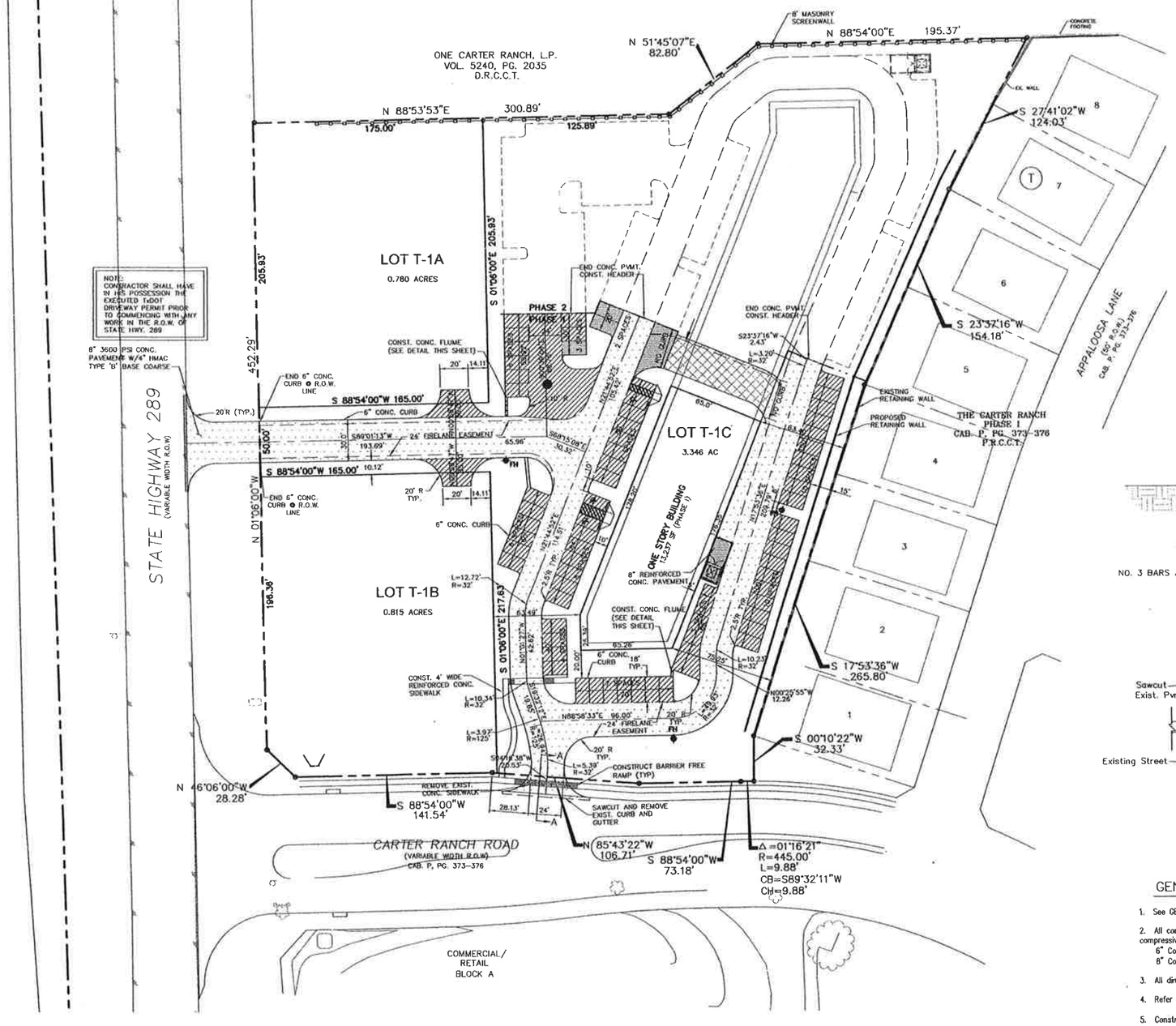
4.941 ACRES OF LAND
SITUATED IN THE SHELBY GLASS SURVEY
ABSTRACT No. 346
CITY OF CELINA
COLLIN COUNTY, TEXAS

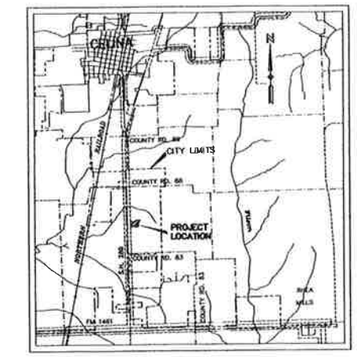
PREPARED FOR:
MARK R. SMITH COMPANY, INC.
P.O. BOX 9027
DALLAS, TEXAS 75209-9027
214-346-0733

PREPARED BY:
HUITT-ZOLLARS
Huitt-Zollars, Inc. Dallas
3131 McKinney Avenue, Suite 600
Dallas, Texas 75204-2489
Phone (214) 871-3311 Fax (214) 871-0757

RECORDING INFORMATION: CABINET________, PAGE________

P-200505-01

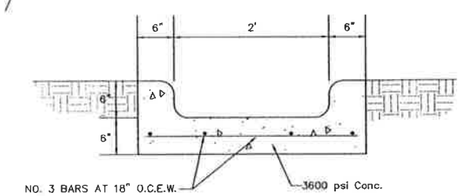




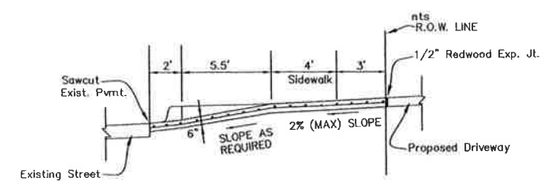
VICINITY MAP
(NOT TO SCALE)

LEGEND:

- 8"-3600 PSI REINFORCED CONCRETE PAVEMENT WITH LIME STABILIZATION PER GEO-TECHNICAL ENGINEER RECOMMENDATION.
- 6"-3600 PSI REINFORCED CONCRETE PAVEMENT WITH LIME STABILIZATION PER GEO-TECHNICAL ENGINEER RECOMMENDATION.
- 6"-HMAC TYPE 'C' ASPHALT PAVING



Concrete Flume Detail



DRIVEWAY APPROACH
SECTION A–A

CITY OF CELINA, TEXAS
APPROVED FOR CONSTRUCTION
DATE: 7-5-05
BY: P.A.C.

STATE OF TEXAS
DOUG L. VEST
80069
REGISTERED PROFESSIONAL ENGINEER
6/23/05

GENERAL NOTES – PAVING

1. See GENERAL NOTES on cover sheet of Engineering Plans.
2. All concrete pavement shall be Class C portland cement concrete and shall have the following 28 day compressive strength:
   6" Concrete pavement – 3600 psi
   8" Concrete pavement – 3600 psi
3. All dimensions are to face of curb unless otherwise noted.
4. Refer to Architectural plans for additional building dimensions.
5. Construct barrier free ramps at all sidewalk/curb intersections as shown on the plans.
6. Contractor shall provide, construct and maintain barricades and signs in accordance with the most current barricade and construction standards or the "Texas Manual of Uniform Traffic Control Devices." In addition, the contractor shall provide an maintain other such barricades and signs as are deemed necessary by the city of Celina.
7. Sawcut contraction joints shall be spaced at 15' on center and expansion joints shall be spaced at 60' on center. All joints shall be cleaned and filled with hot poured rubber joint sealant.

DATE	DESCRIPTION	REV. No.

REVISIONS AND ISSUE DATES

PAVING AND HORIZONTAL CONTROL PLAN

SHOPS AT CARTER RANCH

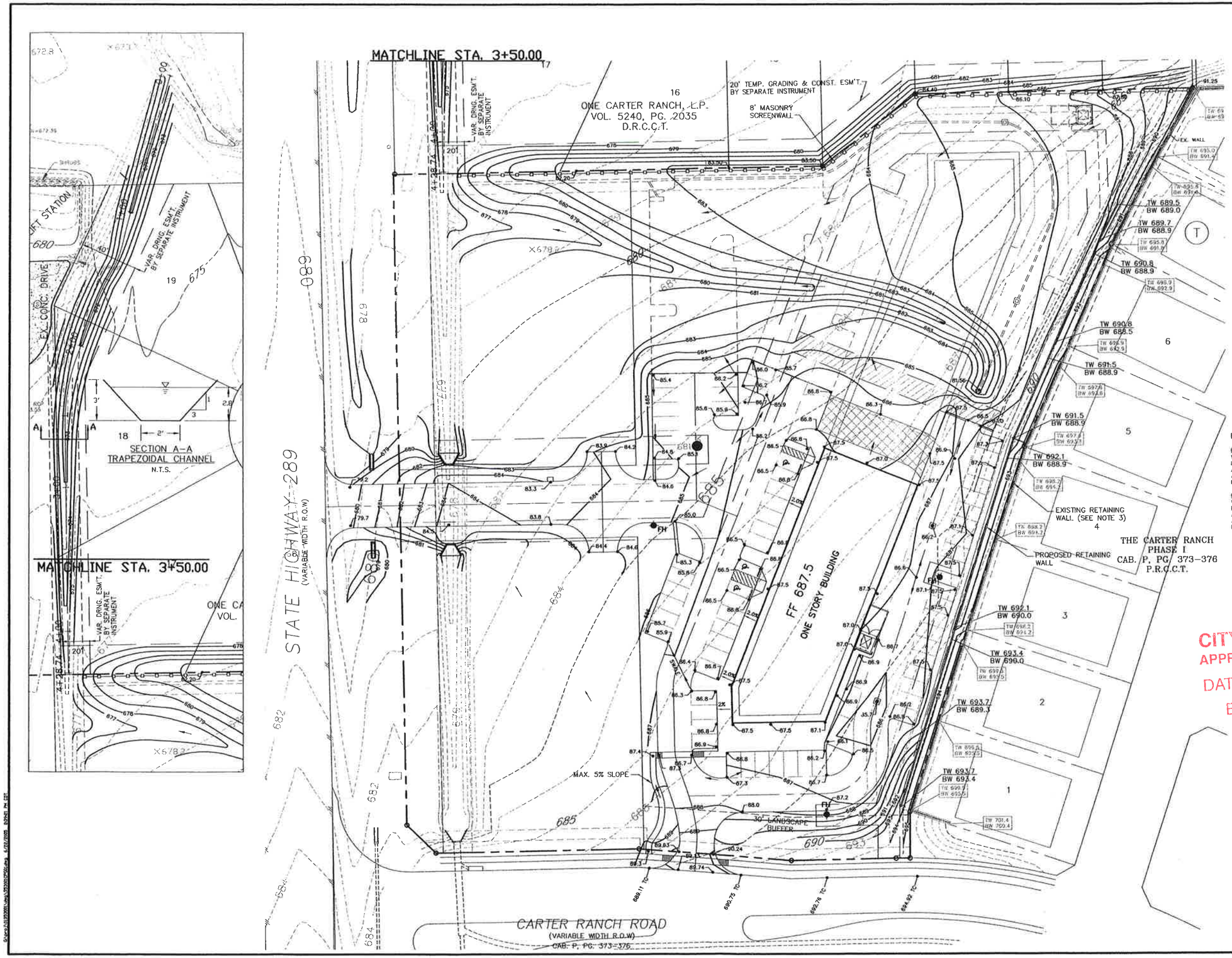
City of Celina, Texas

Mark R. Smith Co. Inc.
8100 Lomo Alto, Suite 230
Dallas, TEXAS 75225

HUITT-ZOLLARS
Huitt-Zollars, Inc. Denton
2220 San Jacinto Blvd., Suite 200
Denton, Texas 76205-7540
Phone (254) 871-0331 Fax (940) 483-1927

SCALE	SHEET
1"=40'H	C1
DATE	
6.22.05	

P-200505-01



LEGEND:

- 74.5 = PROPOSED GRADE
- FF=75.0 = FINISHED FLOOR ELEVATION
- = DIRECTION OF FLOW
- 674 = PROPOSED CONTOUR

NOTES:

1. ALL ELEVATIONS ARE TOP OF PAVEMENT UNLESS OTHERWISE NOTED.
2. REFER TO GEOTECHNICAL REPORT PREPARED FOR THE SITE FOR SUBSURFACE SOIL CONDITIONS AND RECOMMENDATIONS PERTAINING TO THE SITE.
3. GRADES SHOWN FOR EXISTING RETAINING WALL ARE PER "AS-BUILT" PLANS. CONTRACTOR SHALL NOTIFY ENGINEER IF ACTUAL ELEVATIONS VARY BY MORE THAN 0.5'.

BENCHMARKS:

CONTROL MONUMENT No. 3 – CONCRETE MONUMENT WITH 5/8 INCH IRON ROD WITH CAP STAMPED "HUITT-ZOLLARS" AT THE NORTHEAST CORNER OF THE INTERSECTION OF STATE HIGHWAY 289 AND COUNTY ROAD 83. LOCATED APPROXIMATELY 60 FEET NORTH OF THE CENTERLINE OF COUNTY ROAD 83 AND 115 FEET OF THE CENTERLINE OF STATE HIGHWAY 289.
ELEVATION 681.67 FEET

CONTROL MONUMENT No. 5 – CONCRETE MONUMENT WITH 5/8 INCH IRON ROD WITH CAP STAMPED "HUITT-ZOLLARS" AT THE SOUTHEAST CORNER OF THE INTERSECTION OF STATE HIGHWAY 289 AND COUNTY ROAD 88. LOCATED APPROXIMATELY 45 FEET SOUTH OF THE CENTERLINE OF COUNTY ROAD 88 AND 112 FEET EAST OF THE CENTERLINE OF STATE HIGHWAY 289.
ELEVATION 681.76 FEET

STATE OF TEXAS
DOE L. VEST
80069
REGISTERED PROFESSIONAL ENGINEER
6/23/05

CITY OF CELINA, TEXAS
APPROVED FOR CONSTRUCTION
DATE: 7-5-05
BY: P.A.C.

DATE	DESCRIPTION	REV. No.
06/08/05	REVISED SITE GRADES	1

REVISIONS AND ISSUE DATES

GRADING PLAN

SHOPS AT CARTER RANCH

City of Celina, Texas

Mark R. Smith Co. Inc.
8100 Lomo Alto, Suite 230
Dallas, TEXAS 75225

HUITT-ZOLLARS
Huitt-Zollars, Inc. Denton
2200 Ben Jackiko Blvd, Suite 300
Denton, Texas 76205-7540
Phone (940) 671-0081 Fax (940) 483-1927

SCALE 1"=30'H
DATE 06.22.05
SHEET C2

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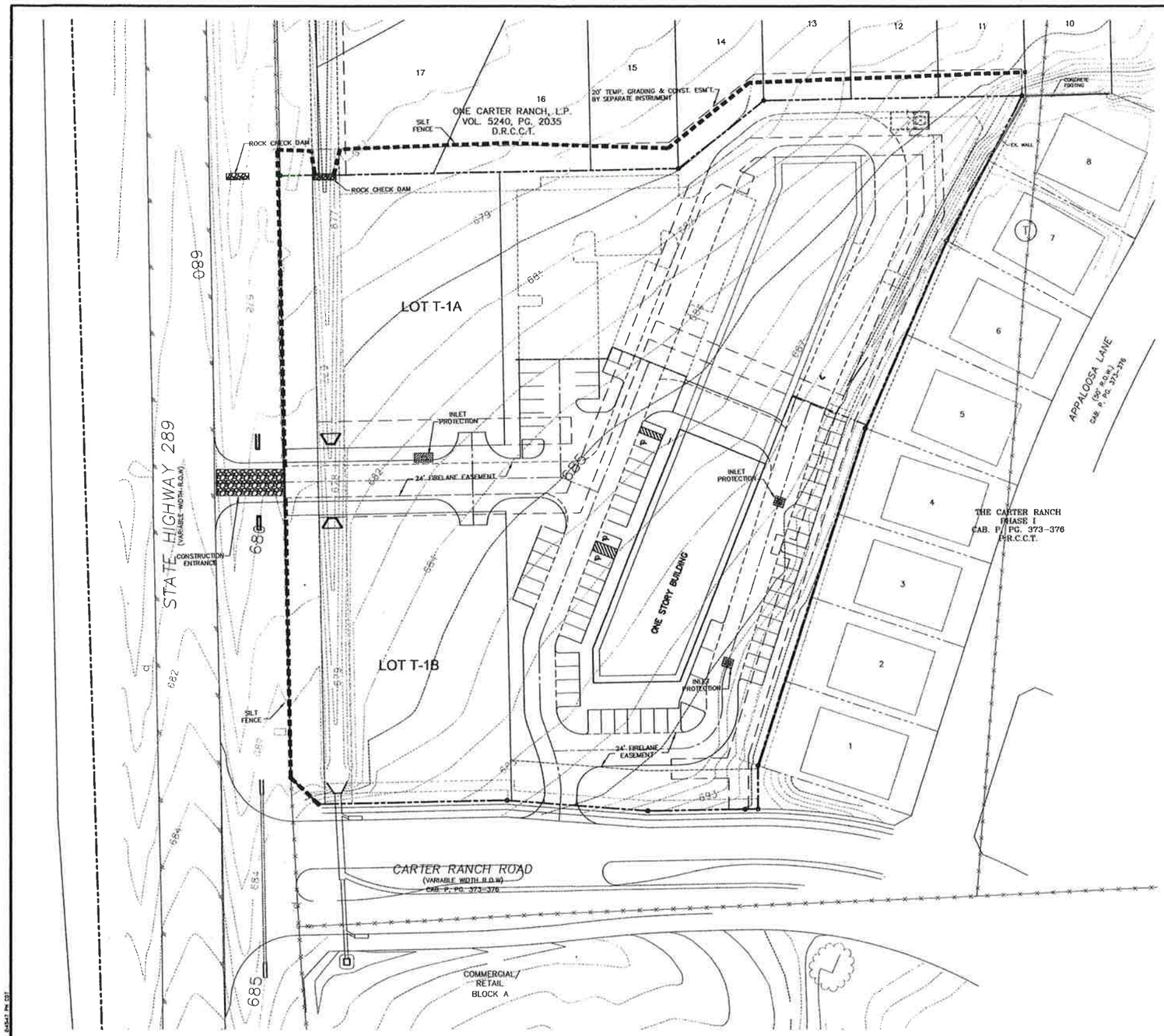

EROSION CONTROL NOTES:

1. THE N.C.T.C.O.G. EROSION CONTROL DETAILS SHALL BE UTILIZED. SEE EROSION CONTROL DETAIL SHEET.
2. INLET PROTECTION SHALL BE INSTALLED, MAINTAINED AND REMOVED BY THE UTILITY CONTRACTOR. SEE DETAILS "C" AND "E", DETAIL SHEET.
3. THE CONTRACTOR SHALL INCORPORATE THE REQUIREMENTS OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) INTO THIS EROSION CONTROL PLAN.
4. DRAINAGE CHANNEL SHALL HAVE ROCK CHECK DAMS EVERY 5' OF VERTICAL FALL OR 150 LF LENGTH OF CHANNEL, WHICHEVER IS LESS. INSTALLATION BY THE GRADING CONTRACTOR, UNLESS SHOWN OTHERWISE. REMOVAL AND DISPOSAL BY GRADING CONTRACTOR. SEE DETAIL "K" DETAIL SHEET.
5. THE GRADING CONTRACTOR SHALL INSTALL SILT FENCE AS SHOWN. SILT FENCE SHALL FOLLOW CONTOUR LINES AS MUCH AS POSSIBLE. SEE DETAIL "B", OF THE DETAIL SHEET. REMOVAL BY GRADING CONTRACTOR. WOODEN STAKES AND WIRE MESH BACKING SUPPORT ARE OPTIONAL IN ALL AREAS.

NOTE TO CONTRACTORS:

- IN ACCORDANCE WITH THE REQUIREMENTS OF THE NPDES GENERAL PERMIT FOR STORM WATER DISCHARGES FROM CONSTRUCTION SITES, ALL CONTRACTORS AND SUBCONTRACTORS SHALL AT ALL TIMES TAKE NECESSARY MEASURES TO PREVENT THE FLOW OF SEDIMENT AND OTHER MATERIALS FROM THE WORK SITE INTO THE THE STORM SEWER SYSTEM OR TO ANY RECEIVING WATER. SUCH MEASURES MAY INCLUDE, BUT ARE NOT LIMITED TO, THE PLACEMENT OF HAY BALE EROSION DIKES AND INLET PROTECTION, SILT FENCE, RIPRAP STABILIZATION, SEEDING, SODDING, ETC. UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS, PAYMENT FOR THIS WORK WILL BE INCLUSIVE UNDER THE LINE ITEM IN THE BID DOCUMENTS FOR EROSION CONTROL.
- THE GRADING CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR THE INSTALLATION AND MAINTENANCE OF THE EROSION CONTROL MEASURES AT THE SITE AS OF THE DATE OF HIS "NOTICE TO PROCEED". THE "NOTICE TO PROCEED" FOR THE UTILITY CONTRACTOR TRANSFERS THE RESPONSIBILITY FROM THE GRADING CONTRACTOR TO THE UTILITY CONTRACTOR.
- A NOTICE OF TERMINATION SHOULD BE FILED UPON OWNER'S/ENGINEERS ACCEPTANCE OF FINAL GRADING AND ACHIEVEMENT OF A FINALLY STABILIZED CONSTRUCTION SITE.

STATE OF TEXAS
DOIE L. VEST
80069
REGISTERED PROFESSIONAL ENGINEER
6/23/05

CITY OF CELINA, TEXAS
APPROVED FOR CONSTRUCTION
DATE: 7-5-05
BY: P.A.C.

DATE	DESCRIPTION	REV. No.
	REVISIONS AND ISSUE DATES	

EROSION CONTROL PLAN

SHOPS AT CARTER RANCH

City of Celina, Texas

Mark R. Smith Co. Inc.
8100 Lomo Alto, Suite 230
Dallas, TEXAS 75225

HUITT-ZOLLARS
Huitt-Zollars, Inc. Denton
2220 Ben Jackins Blvd, Suite 300
Denton, Texas 76205-7540
Phone (940) 671-8211 Fax (940) 483-1827

SCALE 1"=40'H
DATE 06.22.05
SHEET C3

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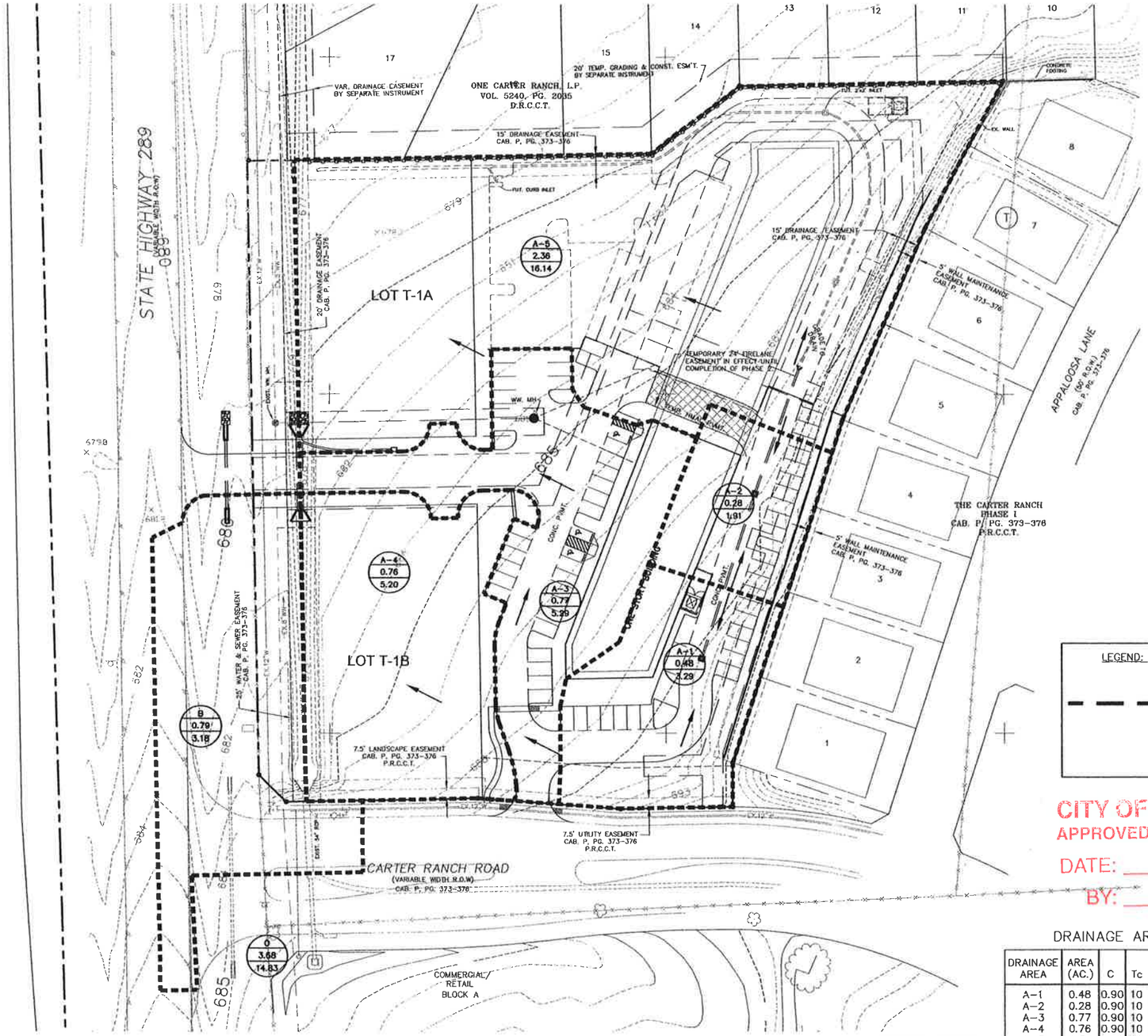


N

0 20 40 80
SCALE IN FEET

BENCHMARKS:

CONTROL MONUMENT No. 3 – CONCRETE MONUMENT WITH 5/8 INCH IRON ROD WITH CAP STAMPED "HUITT-ZOLLARS" AT THE NORTHEAST CORNER OF THE INTERSECTION OF STATE HIGHWAY 289 AND COUNTY ROAD 83. LOCATED APPROXIMATELY 60 FEET NORTH OF THE CENTERLINE OF COUNTY ROAD 83 AND 115 FEET OF THE CENTERLINE OF STATE HIGHWAY 289.
ELEVATION 681.67 FEET

CONTROL MONUMENT No. 5 – CONCRETE MONUMENT WITH 5/8 INCH IRON ROD WITH CAP STAMPED "HUITT-ZOLLARS" AT THE SOUTHEAST CORNER OF THE INTERSECTION OF STATE HIGHWAY 289 AND COUNTY ROAD 88. LOCATED APPROXIMATELY 45 FEET SOUTH OF THE CENTERLINE OF COUNTY ROAD 88 AND 112 FEET EAST OF THE CENTERLINE OF STATE HIGHWAY 289.
ELEVATION 681.76 FEET

STATE OF TEXAS
DOE L. VEST
80069
REGISTERED
PROFESSIONAL ENGINEER
6/23/05

LEGEND:

= FLOW DIRECTION
= DRAINAGE DIVIDE
A-1 = AREA DESIGNATION
0.25 = AREA (acres)
2.21 = RUNOFF (cfs)

CITY OF CELINA, TEXAS
APPROVED FOR CONSTRUCTION
DATE: 7-5-05
BY: P.A.C.

DRAINAGE AREA CALCULATIONS

DRAINAGE AREA	AREA (AC.)	C	Tc	I_{100}	Q_{100}	NOTES
A-1	0.48	0.90	10	7.6	3.29	
A-2	0.28	0.90	10	7.6	1.91	
A-3	0.77	0.90	10	7.6	5.29	
A-4	0.76	0.90	10	7.6	5.20	
A-5	2.36	0.90	10	7.6	16.14	
B	0.79	0.5	10	8.06	3.18	10 YEAR STORM PER TXDOT CRITERIA
O	3.68	0.5	10	8.06	14.83	

RATIONAL METHOD:

Q_{100} = CIA
C = 0.90
I_{100} = 7.6 in/hr
A = AREA

DATE	DESCRIPTION	REV. No.

REVISIONS AND ISSUE DATES

DRAINAGE AREA MAP

SHOPS AT CARTER RANCH

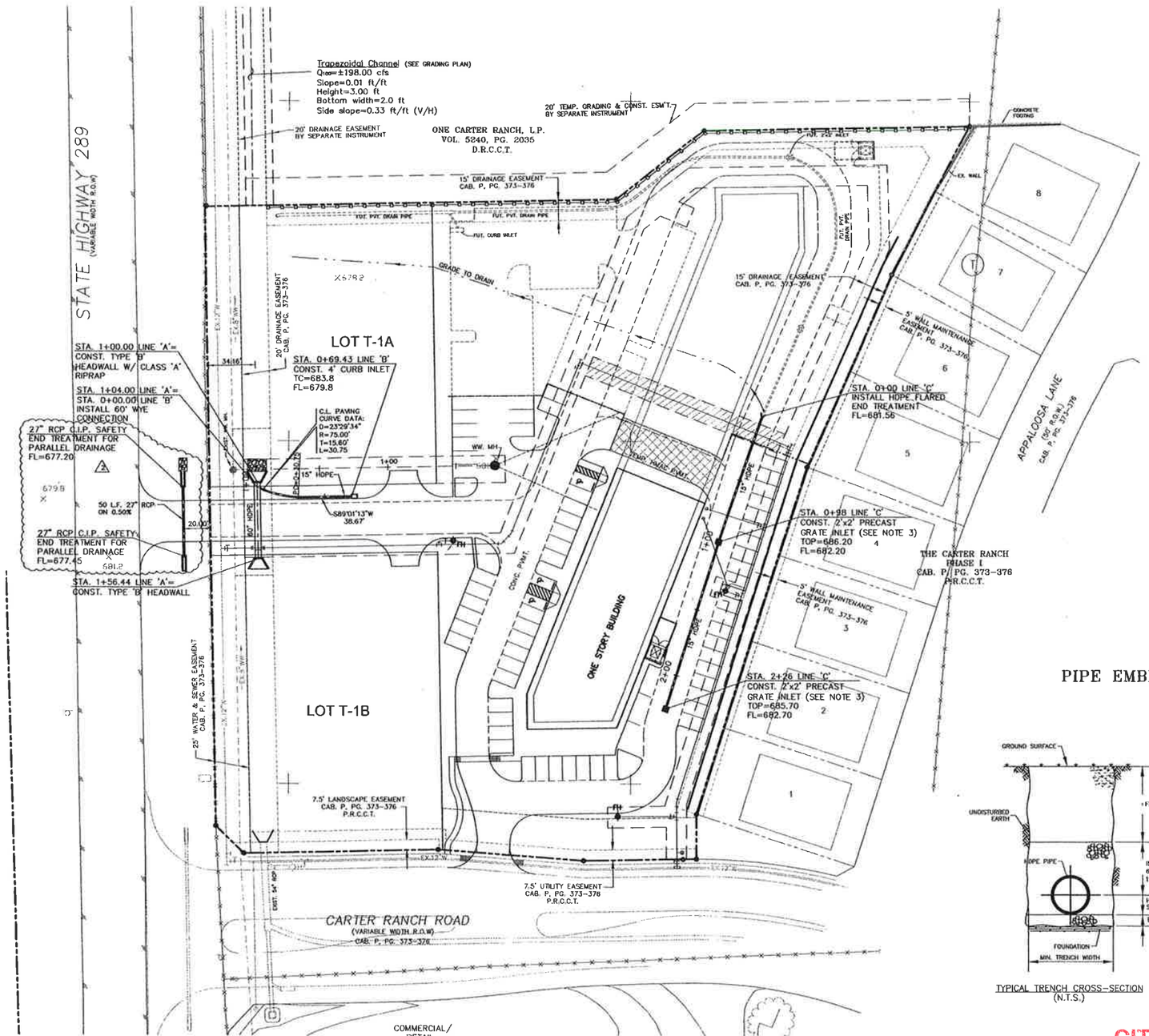
City of Celina, Texas

Mark R. Smith Co. Inc.
8100 Lomo Alto, Suite 230
Dallas, TEXAS 75225

HUITT-ZOLLARS
Huitt-Zollars, Inc. Denton
2220 Ben Jackto Blvd, Suite 300
Denton, Texas 76205-7540
Phone (940) 671-0051 Fax (940) 480-1027

SCALE 1"=40'H
DATE 06.22.05
SHEET C4

P-200505-01



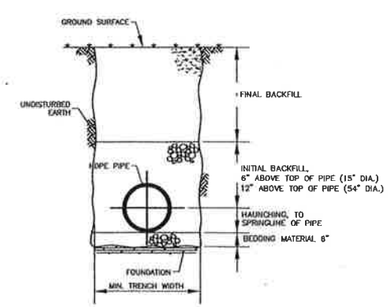
NOTES:
1. ALL HDPE PIPE SHALL BE HANCOR BLUE SEAL OR APPROVED EQUAL INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
2. JOINTS SHALL BE SEALED PER MANUFACTURER'S SPECIFICATIONS USING THE BLUE SEAL JOINT
3. 2' X 2' PRECAST GRATE INLET SHALL BE OLDCASTLE MODEL NO. CB220 OR APPROVED EQUAL.

BENCHMARKS:

CONTROL MONUMENT No. 3 – CONCRETE MONUMENT WITH 5/8 INCH IRON ROD WITH CAP STAMPED "HUITT-ZOLLARS" AT THE NORTHEAST CORNER OF THE INTERSECTION OF STATE HIGHWAY 289 AND COUNTY ROAD 83. LOCATED APPROXIMATELY 60 FEET NORTH OF THE CENTERLINE OF COUNTY ROAD 83 AND 115 FEET OF THE CENTERLINE OF STATE HIGHWAY 289.
ELEVATION 681.67 FEET

CONTROL MONUMENT No. 5 – CONCRETE MONUMENT WITH 5/8 INCH IRON ROD WITH CAP STAMPED "HUITT-ZOLLARS" AT THE SOUTHEAST CORNER OF THE INTERSECTION OF STATE HIGHWAY 289 AND COUNTY ROAD 88. LOCATED APPROXIMATELY 45 FEET SOUTH OF THE CENTERLINE OF COUNTY ROAD 88 AND 112 FEET EAST OF THE CENTERLINE OF STATE HIGHWAY 289.
ELEVATION 681.76 FEET

PIPE EMBEDMENT DETAIL



TYPICAL TRENCH CROSS-SECTION
(N.T.S.)

NOTES:
1. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH A FOUNDATION OF CLASS I OR II MATERIAL AS DEFINED IN ASTM D2321, "STANDARD PRACTICE FOR INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS," LATEST EDITION; AS AN ALTERNATIVE AND AT THE DISCRETION OF THE ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A WOVEN GEOTEXTILE FABRIC.
2. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III AND INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

   UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 6".
3. HAUNCHING AND INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III AND INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
4. UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, MINIMUM TRENCH WIDTHS SHALL BE AS FOLLOWS:

NOMINAL Ø in	MIN. RECOMMENDED TRENCH WIDTH, in
15	35
54	97

STATE OF TEXAS
DOUGLAS L. VEST
80069
REGISTERED PROFESSIONAL ENGINEER
6/23/05

CITY OF CELINA, TEXAS
APPROVED FOR CONSTRUCTION
DATE: 7-5-05
BY: P.A.C.

DATE	DESCRIPTION	REV. No.
06/16/05	REVISED CULVERT SIZE	2
06/08/05	REVISED INLET GRADES	1

REVISIONS AND ISSUE DATES

STORM DRAIN PLAN

SHOPS AT CARTER RANCH

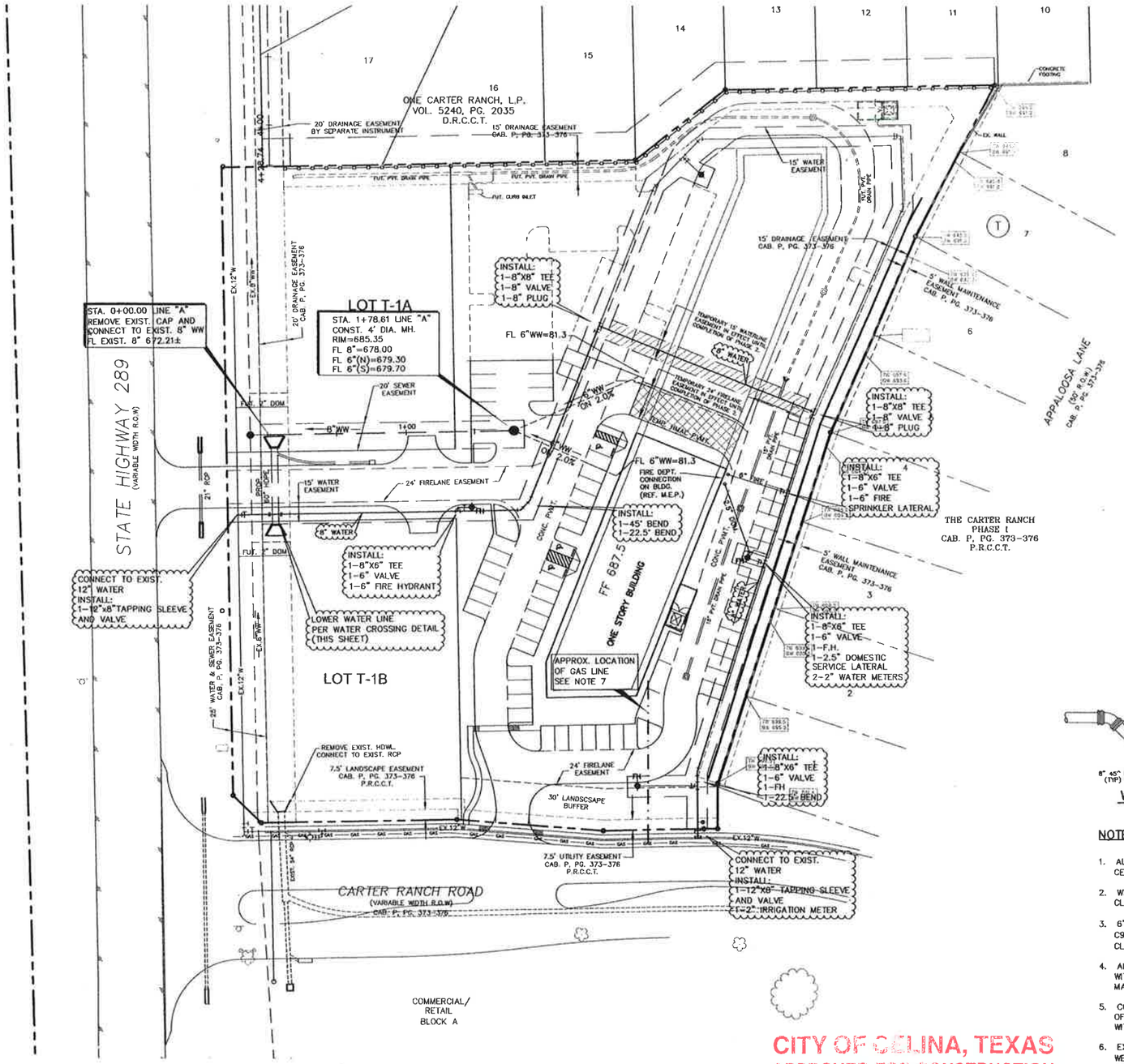
City of Celina, Texas

Mark R. Smith Co. Inc.
8100 Lomo Alto, Suite 230
Dallas, TEXAS 75225

HUITT-ZOLLARS
Huitt-Zollars, Inc. Denton
2220 San Jacinto Blvd, Suite 300
Denton, Texas 76205-7540
Phone (940) 671-0051 Fax (940) 483-1927

SCALE 1"=40'H
DATE 06.22.05
SHEET C5

P-200505-01



BENCHMARKS:

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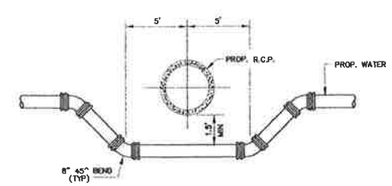


WATER CROSSING DETAIL

NTS

NOTES:

1. ALL WORK SHALL CONFORM TO THE CITY OF CELINA GENERAL DESIGN STANDARDS.
2. WASTE WATER PIPE SHALL BE PVC PIPE SDR 35, CLASS B-1 EMBEDMENT.
3. 6" AND 8" WATER LINES SHALL BE PVC PIPE C900, CLASS 150 (DR 18) WITH D.I. FITTINGS, CLASS "B-4" EMBEDMENT AND 4' MIN. COVER.
4. ALL MECHANICAL JOINTS SHALL BE RESTRAINED WITH MEGA-LUG OR APPROVED EQUAL FITTING. JOINT MATERIAL FOR PVC SHALL CONFORM TO ASTM F471.
5. CONTRACTOR TO CONFIRM EXACT LOCATIONS OF PIPE RISERS FOR FIRE SPRINKLER SYSTEM WITH OWNER PRIOR TO CONSTRUCTION.
6. EXISTING AND PROPOSED OFFSITE UTILITY LOCATIONS WERE OBTAINED FROM "AS-BUILT" INFORMATION. CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF ALL UTILITIES PRIOR TO START OF CONSTRUCTION.
7. REFER TO M.E.P. PLANS FOR EXACT LOCATIONS OF PLUMBING CONNECTIONS AT BUILDING.
8. CONTRACTOR SHALL COORDINATE WITH MARK MAHAN AT ATMOS ENERGY FOR INSTALLATION OF GAS SERVICE LINE FROM EXIST. MAIN TO MANIFOLD AT BUILDING. TEL: 972-881-4163

CITY OF CELINA, TEXAS
APPROVED FOR CONSTRUCTION
DATE: 7-5-05
BY: P.A.C.

DATE	DESCRIPTION	REV. No.
06/08/05	REVISED RIM ELEV. OF SS MH	1

REVISIONS AND ISSUE DATES

WATER AND WASTEWATER PLAN

SHOPS AT CARTER RANCH

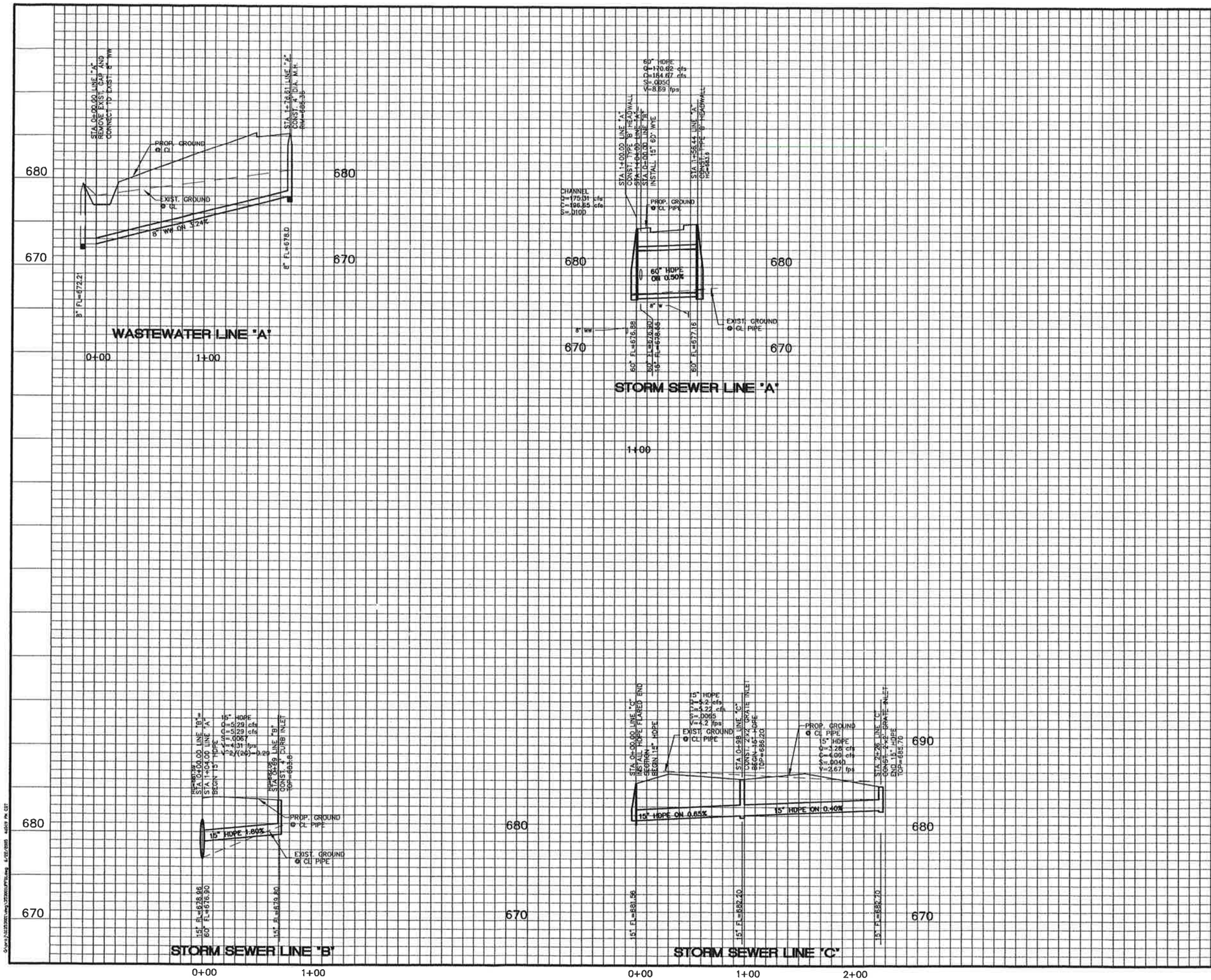
City of Celina, Texas

Mark R. Smith Co. Inc.
8100 Lomo Alto, Suite 230
Dallas, TEXAS 75225

HUITT-ZOLLARS
Huitt-Zollars, Inc. Denton
2220 Ben Jackie Blvd, Suite 200
Denton, Texas 76205-7540
Phone (940) 871-2311 Fax (940) 485-1927

SCALE 1"=40'H
DATE 06.22.05
SHEET C6

P-200505-01



BENCHMARKS:

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ELEVATION 581.76 FEET

STATE OF TEXAS
OCIE L. VEST
80069
REGISTERED
PROFESSIONAL ENGINEER

CITY OF CELINA, TEXAS
APPROVED FOR CONSTRUCTION
DATE: 7-5-05
BY: P.A.C.

DATE	DESCRIPTION	REV. No.
06/08/05	REVISED PROFILE GRADES	1

REVISIONS AND ISSUE DATES

UTILITY PROFILES

SHOPS AT CARTER RANCH

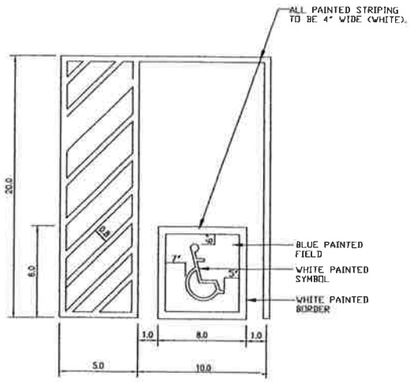
City of Celina, Texas

Mark R. Smith Co. Inc.
8100 Lomo Alto, Suite 230
Dallas, TEXAS 75225

HUITT-ZOLLARS
Huitt-Zollars, Inc. Denton
2220 San Jacinto Blvd., Suite 300
Denton, Texas 76205-7540
Phone (940) 671-5311 Fax (940) 483-1927

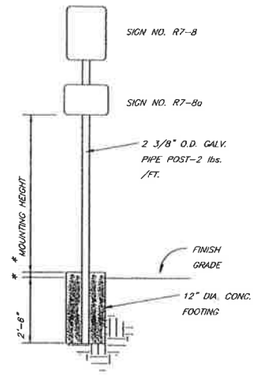
SCALE 1"=40'H 1"=5'V
DATE 06.22.05
SHEET C7

P-200505-01



HANDICAPPED PARKING SPACE

N.T.S.



NOTE:

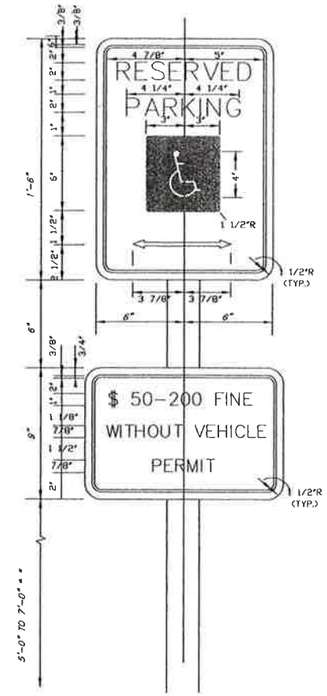
ALL SIGN HARDWARE TO BE GALVANIZED

COLORS

SIGN No. R7-8:
LEGEND & BORDER – GREEN
BACKGROUND – WHITE
WHITE SYMBOL ON BLUE BACKGROUND
SIGN No. R7-8a:
LEGEND & BORDER – GREEN
BACKGROUND – WHITE

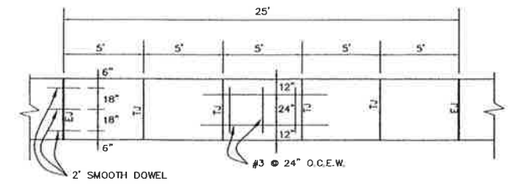
* USE SINGLE AND/OR DOUBLE HEADED ARROWS, MAY BE USED ON SIGNS TO MARK MULTIPLE RESERVED PARKING SPACES, ARROW SHOULD BE OMITTED WHEN SIGN IS TO BE USED TO MARK A SINGLE SPACE. FURNISH AND INSTALL SIGN(S) PER DETAIL. LOCATE AS DIRECTED.

**SIGN MOUNTING HEIGHT:
5'-0" TO BOTTOM OF SIGN – LOCATED IN GRASS OR PLANT BEDS.
7'-0" WHERE LOCATED IN PAVED AREAS.



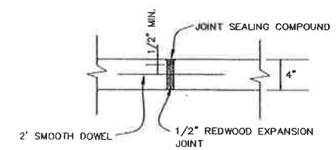
SIGN MOUNTING HEIGHT

N.T.S.



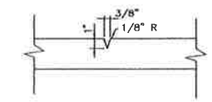
PLAN

N.T.S.



SIDEWALK EXPANSION JOINT

N.T.S.



SIDEWALK TOOL JOINT

N.T.S.

SIDEWALK DETAILS

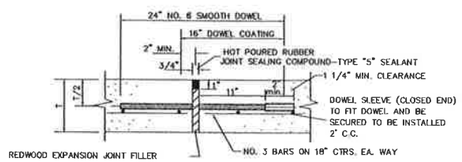
N.T.S.

SIDEWALK NOTES

1. REQUIRED MINIMUM COMPRESSIVE STRENGTH OF CONCRETE = 3000 PSI @ 28 DAYS.
2. A MIN. 4" SAND CUSHION SHALL BE PLACED ON A SUBGRADE COMPACTED TO 95% STD. PROCTOR DENSITY AND SAND SHALL BE COMPACTED TO 98% STD. PROCTOR DENSITY.
3. FORMS SHALL BE SET TRUE TO LINE AND GRADE AND SHALL BE A MIN. OF 5 1/2" DEEP.
4. FORMS SHALL BE SET UP SO THAT NO CONCRETE MAY FLOW UNDER THEM.
5. ASPHALT COAT OR DOWEL SLEEVE THROUGH SECOND POUR.

CITY OF CELINA, TEXAS
APPROVED FOR CONSTRUCTION
DATE: 7-5-05
BY: P.A.C.

STATE OF TEXAS
ODIE L. VEST
80069
REGISTERED PROFESSIONAL ENGINEER
6/23/05

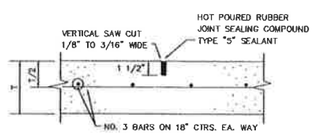


Note:
Dowels and Reinforcing Bars shall be supported by an approved device

EXPANSION JOINT

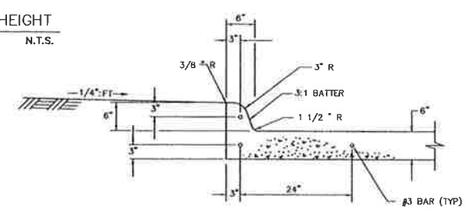
NTS

SPACED AS SHOWN
(60' CTR TO CTR TYPICAL)



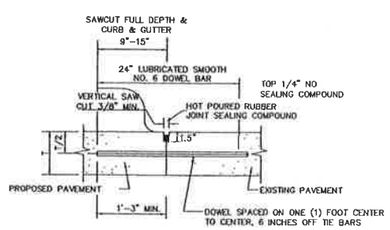
SAWED DUMMY (CONTROL) JOINT

SPACED ON 12' TO 16' CENTERS (TYP) NTS



STANDARD INTEGRAL CURB

N.T.S.

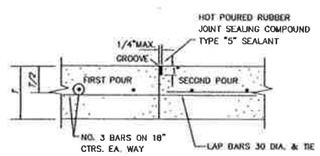


Note:
Dowels and Reinforcing bars shall be supported by an approved device

LONGITUDINAL BUTT JOINT

NTS

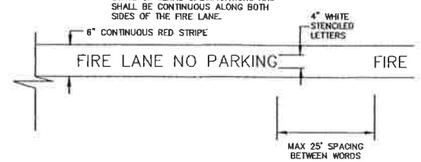
Notes:
1. No. 5 smooth dowel bar may be used in 5 inch and 8 inch pavement thickness.
2. Longitudinal butt construction may be utilized in place of Longitudinal Hinged (Keyway) Joint at Contractors option.
3. Dowel Bars shall be drilled into pavement Horizontally by use of a mechanical rig.
4. Drilled by hand is not acceptable, Pushing Dowel Bars into Green Concrete not acceptable.



CONSTRUCTION JOINT

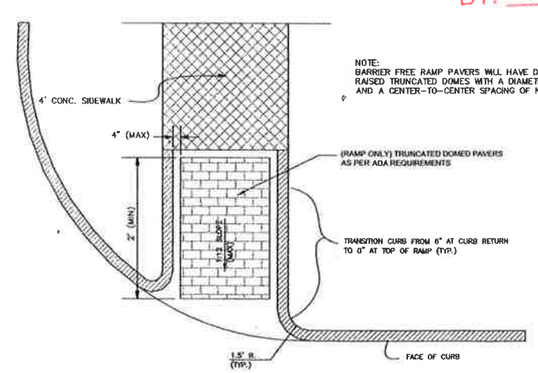
NTS

NOTE: RED STRIPE SHALL COMPLY TO STATE OF TEXAS SPECIFICATIONS AND SHALL BE CONTINUOUS ALONG BOTH SIDES OF THE FIRE LANE.



TYPICAL FIRE LANE STRIPING

N.T.S.



NOTE:
BARRIER FREE RAMP PAVERS WILL HAVE DETECTABLE WARNINGTHAT CONSISTS OF RAISED TRUNCATED DOMES WITH A DIAMETER OF 0.9 IN., A HEIGHT OF 0.2 IN. AND A CENTER-TO-CENTER SPACING OF NORMAL 2.35 IN. AND SHALL BE GRAY IN COLOR.

BARRIER FREE RAMP
(AT STREET CROSSING)

N.T.S.

DATE	DESCRIPTION	REV. No.

REVISIONS AND ISSUE DATES

PAVING DETAILS

SHOPS AT CARTER RANCH

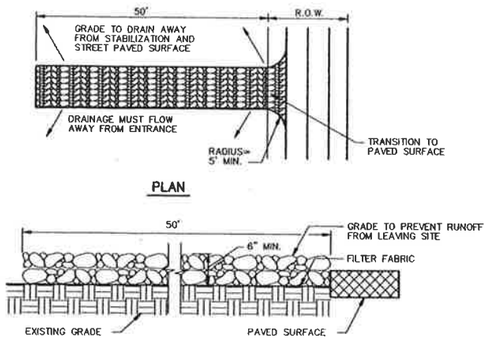
City of Celina, Texas

Mark R. Smith Co. Inc.
8100 Loma Alto, Suite 230
Dallas, TEXAS 75225

HUITT-ZOLLARS
Huitt-Zollars, Inc. Denton
2220 Ben Jeddo Blvd, Suite 200
Denton, Texas 76205-7540
Phone (214) 871-0311 Fax (940) 483-1127

SCALE N.T.S.
DATE 06.22.05
SHEET C8

P-200505-01



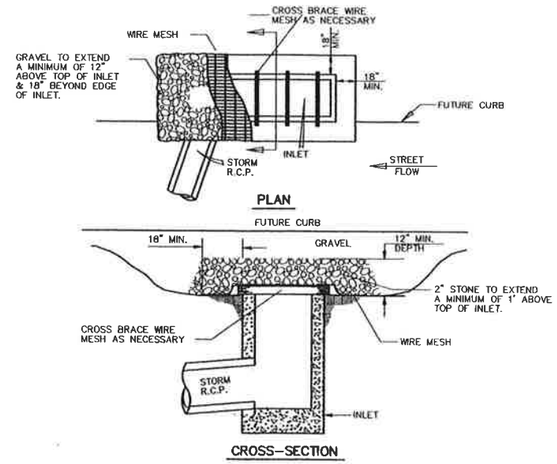
STABILIZED CONSTRUCTION ENTRANCE / EXIT

NCTCOG 02270.G
STORM WATER QUALITY
BEST MANAGEMENT PRACTICES
FOR CONSTRUCTION ACTIVITIES

DETAIL 'A'

N.T.S.

The Stabilized Construction Entrance / Exit Is To Be Used As A Vehicle Wash Down Area For Debris And Soil Removal Before Exiting The Site Onto The Existing Roadway. Location For Installation Should Be Identified On The Project's Erosion Control Plan. An Alternate Location Must Be Approved By Owner Or Engineer Prior To Installation. Stabilized Construction Entrance / Exit Shall Be Top Dressed With Additional Stone As Necessary.



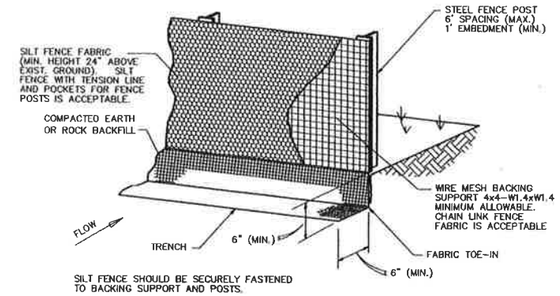
INLET PROTECTION WIRE MESH & GRAVEL

NCTCOG 02270.G
STORM WATER QUALITY
BEST MANAGEMENT PRACTICES
FOR CONSTRUCTION ACTIVITIES

DETAIL 'C'

N.T.S.

CONTRACTOR SHALL INTERCEPT FLOW AND INSTALL INLET PROTECTION MEASURES AS SOON AS PRACTICABLE.



SILT FENCE

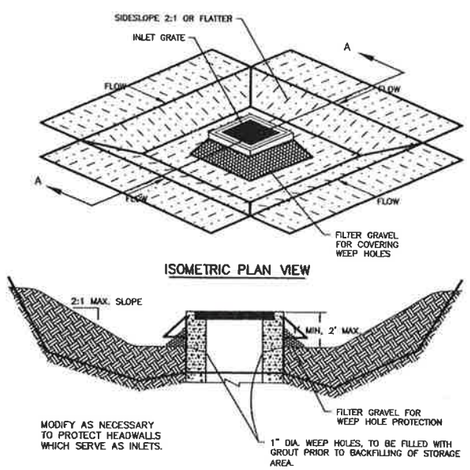
NCTCOG 02270.B
STORM WATER QUALITY
BEST MANAGEMENT PRACTICES
FOR CONSTRUCTION ACTIVITIES

DETAIL 'B'

N.T.S.

SILT FENCE GENERAL NOTES:

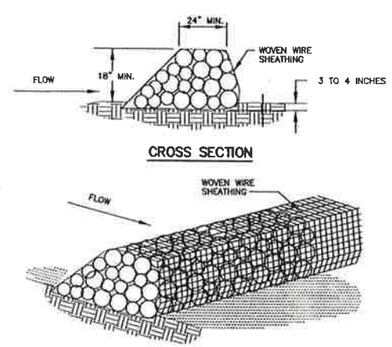
1. STEEL POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF ONE FOOT.
2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (e.g. PAVEMENT), WEIGHT FABRIC FLAP WITH ROCK ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.
3. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
4. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST. THERE SHALL BE A 3 FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
5. INSPECTION SHALL BE MADE WEEKLY AND AFTER EACH RAINFALL. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF HALF THE HEIGHT OF THE FENCE. THE SILT SHALL BE DISPOSED OF AT AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO TO ADDITIONAL SILTATION.



EXCAVATED IMPOUNDMENT INLET PROTECTION

DETAIL 'G'

N.T.S.

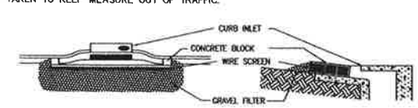


ROCK BERM

DETAIL 'K'

N.T.S.

METHODOLOGY APPLIES TO RECESSED AND STANDARD CURB INLETS. CARE SHOULD BE TAKEN TO KEEP MEASURE OUT OF TRAFFIC.



CURB INLET PROTECTION

DETAIL "E"

N.T.S.

CITY OF CELINA, TEXAS
APPROVED FOR CONSTRUCTION
DATE: 7-5-05
BY: P.A.C.

STATE OF TEXAS
OGE L. VEST
80069
REGISTERED PROFESSIONAL ENGINEER
6/23/05

DATE	DESCRIPTION	REV. No.
	REVISIONS AND ISSUE DATES	

EROSION CONTROL DETAILS

SHOPS AT CARTER RANCH

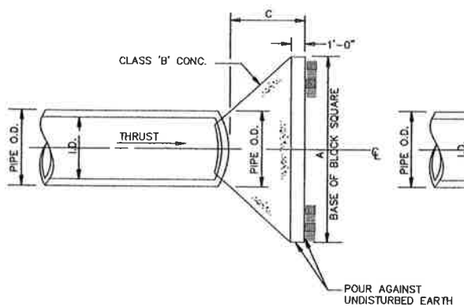
City of Celina, Texas

Mark R. Smith Co. Inc.
8100 Lomo Alto, Suite 230
Dallas, TEXAS 75225

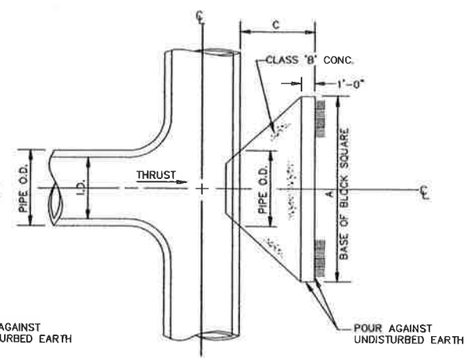
HUITT-ZOLLARS
Huitt-Zollars, Inc. Denton
2220 San Jacinto Blvd, Suite 320
Denton, Texas 76205-7640
Phone (940) 671-2181 Fax (940) 483-1827

SCALE N.T.S.
DATE 06.22.05
SHEET C9

P-200505-01



PLAN OF PLUG THRUST BLOCK

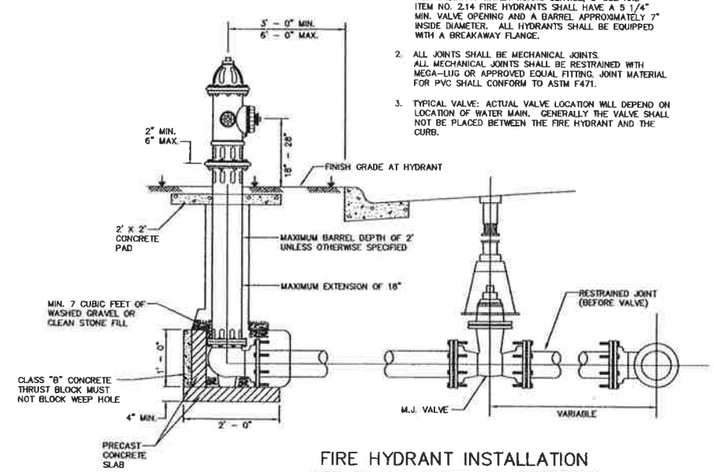


PLAN OF TEE THRUST BLOCK

			EARTH		ROCK	
I.D. (IN.)	THRUST TONS	C. FT.	A. FT.	VOL. C.Y.	A. FT.	VOL. C.Y.
4, 6, 8	5.1	1.5	2.5	0.3	2.0	0.2
10, 12	11.3	1.5	3.5	0.6	2.5	0.3
16, 18	25.5	2.0	5.5	1.6	4.0	0.9

NOTES:

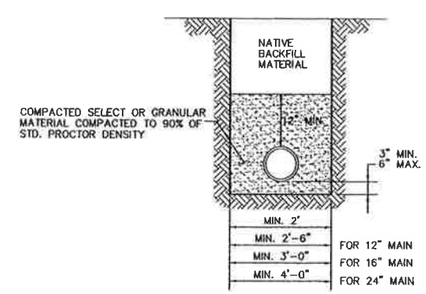
1. IN GENERAL, ALL FIRE HYDRANTS SHALL CONFORM TO AWWA STANDARD SPECIFICATIONS FOR FIRE HYDRANTS FOR ORDINARY WATER WORKS SERVICE, C-502 AND ITEM NO. 214 FIRE HYDRANTS SHALL HAVE A 5 1/4" MIN. VALVE OPENING AND A BARREL APPROXIMATELY 7" INSIDE DIAMETER. ALL HYDRANTS SHALL BE EQUIPPED WITH A BREAKAWAY FLANGE.
2. ALL JOINTS SHALL BE MECHANICAL JOINTS. ALL MECHANICAL JOINTS SHALL BE RESTRAINED WITH MEGA-LUG OR APPROVED EQUAL FITTING. JOINT MATERIAL FOR PVC SHALL CONFORM TO ASTM F471.
3. TYPICAL VALVE: ACTUAL VALVE LOCATION WILL DEPEND ON LOCATION OF WATER MAIN. GENERALLY THE VALVE SHALL NOT BE PLACED BETWEEN THE FIRE HYDRANT AND THE CURB.



FIRE HYDRANT INSTALLATION

GENERAL NOTES:

1. 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 NET VOLUMES OF CONCRETE TO BE FURNISHED, AND THE CORRESPONDING WEIGHT OF THE CONCRETE (AT 4,000 #/CT) EQUALS THE VERTICAL COMPONENT OF THRUST ON THE VERTICAL BEND. ALL BEARING SURFACES OF THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED EARTH.
2. CONCRETE FOR BLOCKING SHALL BE MINIMUM 2000 PSI CONCRETE.
3. DIMENSIONS MAY BE VARIED AS REQUIRED BY FIELD CONDITIONS AND AS DIRECTED BY THE ENGINEER BUT SHALL NOT BE LESS THAN THE DIMENSIONS SHOWN.
4. POLYPIG SHALL BE PULLED THROUGH WATER LINES AND A PRESSURE TEST PERFORMED PER NCTCOG REGULATIONS BEFORE LINES ARE ACCEPTED BY CITY.
5. USE POLYETHYLENE WRAP BETWEEN CONCRETE BLOCKING AND PIPE FITTINGS.
6. TRACER WIRE OR TAPE TO BE INSTALLED PER CITY OF CELINA SUBDIVISION REGULATIONS.
7. ALL WATER LINES SHALL HAVE A MINIMUM OF 42" COVER PER CITY OF CELINA SUBDIVISION REGULATIONS.



CLASS "B-4"
WATER EMBEDMENT
NTS

CITY OF CELINA, TEXAS
APPROVED FOR CONSTRUCTION
DATE: 7-5-05
BY: P.A.C.

DATE	DESCRIPTION	REV. No.
	REVISIONS AND ISSUE DATES	

UTILITY DETAILS

SHOPS AT CARTER RANCH

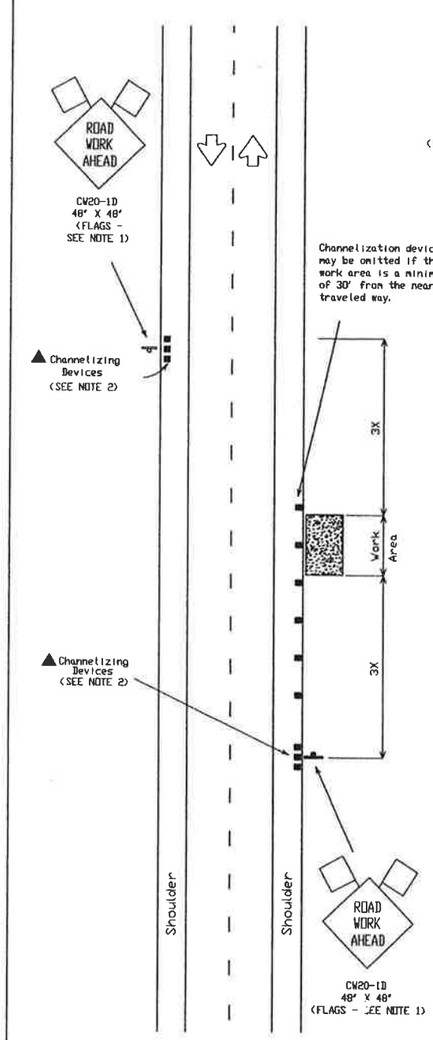
City of Celina, Texas

Mark R. Smith Co. Inc.
8100 Lomo Alto, Suite 230
Dallas, TEXAS 75225

HUITT-ZOLLARS
Huitt-Zollars, Inc. Denton
2220 San Jacinto Blvd., Suite 330
Denton, Texas 76205-7542
Phone (254) 871-3311 Fax (940) 483-1127

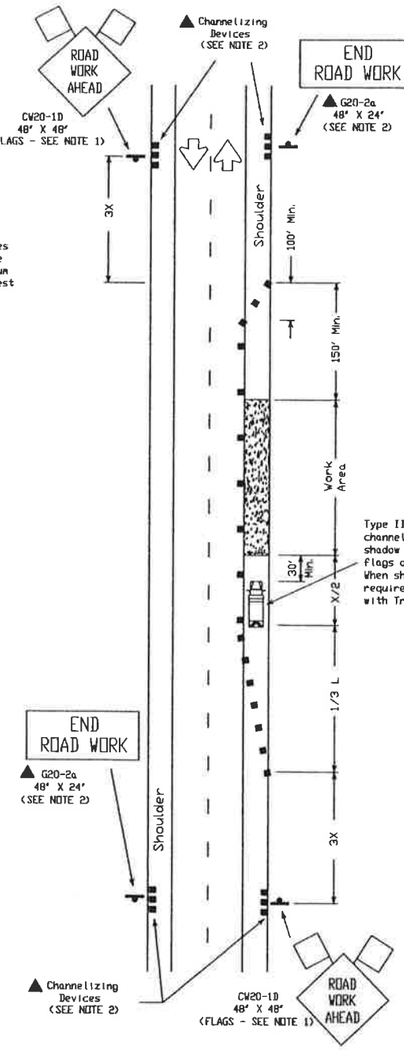
SCALE N.T.S.
DATE 06.22.05
SHEET C10

P-200505-01



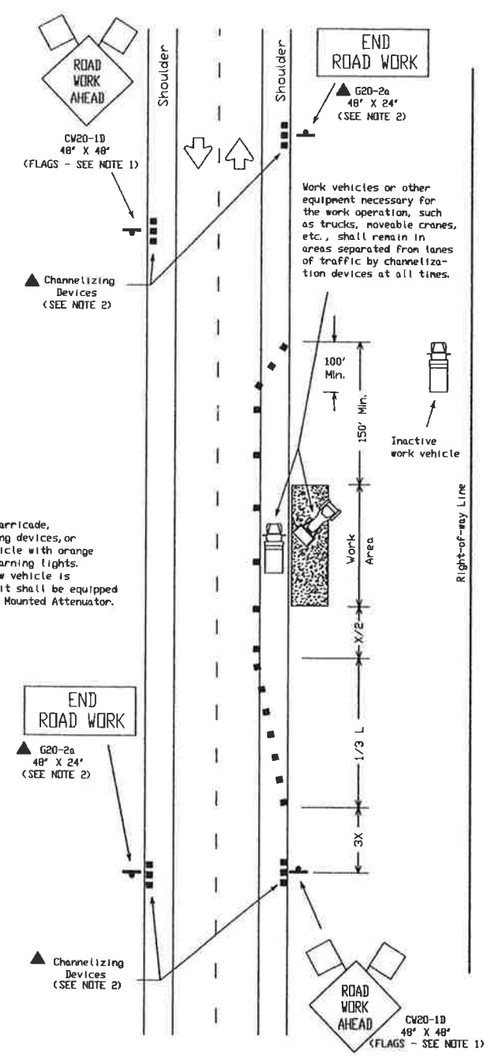
TCP (1-1a)

Work Area Near Shoulder



TCP (1-1b)

Work Area on Shoulder



TCP (1-1c)

Work Vehicles on Shoulder

LEGEND

- Type III Barricade
- Channelizing Devices
- Flag
- Heavy Work Vehicle
- Truck Mounted Attenuator
- Trailer Mounted Flashing Arrow Panel
- Portable Changeable Message Sign
- Flagger
- Sign Post

Posted Speed✱	Formula	Minimum Desirable Taper Lengths✱✱ 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Device On a Taper	On a Tangent	Minimum Sign Spacing X Distance
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60' -75'	120'
35		205'	225'	245'	35'	70' -90'	160'
40		265'	295'	320'	40'	80' -100'	240'
45	L=WS	450'	495'	540'	45'	90' -110'	320'
50		500'	550'	600'	50'	100' -125'	400'
55		550'	605'	660'	55'	110' -140'	500'
60		600'	660'	720'	60'	120' -150'	✱ 600'
65		650'	715'	780'	65'	130' -165'	✱ 700'
70		700'	770'	840'	70'	140' -175'	✱ 800'

✱ Conventional Roads Only

✱✱ Taper lengths have been rounded off.
L=Length of Taper (FT.) W=Width of Offset (FT.) S=Posted Speed (MPH)

TYPICAL USAGE:				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓		

GENERAL NOTES:

1. Unless otherwise stated in the plans, flags attached to signs are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans.
3. On high speed facilities advance warning signs should be installed approximately 3X from the work area or from the beginning of a lane or shoulder taper. On low speed facilities the advance warning signs should be placed based on the 'X' minimum distance.
4. Inactive work vehicles or other equipment should be parked near the right-of-way line and not parked on the paved shoulder.

Only pre-qualified products shall be used. A list of compliant products and their sources may be obtained by writing or faxing:

Standards Engineer
Traffic Operations Division - TE
Texas Department of Transportation
125 East 11th Street
Austin, Texas 78701-2483
Phone (512) 416-3335
Fax (512) 416-3161
E-mail TRF-STANDARD@mail.gw.dot.state.tx.us

The requirement for shadow vehicles will be listed in the project GENERAL NOTES, Item 502, Barricades, Signs and Traffic Handling.

STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

TRAFFIC CONTROL PLAN

TCP(1-1)-98

© TxDOT December 1985	DN-LR	CK-MT	DW-DN	CK-MT	FED. RD. DIV.
REVISIONS 2-94 8-95 1-97 4-98	STATE DISTRICT	FEDERAL AID PROJECT			SHEET C11
	6				
	COUNTY		CONTROL	SECTION	JOB HIGHWAY

151

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LEVELS DISPLAYED	DATE:	DN:
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16		CK:
17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32	ACC:	DW:
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48		CK:
49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64	FILE:	

CITY OF CELINA, TEXAS
APPROVED FOR CONSTRUCTION
DATE: 1-5-05
BY: P.A.C.

P-200505-01

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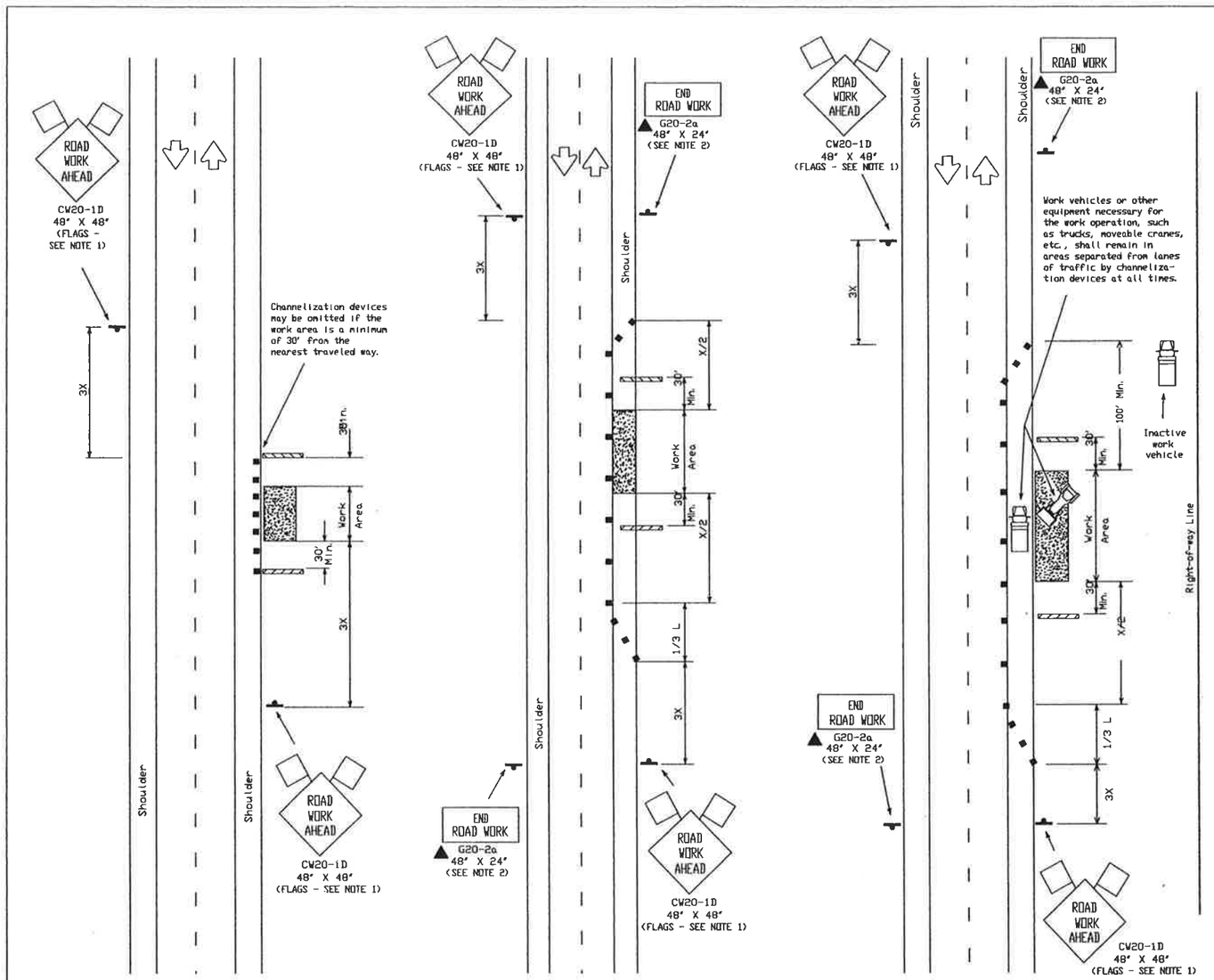


TCP (2-1a)

Work Area Near Shoulder

TCP (2-1b)

Work Area on Shoulder

TCP (2-1c)

Work Vehicles on Shoulder

LEGEND

- Type III Barricade
- Channelizing Devices
- Flag
- Heavy Work Vehicle
- Truck Mounted Attenuator
- Trailer Mounted Flashing Arrow Panel
- Portable Changeable Message Sign
- Flagger
- Sign Post

Posted Speed✱	Formula	Minimum Desirable Taper Lengths✱✱ 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Device On a Taper	On a Tangent	Minimum Sign Spacing X Distance
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60' -75'	120'
35		205'	225'	245'	35'	70' -90'	160'
40		265'	295'	320'	40'	80' -100'	240'
45	L=WS	450'	495'	540'	45'	90' -110'	320'
50		500'	550'	600'	50'	100' -125'	400'
55		550'	605'	660'	55'	110' -140'	500'
60		600'	660'	720'	60'	120' -150'	✱600'
65		650'	715'	780'	65'	130' -165'	✱700'
70		700'	770'	840'	70'	140' -175'	✱800'

✱ Conventional Roads Only

✱✱ Taper lengths have been rounded off.
L=Length of Taper (FT.) W=Width of Offset (FT.) S=Posted Speed (MPH)

TYPICAL USAGE:				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓	✓	✓

GENERAL NOTES:

1. Unless otherwise stated in the plans, flags attached to signs are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans.
3. Type III barricades are required on both sides of work area at all times. (See BC Standards for barricade details.)
4. Stockpiled material should be placed a minimum 30' from nearest traveled way.
5. On high speed facilities advance warning signs should be installed approximately 3X from the work area or from the beginning of a lane or shoulder taper. On low speed facilities the advance warning sign should be placed on the "X" minimum distance.

Only pre-qualified products shall be used. A list of compliant products and their sources may be obtained by writing or faxing:

Standards Engineer
Traffic Operations Division - TE
Texas Department of Transportation
125 East 11th Street
Austin, Texas 78701-2483
Phone (512) 416-3335
Fax (512) 416-3161
E-mail TRF-STANDARD@mailgw.dot.state.tx.us

STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

TRAFFIC CONTROL PLAN

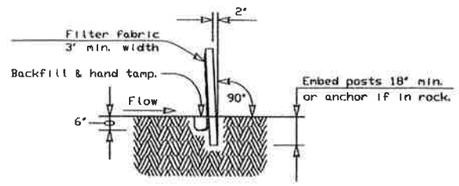
TCP(2-1)-98

© TxDOT December 1985	DN-LR	CK-MT	DW-DN	CK-MT	FILE NO.
REVISIONS 2-94 8-95 1-97 4-98	STATE DISTRICT	FEDERAL REGION 6	FEDERAL AID PROJECT		SHEET C12
	COUNTY		CONTROL	SECTION	JOB	HIGHWAY

161

CITY OF SELINA, TEXAS
APPROVED FOR CONSTRUCTION
DATE: 7-5-05
BY: P.A.C.

P-200505-01



SECTION A-A

SEDIMENT CONTROL FENCE USAGE GUIDELINES

A sediment control fence may be constructed near the downstream perimeter of a disturbed area along a contour to intercept sediment from overland runoff. A 2 year storm frequency may be used to calculate the flow rate to be filtered.

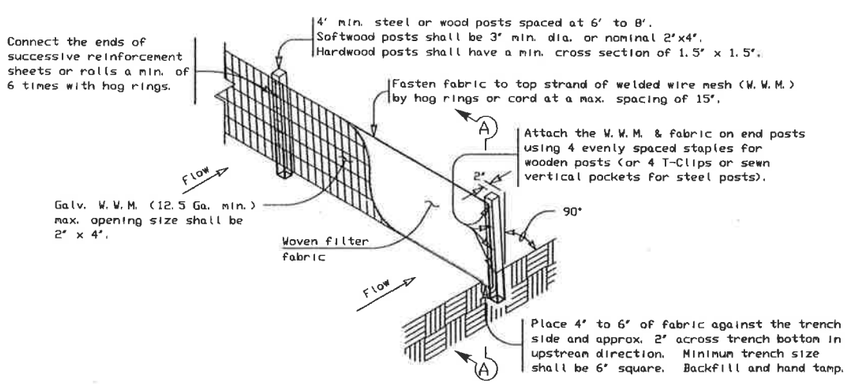
Sediment control fence should be sized to filter a max. flow through rate of 100 GPM/FT^2. Sediment control fence is not recommended to control erosion from a drainage area larger than 2 acres.

PLAN SHEET LEGEND

Sediment Control Fence —— SCF ——

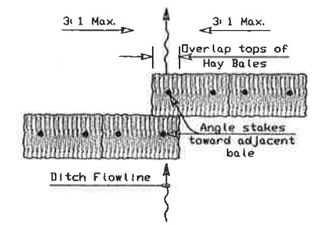
GENERAL NOTES

1. The guidelines shown hereon are suggestions only and may be modified by the Engineer.

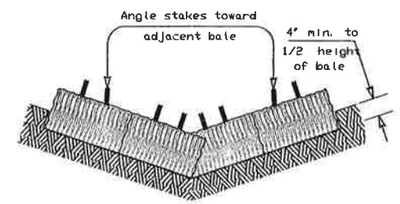


TEMPORARY SEDIMENT CONTROL FENCE

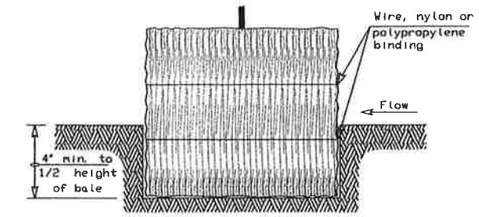
—— SCF ——



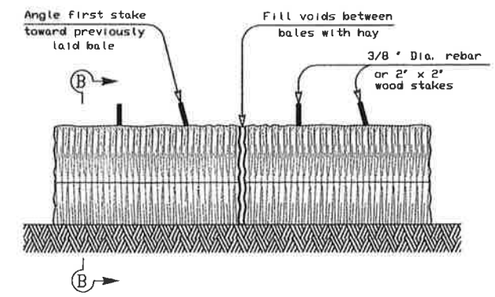
PLAN VIEW



PROFILE VIEW



SECTION B-B



BALED HAY FOR EROSION CONTROL

—— BH ——

PLANS SHEET LEGEND

Baled Hay —— BH ——

BALED HAY USAGE GUIDELINES

A Baled Hay installation may be constructed near the downstream perimeter of a disturbed area along a contour to intercept sediment from overland runoff. A two year storm frequency may be used to calculate the flow rate to be filtered. The installation should be sized to filter a maximum flow thru rate of 5 GPM/FT^2 of cross sectional area. Baled hay may be used at the following locations:

1. Where the runoff approaching the baled hay flows over disturbed soil for less than 100'. If the slope of the disturbed soil exceeds 10%, the length of slope upstream the baled hay should be less than 50'.
2. Where the installation will be required for less than 3 months.
3. Where the contributing drainage area is less than 1/2 acre.

For Baled Hay installations in small ditches, the additional following considerations apply:

1. The ditch sideslopes should be graded as flat as possible to maximize the drainage flowrate thru the hay.
2. The ditch should be graded large enough to contain the overtopping drainage when sediment has filled to the top of the baled hay.

Bales should be replaced usually every 2 months or more often during wet weather when loss of structural integrity is accelerated.

GENERAL NOTES

1. Hay bales shall be a minimum of 30" in length and weigh a minimum of 50 Lbs.
2. Hay bales shall be bound by either wire or nylon or polypropylene string. The bales shall be composed entirely of vegetative matter.
3. Hay bales shall be embedded in the soil a minimum of 4" and where possible 1/2 the height of the bale.
4. Hay bales shall be placed in a row with ends tightly abutting the adjacent bales. The bales shall be placed with bindings parallel to the ground.
5. Hay bales shall be securely anchored in place with 3/8 " Dia. rebar or 2" x 2" wood stakes, driven through the bales. The first stake shall be angled towards the previously laid bale to force the bales together.
6. The guidelines shown hereon are suggestions only and may be modified by the Engineer.

REVISION HISTORY

Texas Department of Transportation
Design Division (Roadway)

TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES

FENCED & BALED HAY

EC(1)-93

FILE: EC193.DGN	DN: HEJ	CK: HEJ	DW: BGD	CK:
©TxDOT JUNE 1993	DISTRICT	FEDERAL AID PROJECT		SHEET
REVISIONS				C13
	COUNTY	CONTROL	SECT	JOB	HIGHWAY

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LEVELS DISPLAYED

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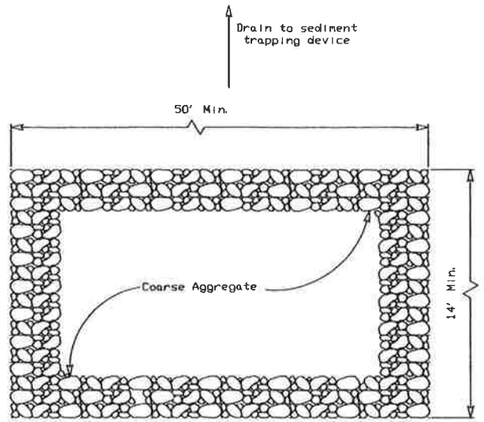
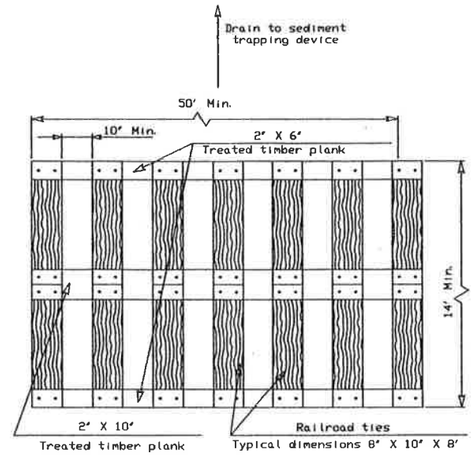
APPROVED FOR CONSTRUCTION
DATE: 7-5-05
BY: P.A.C.



PLAN



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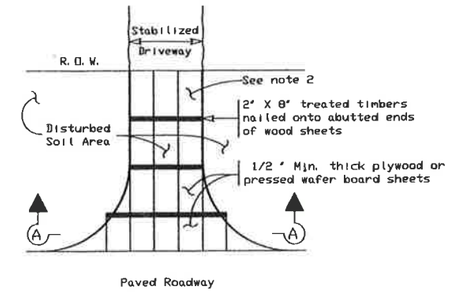

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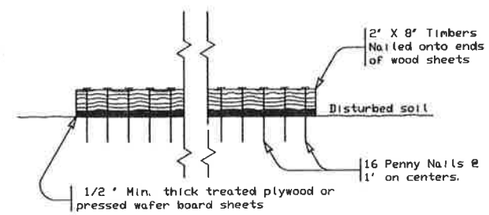
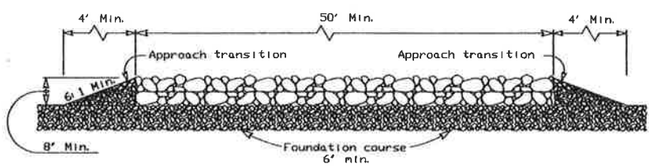


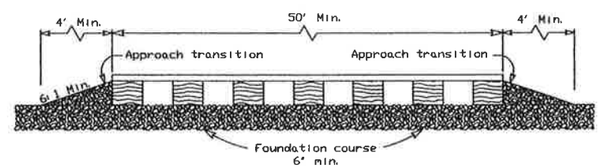
SECTION A-A

CONSTRUCTION EXIT (TYPE 3)



PROFILE

CONSTRUCTION EXIT (TYPE 1)



PROFILE

CONSTRUCTION EXIT (TYPE 2)

GENERAL NOTES

1. The length of the type 1 construction exit shall be as indicated on the plans, but not less than 50'.
2. The coarse aggregate should be open graded with a size of 4' to 8'.
3. The approach transitions should be no steeper than 6:1 and constructed as directed by the Engineer.
4. The construction exit foundation course shall be flexible base, bituminous concrete, portland cement concrete or other material as approved by the Engineer.
5. The construction exit shall be graded to allow drainage to a sediment trapping device.
6. The guidelines shown hereon are suggestions only and may be modified by the Engineer.

GENERAL NOTES

1. The length of the type 2 construction exit shall be as indicated on the plans, but not less than 50'.
2. The treated timber planks shall be attached to the railroad ties with 1/2 "x 6" min. lag bolts. Other fasteners may be used as approved by the Engineer.
3. The treated timber planks shall be #2 grade min., and should be free from large and loose knots.
4. The approach transitions shall be no steeper than 6:1 and constructed as directed by the Engineer.
5. The construction exit foundation course shall be flexible base, bituminous concrete, portland cement concrete or other material as approved by the Engineer.
6. The construction exit should be graded to allow drainage to a sediment trapping device.
7. The guidelines shown hereon are suggestions only and may be modified by the Engineer.

GENERAL NOTES

1. The length of the type 3 construction exit shall be as shown on the plans, or as directed by the Engineer.
2. The type 3 construction exit may be constructed from open graded crushed stone with a size of two to four inches spread a min. of 4" thick to the limits shown on the plans.
3. The treated timber planks shall be #2 grade min., and should be free from large and loose knots.
4. The guidelines shown hereon are suggestions only and may be modified by the Engineer.

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LAYOUT DISPLAYED	
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17 18 19	20 21 22 23 24 25 26 27 28 29 30 31 32
33 34 35	36 37 38 39 40 41 42 43 44 45 46 47 48
49 50 51	52 53 54 55 56 57 58 59 60 61 62 63 64

REVISION HISTORY

Texas Department of Transportation
Design Division (Roadway)

TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES

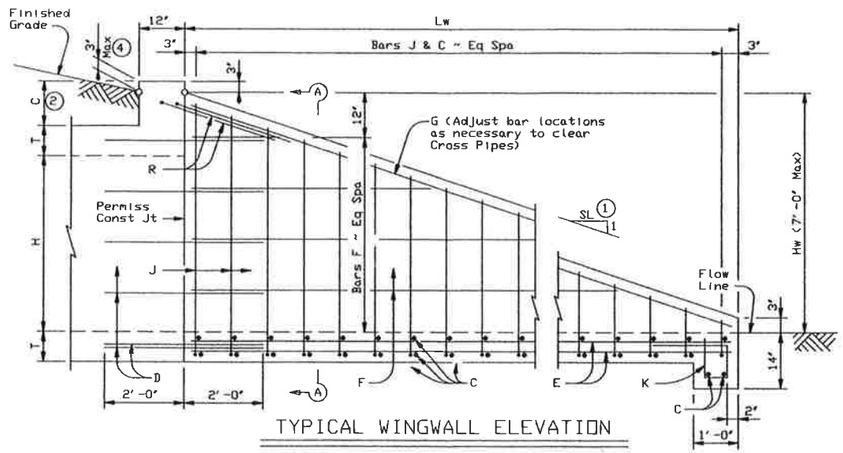
CONSTRUCTION EXITS

EC(3)-93

FILE: EC393.DGN	DN: HEJ	CK: HEJ	DW: BGD	CK:
©TxDOT JUNE 1993	DISTRICT	FEDERAL AID PROJECT		SHEET
REVISIONS				C14
	COUNTY	CONTROL	SECT	JOB	HIGHWAY

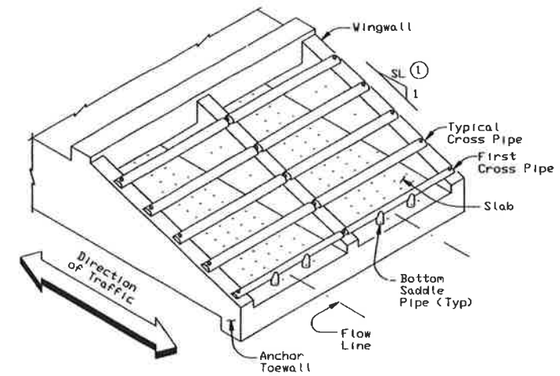
CITY OF CELINA, TEXAS
APPROVED FOR CONSTRUCTION
DATE: 7-5-05
BY: P.A.C.

P-200505-01



TYPICAL WINGWALL ELEVATION

(Cross Pipes not shown for clarity)



ISOMETRIC VIEW OF TYPICAL INSTALLATION

(Showing Bolted Anchor Option)

Formulas: (All values are in Feet)

$Hw = H + T + C - 0.250'$

$Lw = (Hw - 0.250') (SL)$

For Cast-in-place culverts:

$Atw = (N) (S) + (N+1) (U)$

For Precast culverts:

$Atw = (N) (2U+S) + (N-1) (0.500')$

Total Wingwall Area (S.F.)

$= (0.5) (Hw + 0.250') (Lw) (N+1)$

Total Concrete Volume (C.Y.)

$= [(\text{Wingwall Area}) (U) + (Lw) (Atw) (T) + (Atw) (1.000') (1.167' - T)] \div (27)$

Total Reinforcing (Lbs)

$= (1.55) (Lw) (Atw) + (4.43) (Atw) + (K) (Hw) (N+1) (\sqrt{Lw})$

C = Height of Curb above top of Top Slab
Hw = Height of Wingwall
K = Constant Value for use in formulas
Slope SL: 1 K
6: 1 ~ 10.41
Atw = Anchor Toewall Length
Lw = Length of Wingwall
N = Number of Culvert Barrels
S = Clear Span of each Barrel
SL: 1 = Side Slope Ratio (Horizontal : 1 Vertical)

See applicable box culvert standard for H, S, T, and U values.

GENERAL NOTES:

Designed according to current AASHTO Standard and Interim Specifications.

The Safety End Treatments shown herein are intended for use in those installations where out of control vehicles are likely to traverse the openings approximately perpendicular to the Cross Pipes.

Cross Pipes are designed for a traversing load of 10,000 pounds at yield as recommended by Research Report 280-2F, 'Safety Treatment of Roadside Parallel-Drainage Structures', Texas Transportation Institute, March 1981.

All concrete shall be Class 'C' and shall have a minimum compressive strength of 3600 psi.

All reinforcing steel shall be Grade 60. All reinforcing shall be adjusted as necessary to provide a minimum clear cover of 1 1/4 '.

The quantities for concrete, reinforcing steel, and Cross Pipes resulting from the formulas given herein are for Contractor's information only.

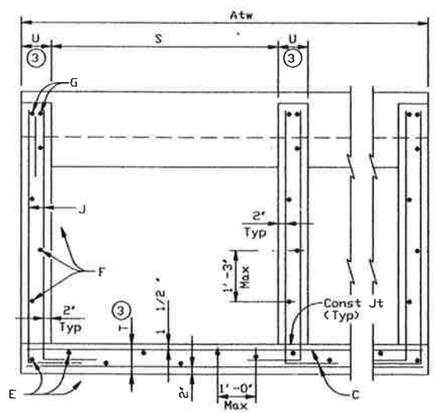
Cross Pipes, Sleeve Pipes, and Saddle Pipes shall conform to the requirements of ASTM A53 (Type E or S, Grade B), ASTM A500 (Grade B), or API 5LX52.

Bolts and nuts shall conform to ASTM A307.

All steel components, except the concrete reinforcing, shall be galvanized after fabrication. Galvanizing damaged during transport or construction shall be repaired in accordance with the specifications.

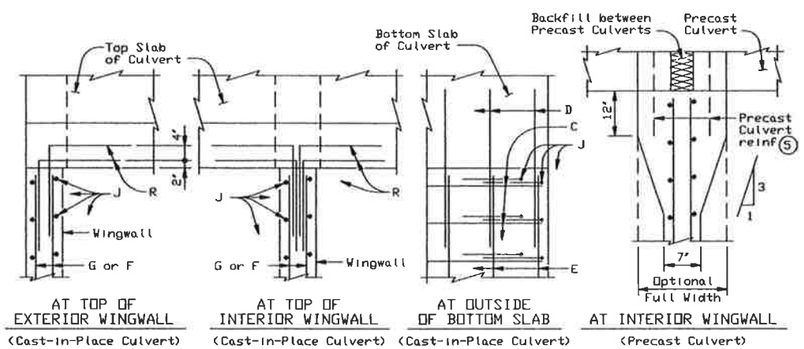
See BCS standard sheet for additional dimensions and information.

Alternate design drawings bearing the seal of a professional engineer will be acceptable for precast construction of the Safety End Treatments.

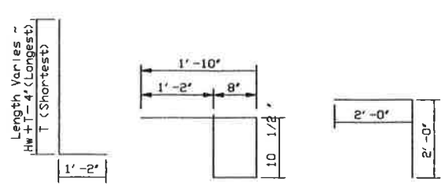


SECTION A-A

(Showing typical Wingwall and Wing Slab reinforcing)
(Pipe Runners not shown for clarity)



PLAN VIEWS OF CORNER DETAILS



BARS J BARS K BARS R

(Length = 4'-3")

TABLE OF REINFORCING BAR SIZES & SPACING		
Bar	Size	Spacing
C	#4	10" Max
D	#4	match F & E
E	#4	1'-0" Max
F	#4	1'-3" Max
G	#4	Shown
J	#4	10" Max
K	#4	1'-0" Max
R	#4	Shown

1. Slope shall be 6:1 or flatter.
2. 0" min to 5'-0" max. Estimated curb heights are shown elsewhere in the plans. For structures without railing and curbs taller than 1'-0", refer to ECD standard.
3. Wingwall and slab thicknesses may be the same as the adjacent culvert wall and slab thicknesses (7" Minimum).
4. For vehicle safety, curbs shall project no more than 3" above finished grade. Curb heights shall be reduced, if necessary, to meet these requirements. No changes will be made in quantities and no additional compensation will be allowed for this work.
5. For Culverts with C = 0", the precast culvert reinforcing may extend 1'-0" minimum into Wingwall. Wingwall Bars D and R may be omitted. Otherwise, refer to the 'Wingwall Connection Detail' on the SCP-MD standard.

Texas Department of Transportation
Bridge Division

SAFETY END TREATMENT FOR BOX CULVERTS (MAXIMUM Hw = 7'-0") TYPE I ~ PARALLEL DRAINAGE

1 of 2 SETB-PD

FILE: setbpdse.dgn	DN: GAF	CK: CAT	DW: JRP	CK: GAF
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REVISIONS				C15
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CITY OF COLINA, TEXAS
APPROVED FOR CONSTRUCTION
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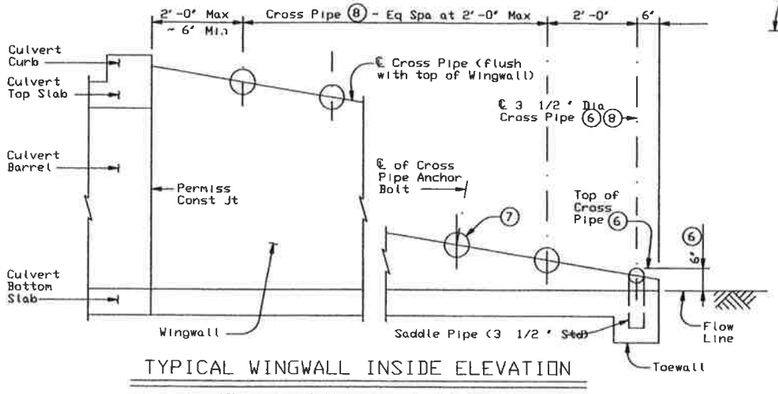
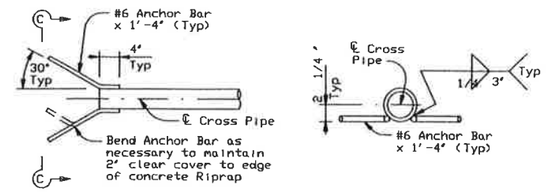
BY: P.A.C.

P-200505-01

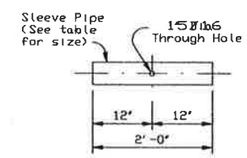


TYPICAL WINGWALL INSIDE ELEVATION

(Showing installation of Cross Pipes)



OPTIONAL ANCHOR BAR DETAILS



SLEEVE PIPE DETAILS (9)

REQUIRED PIPE SIZES (8)			STANDARD PIPE SIZES		
Culvert Span Sizes	Cross Pipe Size	Sleeve Pipe Size (9)	Pipe Size	Pipe O. D.	Pipe I. D.
First Pipe 3	1/2 " STD	1/2 " STD 2	1/2 " STD	2. 875"	2. 469"
30" to 42"	4" STD	3" STD	3" STD	3. 500"	3. 068"
48" to 72"	5" STD	4" STD	3 1/2 " STD	4. 000"	3. 548"
78" to 120"	6" STD	5" STD	4" STD	4. 500"	4. 026"
			5" STD	5. 563"	5. 047"
			6" STD	6. 625"	6. 065"

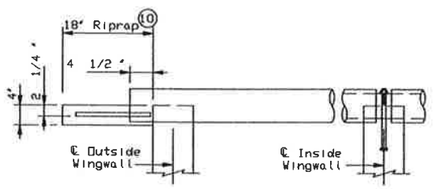
(6) The proper installation of the first Cross Pipe is critical for vehicle safety. The top of the first Cross Pipe must be placed at no more than 6" above the flow line.

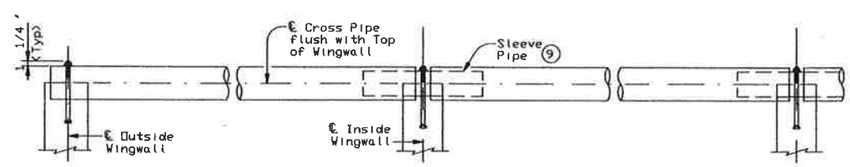
(7) The third Cross Pipe from the bottom of the Culvert shall always be installed using a bolted connection. Care shall be taken to ensure that concrete does not flow into this Cross Pipe so as to permit disassembly of the bolted connection to allow cleanout access.

(8) Cross Pipes and Sleeve Pipes (if required) shall be as shown in the REQUIRED PIPE SIZES table. Saddle Pipes for the 3 1/2 " first Cross Pipe shall also be 3 1/2 ".

(9) At Contractor's option, the Cross Pipe may be continuous across the Inside Wingwalls. If such option is selected, the Sleeve Pipe shall be omitted and a 1 5/16 diameter through hole made in the Cross Pipe to accept the anchor bolt at the centerline of each Interior Wingwall.

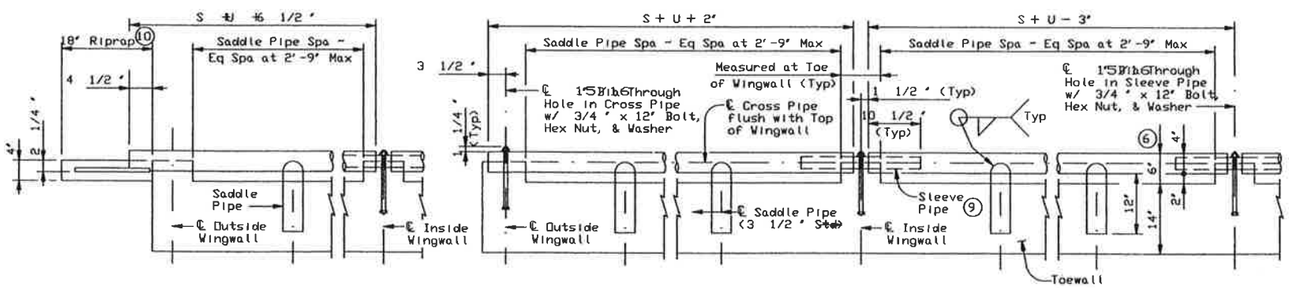
(10) Riprap will be required when using the optional Anchor Bar details and shall be included in the Price Bid for Safety End Treatment. Such Riprap shall be concrete Riprap in accordance with Item 432, "Riprap".





SECTION THROUGH INSTALLATION OF TYPICAL FULL CROSS PIPE

(Anchor details and dimensions are similar to those shown below in SECTION THROUGH INSTALLATION OF 3 1/2 " FIRST CROSS PIPE detail.)



OUTSIDE CULVERT BARREL WITH OPTIONAL ANCHOR BARS & RIPRAP

OUTSIDE CULVERT BARREL WITH BOLTED ANCHOR

INSIDE CULVERT BARREL

SECTION THROUGH INSTALLATION OF 3 1/2 " FIRST CROSS PIPE

CROSS PIPE INSTALLATION DETAILS

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UNITS DISPLAYED
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64

Texas Department of Transportation
Bridge Division

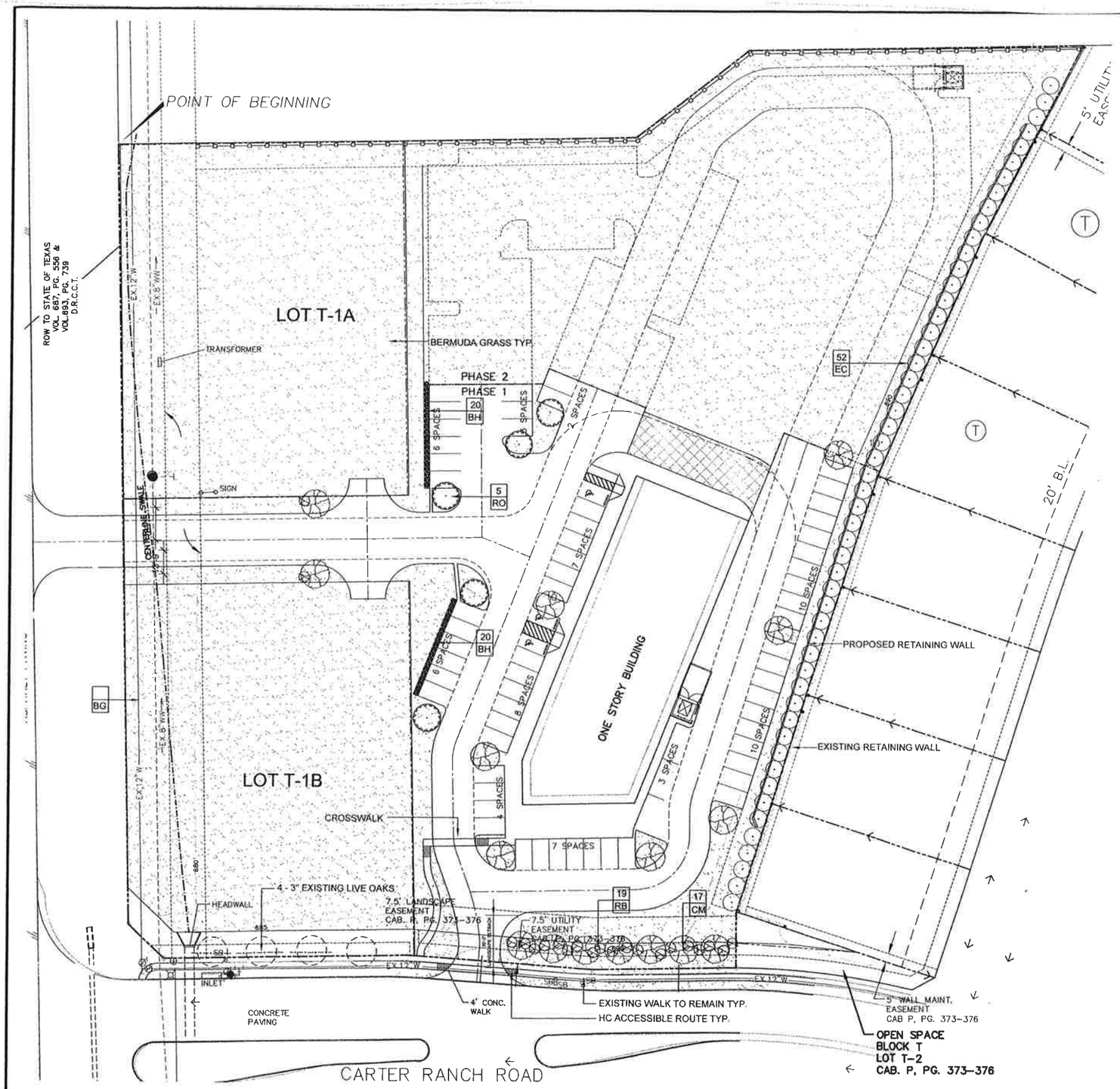
SAFETY END TREATMENT
FOR BOX CULVERTS
(MAXIMUM Hw = 7'-0")
TYPE I ~ PARALLEL DRAINAGE

2 of 2 SETB-PD

FILE setbpdse. dgn	DN GAF	CK CAT	DW JRP	CK GAF
©TxDOT December 2003	DISTRICT	FEDERAL AID PROJECT		SHEET
REVISIONS				C16
	COUNTY	CONTROL SECT	JOB	HIGHWAY

CITY OF CELINA, TEXAS
APPROVED FOR CONSTRUCTION
DATE: 7-5-05
BY: P.A.C.

P-200505-01



01 LANDSCAPE PLAN
SCALE: 1"=30'-0"

CELINA RETAIL PLANT LIST

SYMBOL	QUANT.	COMMON NAME	SCIENTIFIC NAME	CONDITION	SIZE	REMARKS
OVERSTORY TREES						
	5	TEXAS RED OAK	*Quercus buckleyi*	CONTAINER	3" - 3.5" CAL.	SINGLE, STRAIGHT TRUNK, 65 GAL 12' - 14' HT, 5' - 6' SP FULL.
	15	CADDO MAPLE	*Acer barbatum 'Caddo'*	CONTAINER	3" - 3.5" CAL.	SINGLE, STRAIGHT TRUNK, 65 GAL 12' - 14' HT, 5' - 6' SP FULL.
UNDERSTORY TREES						
	19	OKLAHOMA RED BUD	*Cupressocyparis leylandii*	CONTAINER	10 GAL.	7' - 8' HT, 3' - 4' SP FULL
EVERGREEN SCREEN						
	52	EASTERN RED CEDAR	*Juniperus virginiana*	CONTAINER	30 GAL.	7' - 8' HT, 3' - 4' SP FULL
SHRUBS						
	40	DWF BURFORD HOLLY	*Ilex cornuta 'Burfordii Nana'*	CONTAINER	5 GAL.	36" HT., 18" SP., FULL, 36" O.C.
GROUNDCOVER						
	18211 SY	BERMUDA GRASS	*Cynodon dactylon*			HYDROMULCH

4-8-05

CITY OF CELINA, TEXAS
APPROVED FOR CONSTRUCTION
DATE: 7-5-05
BY: P.A.C.

0 15 30 60 90
NORTH

PROJECT PERCENTAGE COMPLETE

DATE	DESCRIPTION	REV. No.
	REVISIONS AND ISSUE DATES	

LANDSCAPE PLAN
SHOPS AT CARTER RANCH
City of Celina, Texas

Mark R. Smith Co. Inc.
8100 Lemo Alto, Suite 230
Dallas, TEXAS 75225

HUITT-ZOLLARS
Huitt-Zollars, Inc. Denton
2220 Ben Jeanie Blvd, Suite 300
Denton, Texas 76205-7940
Phone (940) 671-3311 Fax (940) 483-1927

SCALE: AS SHOWN
DATE: 2/11/05
SHEET: LP.01

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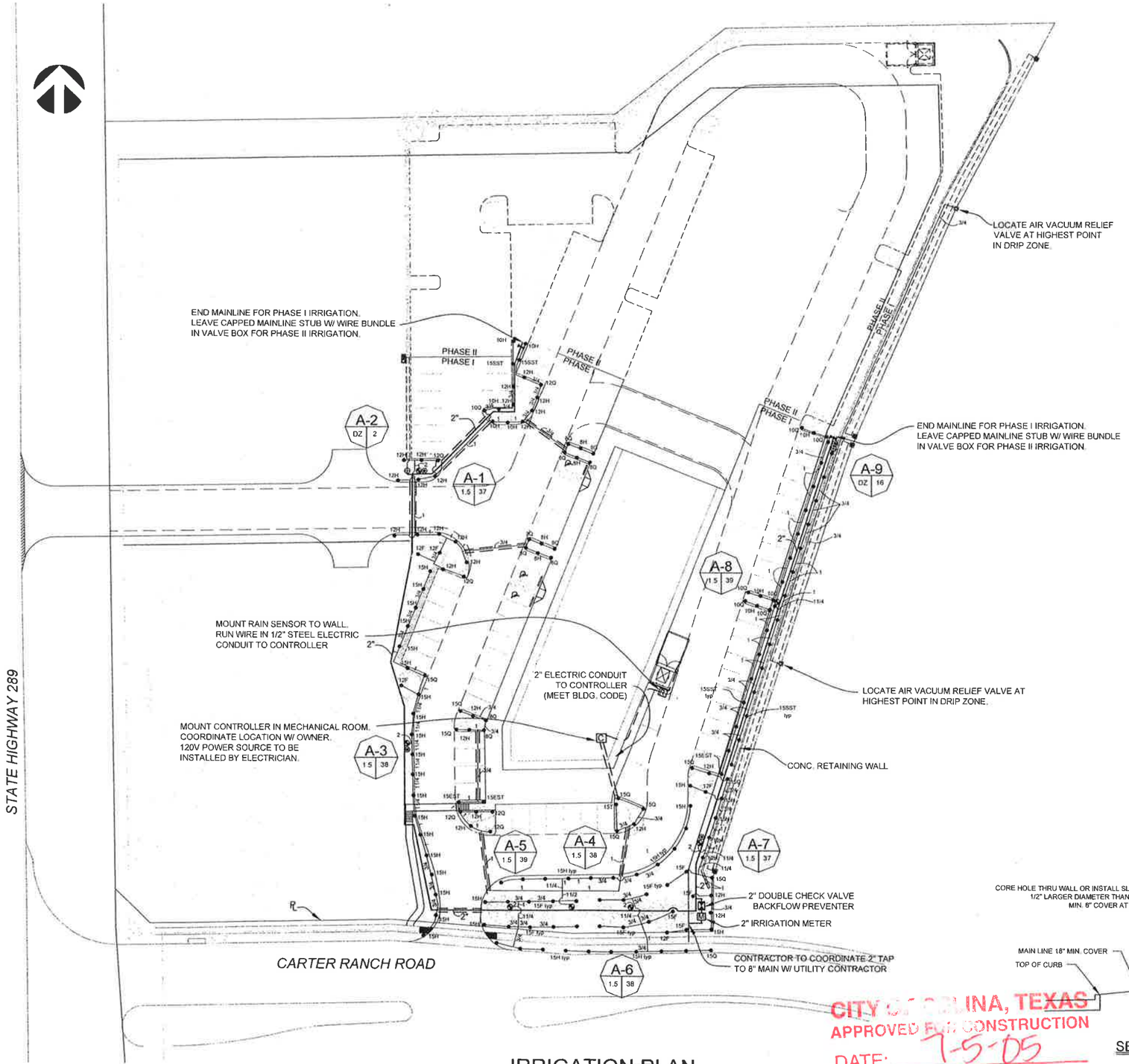


IRRIGATION PLAN

SCALE: 1"=30'

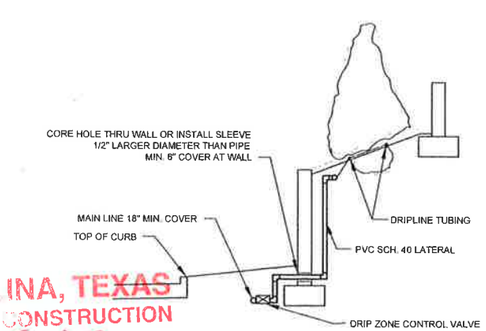
IRRIGATION LEGEND

- M — Irrigation Water Meter Hersey MVR (or approved equal)
- Backflow Preventer Febco 805Y Double Check assembly (or approved equal)
- C — Irrigation Controller Rain Bird ESP-MC24 (or approved equal)
- R — Rain Sensor Rain Bird RSD (or approved equal)
- 4" Spray Head Rain Bird 1804 (or approved equal)
- Quick Coupler Rain Bird 33DNP (or approved equal)
- Isolation Valve (PVC Ball Valve same size as mainline)
- Electric Valve Rain Bird PEB 150 (or approved equal)
- Drip Zone Electric Valve Rain Bird DV-100 (see detail) (or approved equal)
- Drip Zone Flush cap
- Drip Zone Air relief valve
- Dripline Tubing Rain Bird LD-09-12 (.9GPH 12")
- 1 — Lateral Line Class 200 PVC (size as shown)
- 2" — Main Line 2" Sch. 40 PVC
- Sleeves Class 200 PVC (except 2" & smaller Sch. 40) (size 2x diameter of pipe inside)
- A-1 / 1.0 / 15 — Valve Designation; Valve GPM; Valve Size

Note: "DZ" denotes drip zone valve

1. LINE LAYOUT IS DIAGRAMMATIC. ADJUST HEAD AND LINE LOCATIONS ON SITE TO ACCOMMODATE EXISTING JOB CONDITIONS AND TO ACHIEVE COMPLETE COVERAGE.
2. ALL MAIN LINE PIPING SHALL BE BURIED TO HAVE A MINIMUM COVER OF 18". ALL LATERAL PIPING DOWNSTREAM OF THE MAIN LINE SHALL BURIED TO HAVE A MINIMUM COVER OF 12".
3. ALL MAINS ARE TO DRAIN TO LOW POINTS AT A MINIMUM ONE HALF(1/2%) PERCENT SLOPE. AT LOW POINTS, INSTALL GATE VALVE IN VALVE BOX W/GRAVEL SUMP TO FACILITATE DRAINAGE OF SYSTEM DURING FREEZING TEMPERATURES.
4. CONTRACTOR SHALL INSTALL AUTOMATIC DRAIN VALVES AT LOW POINTS IN THE IRRIGATION LINES AS REQUIRED TO PREVENT FREEZE DAMAGE.
5. ALL VALVE BOXES SHALL BE BLACK IN COLOR(BODY AND LID). SIZES SHALL BE TEN(10") INCHES BY FOURTEEN(14") INCHES (RECTANGULAR) FOR REMOTE CONTROL VALVES AND NINE(9") INCHES(ROUND) FOR GATE AND QUICK COUPLER VALVES.
6. CONTRACTOR SHALL MAKE MINOR ADJUSTMENTS TO SYSTEM LAYOUT IN FIELD TO INSURE POSITIVE DRAINAGE OF LATERAL LINES AND MAIN LINES.
7. ALL WIRING FROM THE IRRIGATION CONTROLLER TO THE REMOTE CONTROL VALVES SHALL BE UF-14/1 DIRECT BURIAL CABLE. ALL WIRE SPLICES SHALL BE MADE IN VALVE BOXES ONLY USING RAINBIRD SNAP-TITE CONNECTORS AND SEALANT. PROVIDE SLEEVES FOR WIRE UNDER PAVED AREAS AS REQUIRED.
8. DESIGN STATIC PRESSURE IS 50 PSI AT POINT OF CONNECTION. CONTRACTOR SHALL VERIFY ACTUAL STATIC PRESSURE PRIOR TO STARTING WORK AND NOTIFY LANDSCAPE ARCHITECT IF PRESSURE IS LESS THAN 50 PSI. IF STATIC PRESSURE IS GREATER THAN 70 PSI CONTRACTOR SHALL INSTALL A PRESSURE REGULATING VALVE AFTER THE METER SET AT 60 PSI.
9. ALL IRRIGATION INSTALLATION SHALL CONFORM TO THE LOCAL CODES AND REGULATIONS

STATE OF TEXAS — CHAD STUMPE — 2154 — REGISTERED LANDSCAPE ARCHITECT



SECTION AT WALL
NOT TO SCALE

CITY OF CELINA, TEXAS
APPROVED FOR CONSTRUCTION
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BY: P.A.C.

PROJECT PERCENTAGE COMPLETE

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IRRIGATION PLAN

SHOPS AT CARTER RANCH

City of Celina, Texas

Mark R. Smith Co. Inc.
8100 Lomo Alto, Suite 230
Dallas, TEXAS 75225

HUITT-ZOLLARS
Huitt-Zollars, Inc. Denton
2220 San Jacinto Blvd., Suite 300
Denton, Texas 76205-7540
Phone (214) 871-3311 Fax (940) 483-3127

SCALE	SHEET
AS SHOWN	IR.01
DATE 2/11/05	

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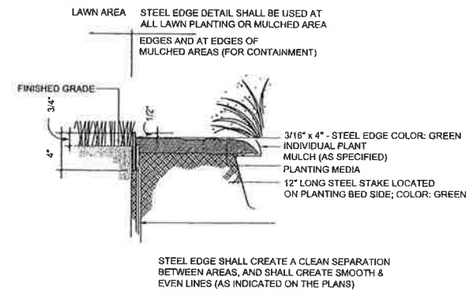
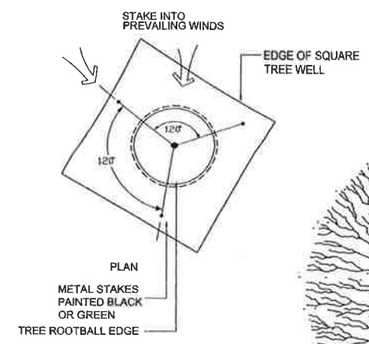
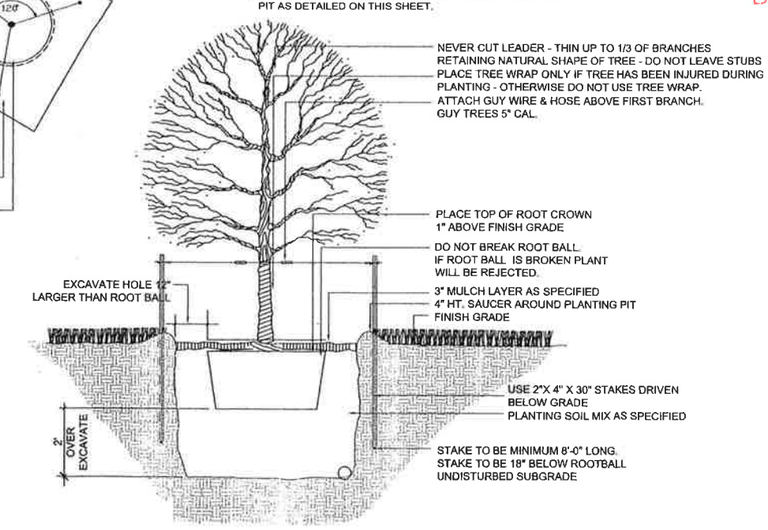


02 STEEL EDGING

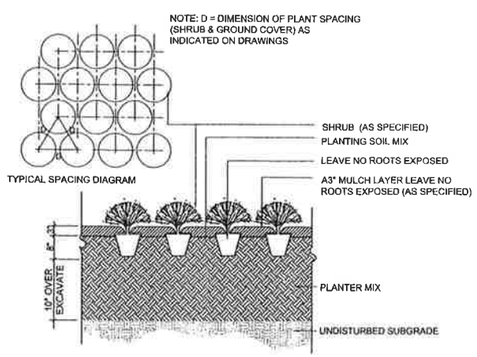
CITY OF CELINA, TEXAS
APPROVED FOR CONSTRUCTION
DATE: 7-5-05
BY: P.A.C.



NOTE:
1. ROOTBALL SIZE SHALL CONFORM TO THE AMERICAN ASSOCIATION OF NURSYMEN STANDARDS.
2. ROOTBALL WIDTH SHOULD BE DETERMINED BY THE FOLLOWING: 10" OF ROOTBALL FOR EACH CALIPER OF TREE TRUNK.
3. ROOTBALL DEPTH IS 2/3rds OF THE DIAMETER.
4. CONTRACTOR SHALL INSTALL SUBSURFACE DRAINAGE IN EACH TREE PIT AS DETAILED ON THIS SHEET.



01 TREE PLANTING AND STAKING DETAIL
SCALE: NTS



03 SHRUB PLANTING DETAIL
SCALE: NTS

STATE OF TEXAS
CHAD ST. JOHN
2154
REGISTERED
LANDSCAPE ARCHITECT
4-26-05

PROJECT PERCENTAGE COMPLETE

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DETAILS

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City of Celina, Texas

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8100 Lomo Alto, Suite 230
Dallas, TEXAS 75225

HUITT-ZOLLARS
Huitt-Zollars, Inc. Denton
2220 San Jacinto Blvd, Suite 330
Denton, Texas 76205-7540
Phone (940) 871-3351 Fax (940) 483-1127

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