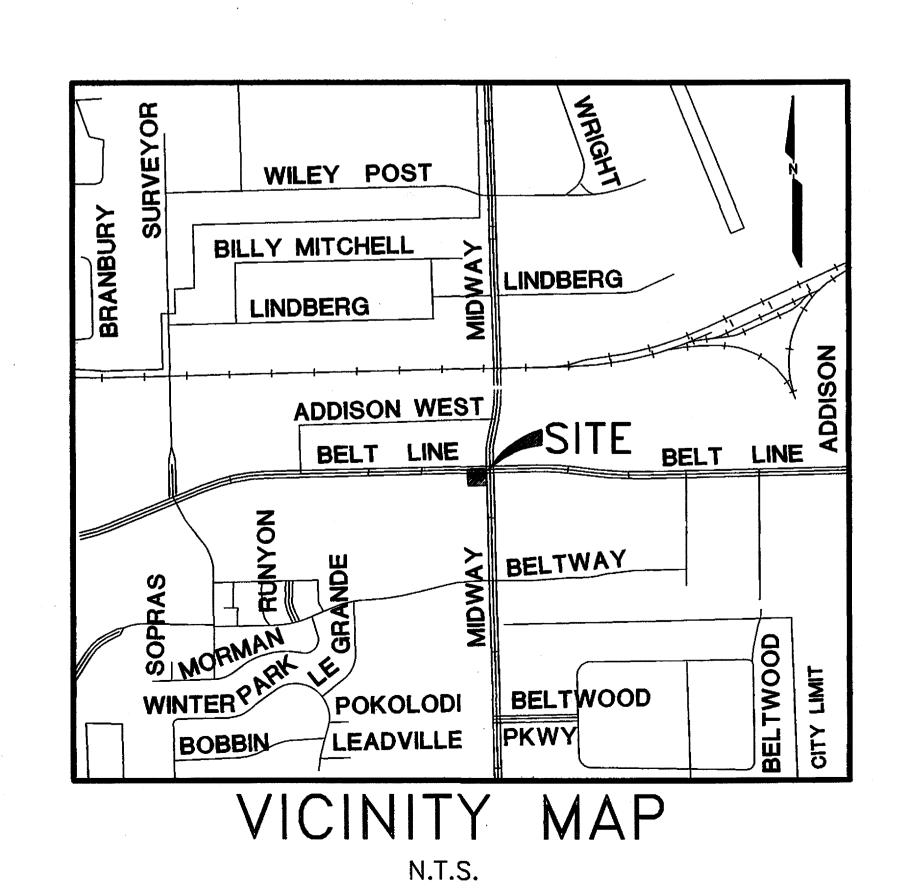
# SITEWORK PLANS FOR



# S.W.C. OF BELT LINE ROAD & MIDWAY ROAD THE TOWN OF ADDISON, TEXAS

OWNER:
PIEDMONT MIDWAY PARTNERS, LP
3400 CARLISLE, SUITE 445
DALLAS, TEXAS 75204
CONTACT: BILL PARK
(214) 979-1125
FAX: (214) 979-1128

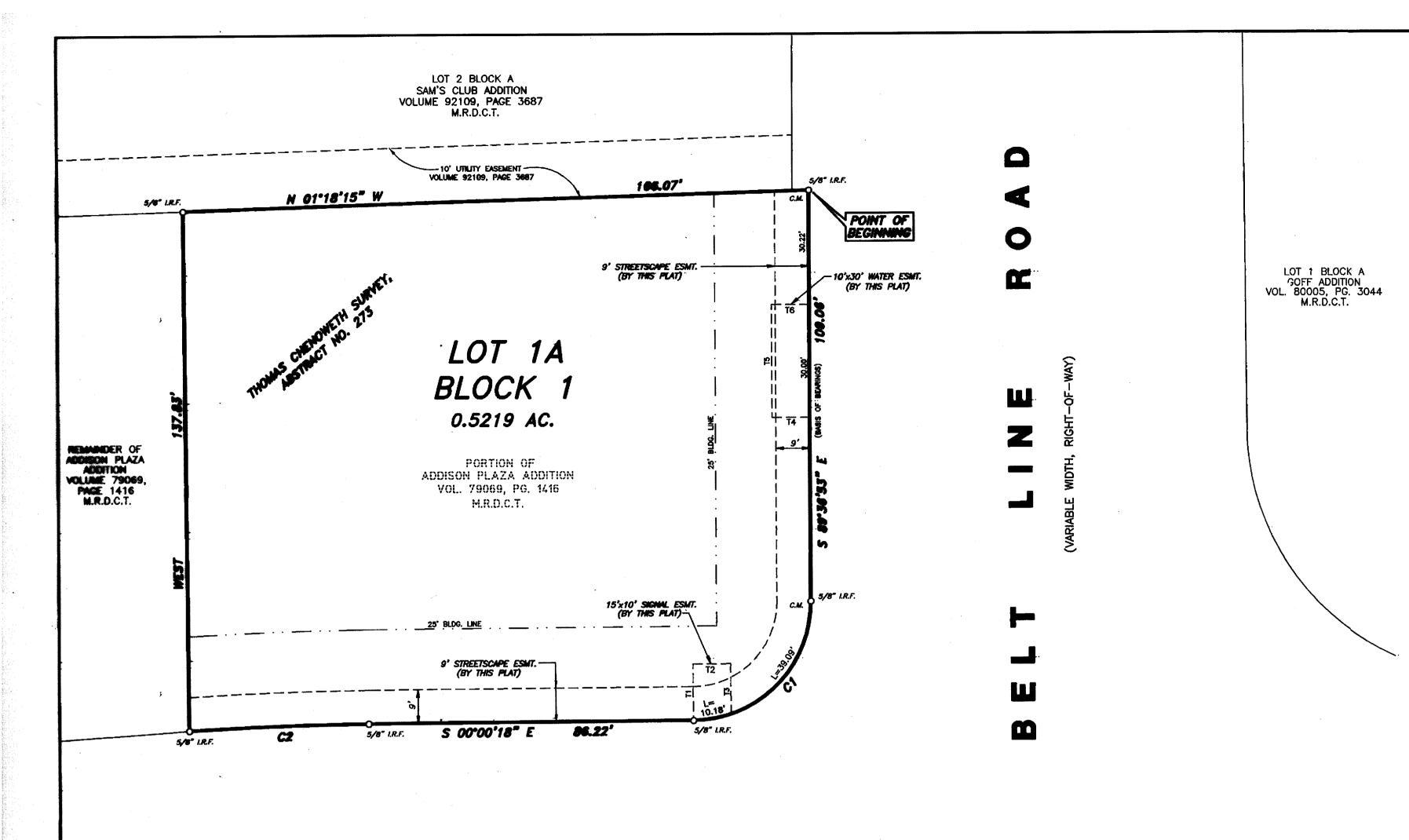
CIVIL ENGINEER:
LAWRENCE A. CATES & ASSOC., LLP
14800 QUORUM DRIVE, SUITE 200
DALLAS, TEXAS 75254
CONTACT: BRYAN M. BURGER, P.E.
(972) 385-2272
FAX: (972) 980-1627



# SHEET INDEX

SURVEY C-1 C-2 C-3 C-4 C-5 C-6 C-7 PLAT **DEMOLITION PLAN** SITE PLAN **PAVING PLAN** GRADING PLAN DRAINAGE AREA MAP **C-8** WATER & SANITARY SEWER PLAN **C-9** EROSION CONTROL PLAN SD-I SANITARY SEWER DETAILS SD-2 TRAFFIC CONTROL PLAN LANDSCAPE PLAN LANDSCAPE SPECIFICATIONS AND DETAILS IRRIGATION PLAN IRRIGATION SPECIFICATIONS AND DETAILS MEP-1 MEP-2 MEP-3 SITE PLAN-MEP MEP REQUIREMENTS SITE PLAN-PHOTOMETRICS

DATE 3.17.06



(VARIABLE WIDTH, RIGHT-OF-WAY)

T1	15.00'	N90'00'00"W
T2	10.00'	N00'00'00"E
T3	13.37'	N90'00'00"E
T4	10.00'	S00'23'07"W
T5	30.00'	N89°36'53"W
Т6	10.00'	N00'23'07"E

BEARING

CURVE TABLE										
CURVE	RADIUS	DELTA	TANGENT	CHORD	LENGTH	BEARING				
C1	31.50'	89'37'14"	31.29'	44.40'	49.27'	S44'48'27"E				
C2	908.50'	3'00'06"	23.80'	47.59'	47.60'	S01°30'24"E				

LINE TABLE

LINE LENGTH

#### SURVEYOR'S CERTIFICATION

I. LAWRENCE A. CATES, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF TEXAS, DO HEREBY CERTIFY THAT I HAVE PREPARED THIS PLAT FROM AN ACTUAL ON THE GROUND SURVEY OF THE LAND. AND THE MONUMENTS SHOWN HEREON WERE FOUND AND/OR PLACED UNDER MY PERSONAL SUPERVISION IN ACCORDANCE WITH THE PLATTING RULES AND REGULATIONS OF THE CITY PLAN COMMISSION OF THE TOWN OF ADDISON, TEXAS.

a. O.L PE, Ross

LAWRENCE A. CATES, P.E., R.P.L.S. REGISTERED PROFESSIONAL LAND SURVEYOR NO. 3717



STATE OF TEXAS COUNTY OF DALLAS

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED LAWRENCE A. CATES, PERSONALLY KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE ABOVE AND FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATION EXPRESSED AND IN THE CAPACITY THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE ON THIS THE \_\_\_\_\_ ITH\_\_\_\_ DAY OF \_\_AULUST\_\_\_\_\_, 2005.

Jamis d. Barnett NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS

EXPIRATION

2/11/09



CITY SECRETARY

#### OWNER'S CERTIFICATE

STATE OF TEXAS COUNTY OF DALLAS

WHEREAS, PIEDMONT MIDWAY PARTNERS, LP, is the owner of all that certain lot, tract or parcel of land situated in the Thomas Chenoweth Survey, Abstract No. 273, in the Town of Addison, Dallas County, Texas, and being a portion of a tract of land described in a deed to Piedmont Midway Partners, L.P., recorded in Volume 2004009, Page 06138, of the Deed Records of Dallas County, Texas, and being a portion of Addison Plaza Addition, an addition to the Town of Addison, Dallas County, Texas, as recorded in Volume 79069, Page 1416, of the Map Records of Dallas

BEGINNING at a 5/8 inch iron rod found for corner in the southerly right-of-way line of Belt Line Road, (variable width right-of-way), said iron rod being the northwest corner of said Addison Plaza Addition, and being the northeast corner of Lot 2, Block 'A' of Sam's Club Addition, an addition to the Town of Addison, Dallas County, Texas, as recorded in Volume 92109, Page 3687, of the Map Records of Dallas County, Texas:

THENCE South 89° 36' 53" East along said southerly right-of-way line of Belt Line Road, for a distance of 109.06 feet to a 5/8" iron rod found for corner and beginning of a curve to the right, said curve having a central angle of 89° 37' 14" and a radius of 31.50 feet with a chord bearing South 44° 48' 27" East at a distance of 44.40

THENCE Southeasterly along said curve to the right, a distance of 49.27 feet to a 5/8" iron rod found for corner in the west right-of-way line of Midway Road, (variable width right-of-way):

THENCE South 00' 00' 18" East along said west right of way line of Midway Road, for a distance of 86.22 feet. to a 5/8" iron rod found for corner, said point being the beginning of a curve to the left, said curve having a central angle of 03° 00' 06" with a radius of 908.50 feet and a chord bearing South 01° 30' 24" East at a distance of 47.59 feet;

THENCE Southeasterly along said curve to the left and continuing along said west right-of-way line of Midway Road, for an arc distance of 47.60 feet to a 5/8" iron rod found for corner;

THENCE departing said west right—of—way line of Midway Road, for a distance of 137.83 feet to a 5/8" iron rod found for corner in the west line of said Addison Plaza Addition, and being in the easterly line of said Lot 2, Block 'A':

THENCE along the common line of said Addison Plaza Addition and said Lot 2, Block 'A', North 01° 18' 15" West, a distance of 166.07 feet to the POINT OF BEGINNING;

Containing within these metes and bounds, 0.5219 acres of land, more or less. Bearings shown hereon are based upon the southerly right—of—way line of Beltline Road, as per the final plat of Addison Plaza Addition, recorded in Volume 79069, Page 1416, of the Map Records of Dallas County, Texas.

#### OWNER'S DEDICATION

NOW THEREFORE. KNOW ALL MEN BY THESE PRESENTS:

THAT PIEDMONT MIDWAY PARTNERS, LP. DOES HEREBY ADOPT THIS PLAT DESIGNATING THE HEREINABOVE PROPERTY AS ADDISON PLAZA ADDITION, LOT 1A, BLOCK 1, AN ADDITION TO THE TOWN OF ADDISON, TEXAS AND, SUBJECT TO THE CONDITIONS, RESTRICTIONS AND RESERVATIONS STATED HEREINAFTER. OWNER DEDICATES ALLEYS SHOWN THEREON.

TO THE PUBLIC USE FOREVER THE STREETS AND THE EASEMENTS SHOWN ON THIS PLAT ARE HEREBY RESERVED FOR THE PURPOSES AS INDICATED, INCLUDING, BUT NOT LIMITED TO, THE INSTALLATION AND MAINTENANCE OF WATER, SANITARY SEWER, STORM SEWER, DRAINAGE, ELECTRIC, TELEPHONE, GAS AND CABLE TELEVISION. OWNER SHALL HAVE THE RIGHT TO USE THESE EASEMENTS, PROVIDED HOWEVER, THAT IT DOES NOT UNREASONABLY INTERFERE OR IMPEDE WITH THE PROVISION OF THE SERVICE TO OTHERS, SAID UTILITY EASEMENTS ARE HEREBY BEING RESERVED BY MUTUAL USE AND ACCOMMODATION OF ALL PUBLIC UTILITIES USING OR DESIRING TO USE THE SAME. AN EXPRESS EASEMENT OF INGRESS AND EGRESS IS HEREBY EXPRESSLY GRANTED ON, OVER AND ACROSS ALL SUCH EASEMENTS FOR THE BENEFIT OF THE PROVIDER FOR SERVICES FOR WHICH EASEMENTS ARE GRANTED.

ANY DRAINAGE AND FLOODWAY EASEMENT SHOWN HEREON IS HEREBY DEDICATED TO THE PUBLIC'S USE FOREVER. BUT INCLUDING THE FOLLOWING COVENANTS WITH REGARDS TO MAINTENANCE RESPONSIBILITIES. THE EXISTING CHANNELS OR CREEKS TRAVERSING THE DRAINAGE AND FLOODWAY EASEMENT WILL REMAIN AS AN OPEN CHANNEL. UNLESS REQUIRED TO BE ENCLOSED BY ORDINANCE, AT ALL TIMES AND SHALL BE MAINTAINED BY THE INDIVIDUAL OWNERS OF THE LOT OR LOTS THAT ARE TRAVERSED BY OR ADJACENT TO THE DRAINAGE AND FLOODWAY EASEMENT. THE CITY WILL NOT BE RESPONSIBLE FOR THE MAINTENANCE AND OPERATION OF SAID CREEK OR CREEKS OR FOR ANY DAMAGE OR INJURY OF PRIVATE PROPERTY OR PERSON THAT RESULTS FROM THE FLOW OF WATER ALONG SAID CREEK, OR FOR THE CONTROL OF EROSION. NO OBSTRUCTION TO THE NATURAL FLOW OF WATER RUN-OFF SHALL BE PERMITTED BY CONSTRUCTION OF ANY TYPE BUILDING, FENCE OR ANY OTHER STRUCTURE WITHIN THE DRAINAGE AND FLOODWAY EASEMENT. PROVIDED, HOWEVER, IT IS UNDERSTOOD THAT IN THE EVENT IT BECOMES NECESSARY FOR THE CITY TO CHANNELIZE OR CONSIDER ERECTING ANY TYPE OF DRAINAGE STRUCTURE IN ORDER TO IMPROVE THE STORM DRAINAGE, THEN IN SUCH EVENT, THE CITY SHALL HAVE THE RIGHT, BUT NOT THE OBLIGATION, TO ENTER UPON THE DRAINAGE AND FLOODWAY EASEMENT AT ANY POINT, OR POINTS, WITH ALL RIGHTS OF INGRESS AND EGRESS TO INVESTIGATE, SURVEY, ERECT, CONSTRUCT OR MAINTAIN ANY DRAINAGE FACILITY DEEMED NECESSARY BY THE CITY FOR MAINTENANCE OR EFFICIENCY OF ITS RESPECTIVE SYSTEM OR SERVICE.

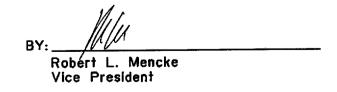
WATER MAIN AND SANITARY SEWER EASEMENTS SHALL INCLUDE ADDITIONAL AREA OF WORKING SPACE FOR CONSTRUCTION AND MAINTENANCE OF THE SYSTEMS. ADDITIONAL EASEMENT AREA IS ALSO CONVEYED FOR INSTALLATION AND MAINTENANCE OF MANHOLES, CLEANOUTS, FIRE HYDRANTS, WATER SERVICE AND SEWER SERVICES FROM THE MAIN TO CURB OR PAVEMENT LINE, AND THE DESCRIPTIONS OF SUCH ADDITIONAL EASEMENTS HEREIN GRANTED SHALL BE DETERMINED BY THEIR LOCATIONS AS INSTALLED.

WITNESS, MY HAND AT ADDISON, TEXAS THIS THE \_\_\_\_\_\_ PAY OF HUGUST

PIEDMONT MIDWAY PARTNERS, L.P., a Texas limited partnership

BY: Pledmont Partners, L.P., a Texas limited partnership, sole general partner

> BY: Piedmont Capital Corporation a Texas Corporation, sole general partner



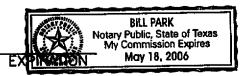
AS BUILT DATE 3.17.06

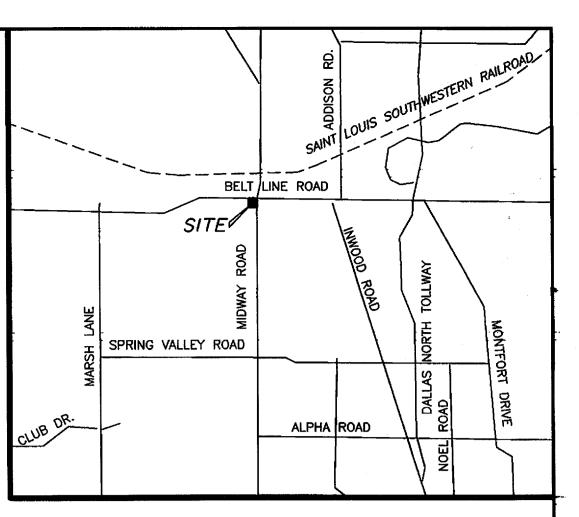
STATE OF TEXAS COUNTY OF DALLAS

BEFORE ME. THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED ROBERT L. MENCKE, PERSONALLY KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE ABOVE AND FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATION EXPRESSED AND IN THE CAPACITY THEREIN STATED.

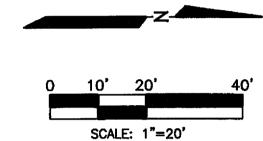
GIVEN UNDER MY HAND AND SEAL OF OFFICE ON THIS THE 1914 DAY OF AUGUST, 2005.

NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS





VICINITY MAP



LEGEND

- IRON ROD FOUND - CONTROLLING MONUMENT

BASIS OF BEARINGS:

BEARINGS SHOWN HEREON ARE BASED UPON THE SOUTHERLY RIGHT-OF-WAY LINE OF BELTLINE ROAD, AS PER THE FINAL PLAT OF ADDISON PLAZA ADDITION, RECORDED IN VOLUME 79069, PAGE 1416, OF THE MAP RECORDS OF DALLAS

OWNER

PIEDMONT MIDWAY PARTNERS, LP 3400 CARLISLE, SUITE 445 DALLAS, TEXAS 75204 CONTACT: BILL PARK (214) 979-1125 FAX: (214) 979-1128

ENGINEER/SURVEYOR

LAWRENCE A. CATES & ASSOC. LLP 14800 QUORUM DRIVE, STE. 200 DALLAS, TEXAS 75254 (972) 385-2272 CONTACT: LAWRENCE A. CATES, P.E., R.P.L.S.

FINAL PLAT

3:01

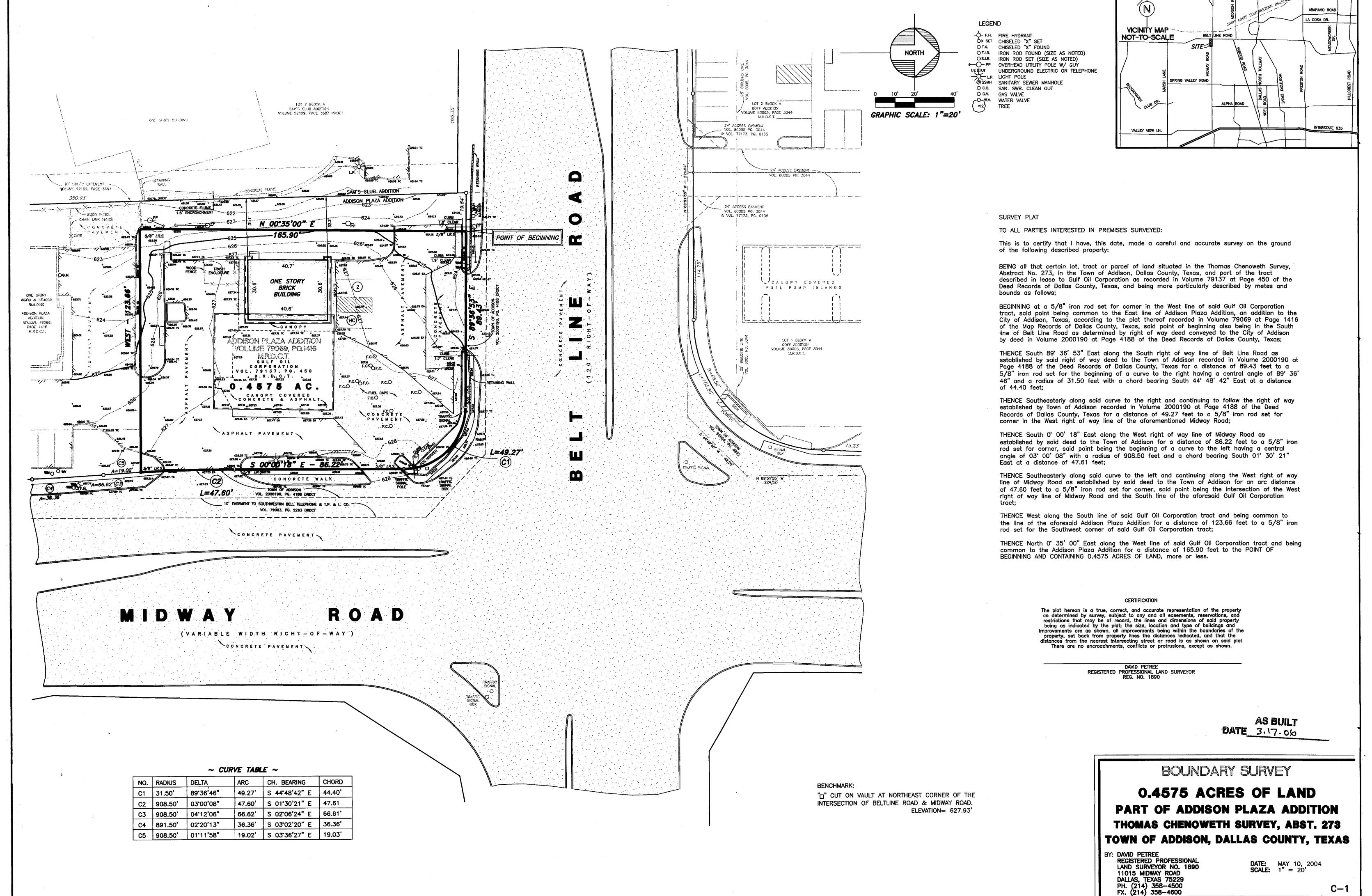
ADDISON PLAZA ADDITION LOT 1A, BLOCK 1

0.5219 ACRES

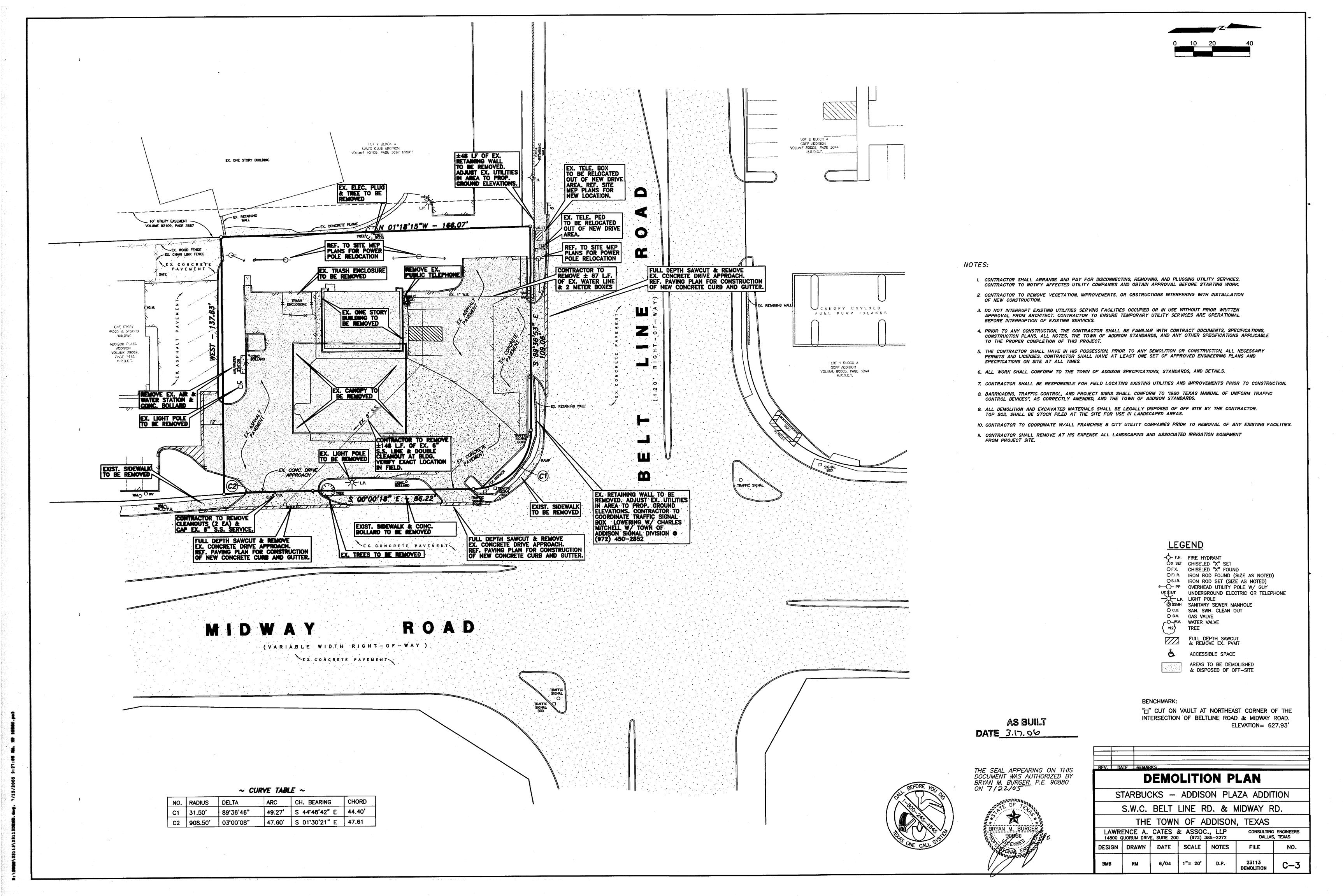
BEING A REPLAT OF ADDISON PLAZA ADDITION THOMAS CHENOWETH SURVEY, ABSTRACT NO. 273 TOWN OF ADDISON, DALLAS COUNTY, TEXAS

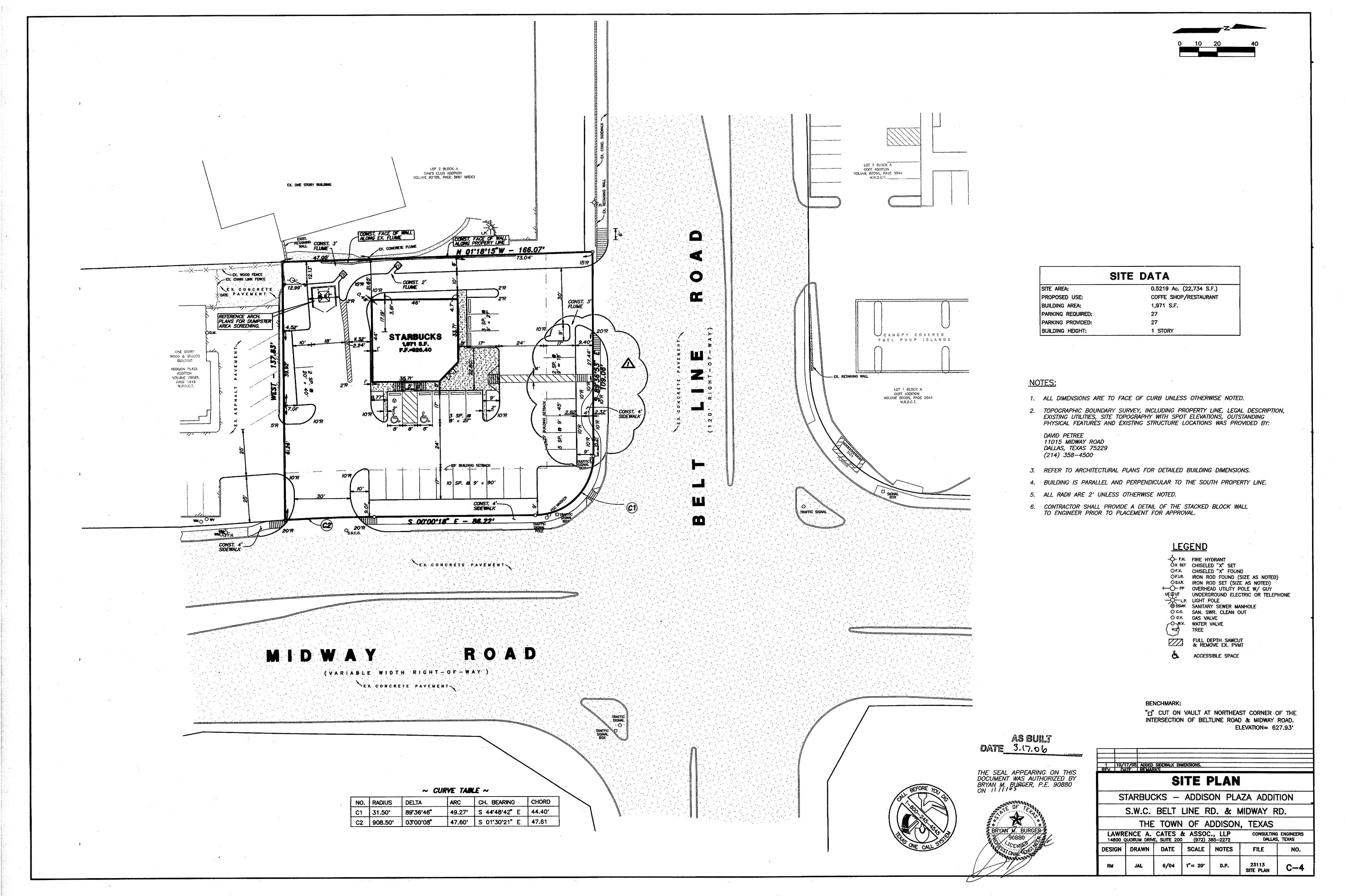
JULY 25, 2005

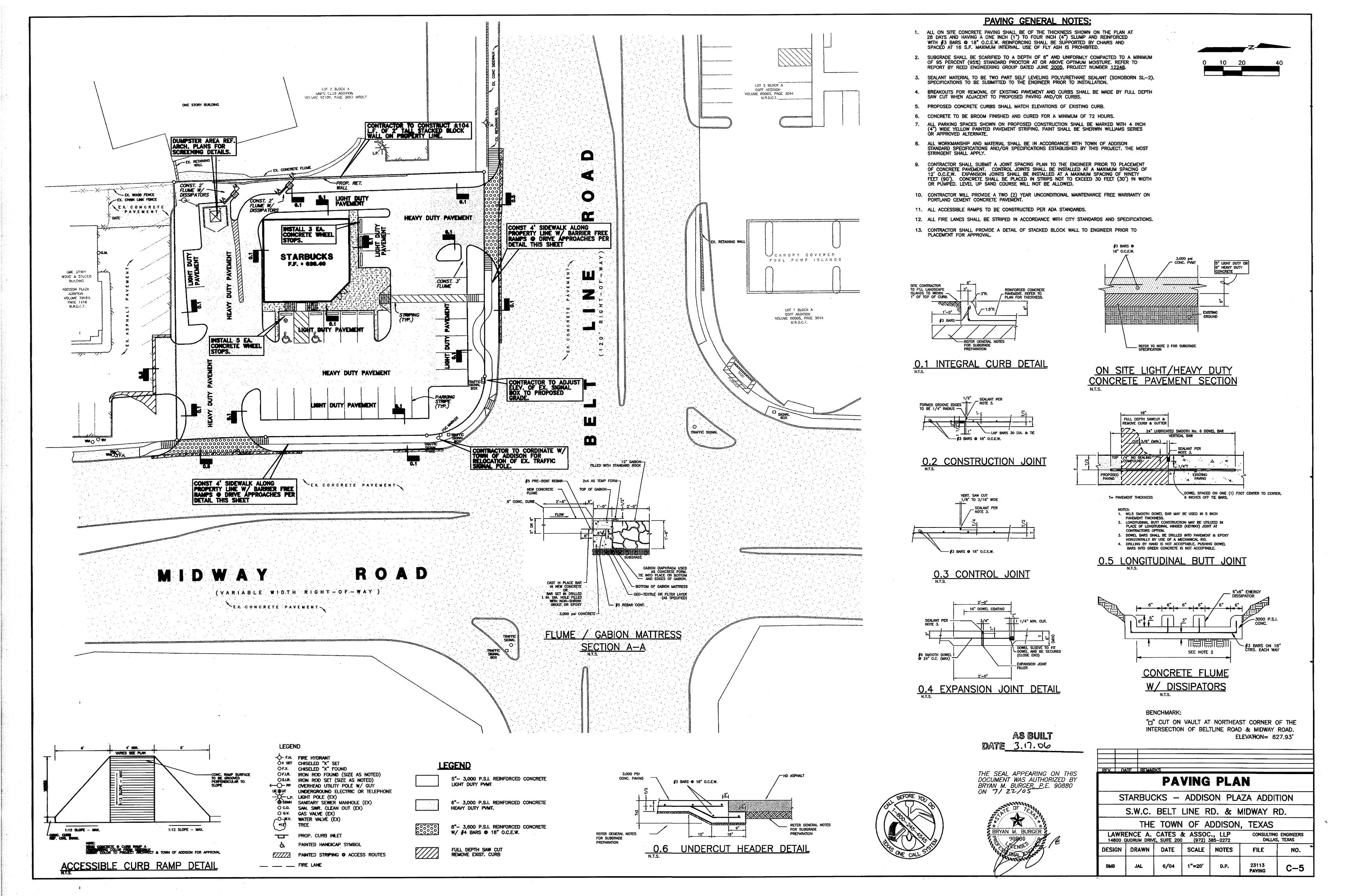
THIS PLAT FILED IN VOLUME 20964, PAGE 00094, M.R.D.C.T.

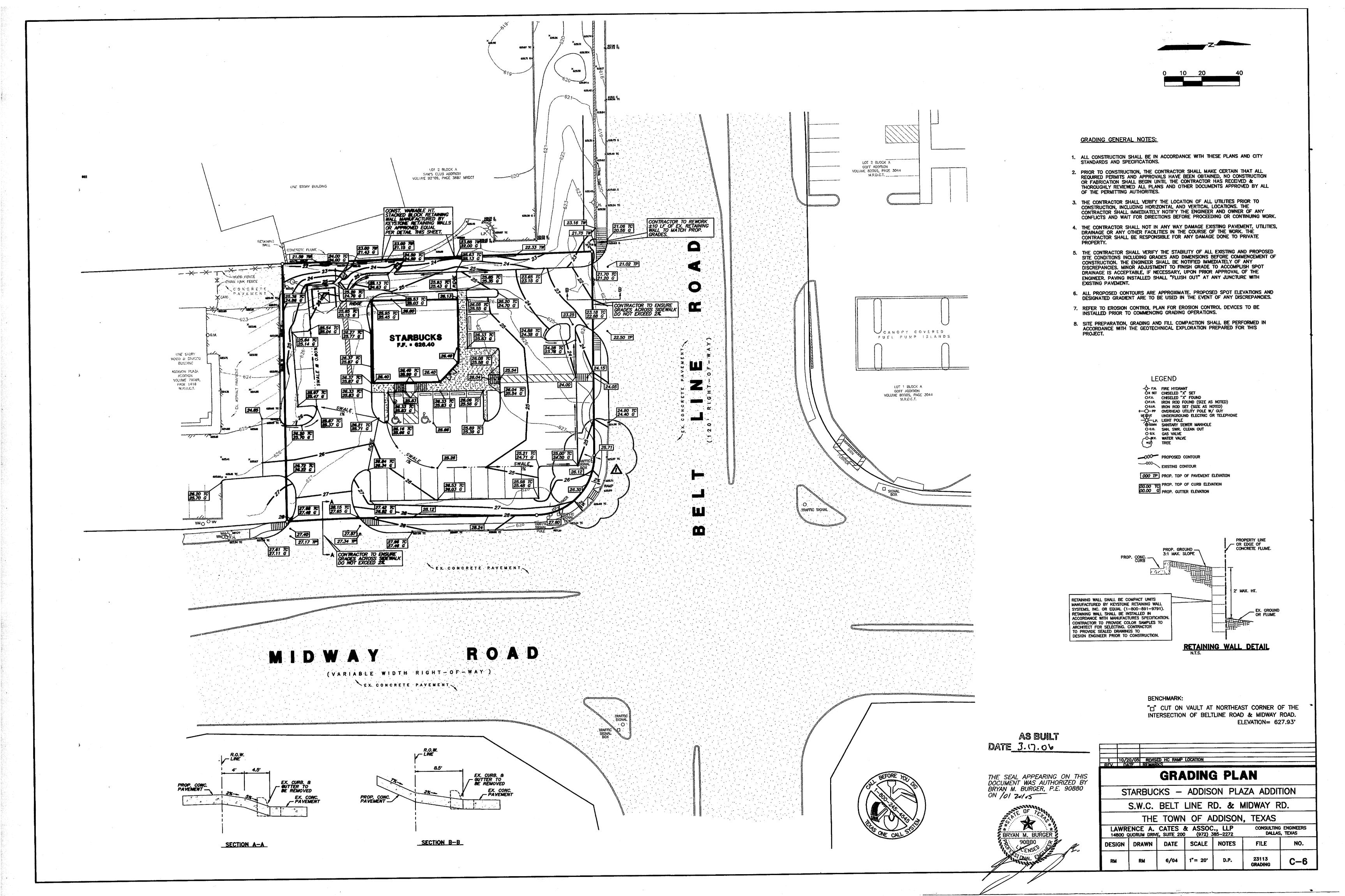


C-1









# EXISTING DRAINAGE AREAS LOT 2 BLOCK A SAM'S CLUB ADDITION VOLUME 92109, PAGE 3687 MRDCT ONE STORY BUILDING \_ 10' UTBUTY EASEMENT ---VOLUME 92109, PAGE 3687 WUCO FENCE 0 ONE STORY WOOD & STUCCO ADDISON PLAZA ADDITION VOLUME V9069. PAGE 1416 M.R.O.C.T, EX. CONCRETE PAVEMENT (VARIABLE WIDTH RIGHT-OF-WAY) EX. CONCRETE PAVENENT

## EXISTING HYDRAULIC DATA $Q = C \times l_{loc} \times A$

DRAINAGE AREA DESIG.	AREA (ACRES) A	RUNOFF COEFF. C	TIME OF CONC. Tc	INTENSITY 100 I <sub>100</sub>	QUANTITY 100 Q <sub>66</sub>	REMARKS
A	0.27	0.90	10.0	<i>8.88</i>	2.16	EX. CONC. FLUME AT SWC PROPERTY
В	0.21	0.90	10.0	8.88	1.68	SHEET FLOW TO BELT LINE RD.
С	0.04	0.90	10.0	8.88	0.32	SHEET FLOW TO DUKE'S PROPERTY

#### LEGEND

EXIST. CONTOURS

PROP. CONTOURS

EXIST. DRAINAGE DIVIDE

PROP. DRAINAGE DIVIDE

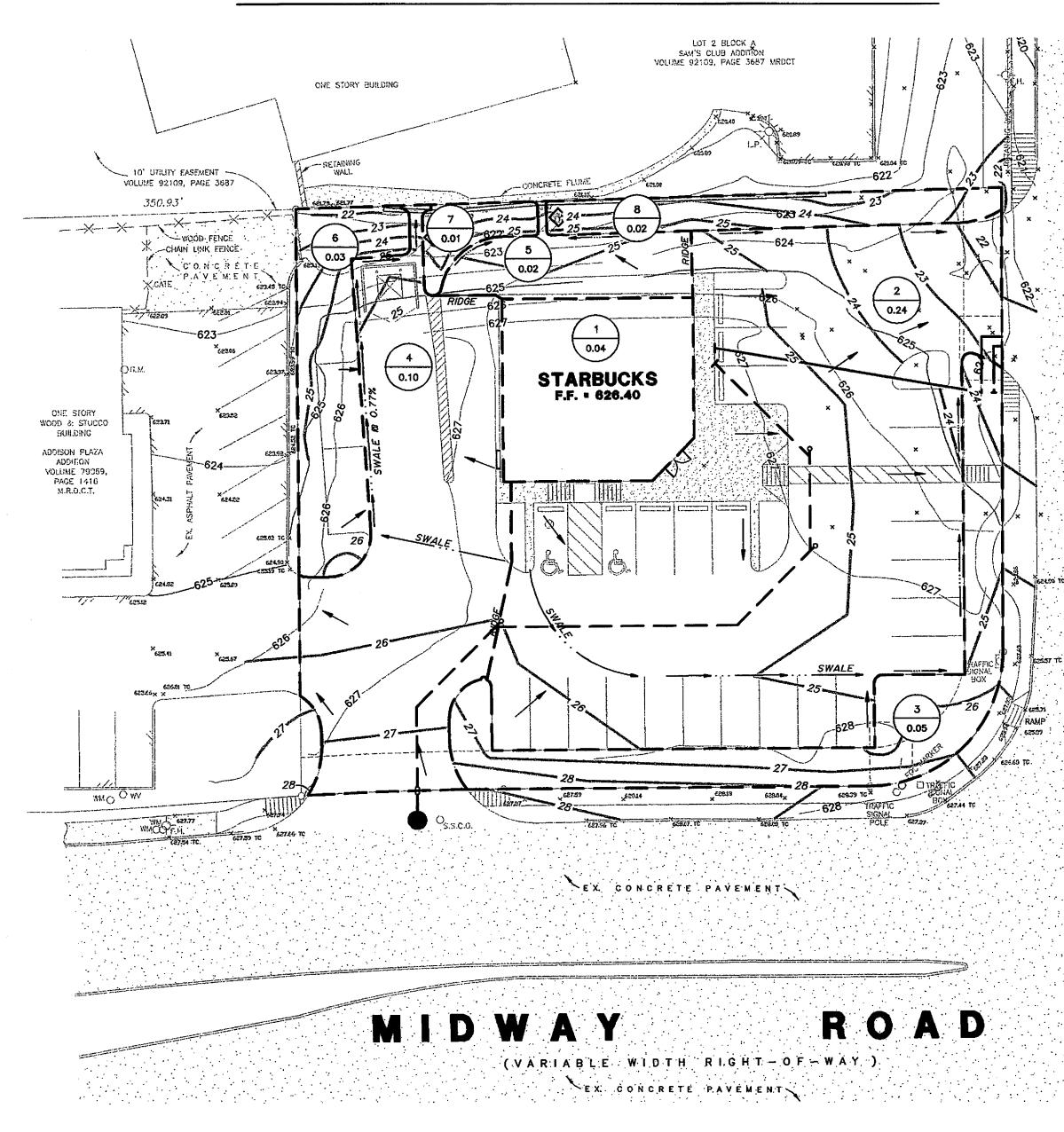
0.49

EXIST. DRAINAGE AREA NO.
ACREAGE

PROP. DRAINAGE AREA NO.
ACREAGE

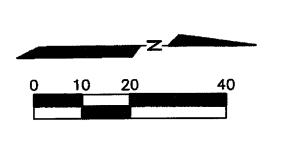
DIRECTION OF FLOW

# PROPOSED DRAINAGE AREAS



### PROPOSED HYDRAULIC DATA $Q = C \times l_{100} \times A$

DRÁINAGE AREA DESIG.	AREA (ACRES) A	RUNOFF COEFF. C	TIME OF CONC. Tc	INTENSITY 100 I <sub>100</sub>	QUANTITY 100 Q <sub>∞</sub>	REMARKS
1	0.04	0.90	10.0	8.88	0.32	ROOF DRAINS
2	0.24	0.90	10.0	8.88	1.92	SHEET FLOW TO BELT LINE RD.
3	0.05	0.35	10.0	8.88	0.16	SHEET FLOW TO R.O.W.
4	0.10	0.90	10.0	8.88	0.80	3' CONCRETE FLUME
5	0.02	0.90	10.0	8.88	0.16	2' CONCRETE FLUME
6	0.03	0.35	10.0	8.88	0.09	EXIST. CONCRETE FLUME
7	0.01	0.35	10.0	8.88	0.03	EXIST. CONCRETE FLUME
8	0.02	0.35	10.0	8.88	0.06	EXIST. CONCRETE FLUME

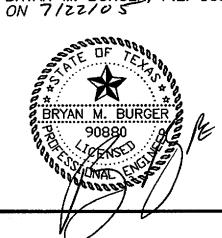


BENCHMARK:
"" CUT ON VAULT AT NORTHEAST CORNER OF THE INTERSECTION OF BELTLINE ROAD & MIDWAY ROAD.

ELEVATION= 627.93"

Date 3.17.06

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY BRYAN M. BURGER, P.E. 90880 ON 7/22/05



RFV. L DA	TF REMAR	?KS							
	DR	AINA	GE	AREA	MAP				
S	STARBUCKS - ADDISON PLAZA ADDITION								
	S.W.C.	BELT	LINE R	D. & N	AIDWAY R	D.			
	THE	TOWN	OF A	DDISON	, TEXAS				
		CATES &	& ASSOC (972) 3	., LLP 185–2272		ENGINEERS , TEXAS			
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.			
RM	RM	6/04	1"=20'	D.P.	23113	C-7			

LOT 2 BLOCK A SAM'S CLUB ADDITION

- I. ALL WORK AND MATERIALS. UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR THE TOWN.
- 2. THE WATER METER BOX SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AFTER THE PAVING CONTRACTOR HAS COMPLETED THE FINE GRADING BEHIND THE BACK OF THE CURB. EACH SERVICE LOCATION WILL BE MARKED ON THE PAVEMENT OR CURB, WITH A BLUE DOT BY THE UTILITY CONTRACTOR AND TIED TO PROPERTY CORNERS ON THE "RECORD DRAWINGS."

**WATER LINE GENERAL NOTES** 

- 3. THE CONTRACTOR SHALL FURNISH A MAINTENANCE BOND TO THE TOWN TO RUN TWO [2] YEARS FROM THE DATE OF ACCEPTANCE OF THE SYSTEM BY THE TOWN.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING "RECORD DRAWING" PLANS TO THE ENGINEER & TOWN OF ADDISON SHOWING THE LOCATION OF WATER SERVICES AND VALVES.
- 5. ALL WATER LINES SHALL BE HYDROSTATICALLY TESTED PER TOWN STANDARDS AND SPECIFICATIONS.
- 6. ALL WATER LINES SHALL BE STERILIZED PER TOWN STANDARDS AND SPECIFICATIONS.
- 7. ALL METER BOXES SHALL BE LOCATED IN NON-TRAFFIC AREAS.
- 8. THE HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING SUBSURFACE UTILITIES HAVE BEEN DETERMINED FROM RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY THAT NECESSARY CLEARANCES BETWEEN EXISTING AND PROPOSED UTILITIES EXIST PRIOR TO THE CONSTRUCTION OF ANY SUCH CROSSING.
- 9. UTILITY TRENCHES SHALL BE BACKFILLED WITH MATERIAL PER TOWN OF ADDISON SPECIFICATIONS.
- IO. ALL WATER SERVICES OUTSIDE OF EASEMENTS SHALL BE INSTALLED BY A PLUMBER.
- II. CONTRACTOR TO INCLUDE ALL TOWN REQUIRED MAINTENANCE BOND, INSPECTION, TAP, AND METER FEES IN BID. OWNER TO PAY IMPACT FEES.
- 12. NO WATER JETTING OF BACKFILL ALLOWED.

# . WATER METER . . . GATE VALVE



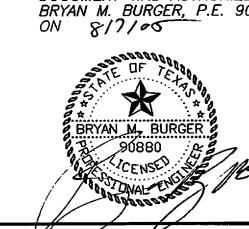
"\_" CUT ON VAULT AT NORTHEAST CORNER OF THE INTERSECTION OF BELTLINE ROAD & MIDWAY ROAD. ELEVATION= 627.93'

as Built DATE 3.17.06

. . . EXIST. FIRE HYDRANT

OHE . . . EXIST. OVER HEAD ELECTRIC

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY BRYAN M. BURGER, P.E. 90880 ON 8/7/05



WATER & SANITARY SEWER PLAN

STARBUCKS - ADDISON PLAZA ADDITION S.W.C. BELT LINE RD. & MIDWAY RD. THE TOWN OF ADDISON, TEXAS CONSULTING ENGINEERS
DALLAS, TEXAS LAWRENCE A. CATES & ASSOC., LLP DESIGN DRAWN DATE SCALE NOTES 6/04 1"=20' WATSEW

PUBLIC UTILITIES IN THE CONSTRUCTION OF THIS PROJECT; ALL MANHOLES, CLEANOUTS, VALVE BOXES, FIRE HYDRANTS, SEWER LATERALS, WATER SERVICE, ETC.

THE HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING SUBSURFACE

UTILITIES HAVE BEEN DETERMINED FROM DATA RECORDED BY OTHERS.

CONTRACTOR SHALL COORDINATE WITH THE OWNER, ENGINEER OR HIS

4. CONTRACTOR SHALL MAINTAIN ONE SET OF RECORD DRAWINGS (AS BUILT)

REPRESENTATIVE AND TOWN REPRESENTATIVE REGARDING ANY DEVIATIONS

ON SITE WHICH WILL BE SUBMITTED TO THE ENGINEER & TOWN OF ADDISON

BETWEEN - EXISTING AND PROPOSED UTILITIES EXIST PRIOR TO

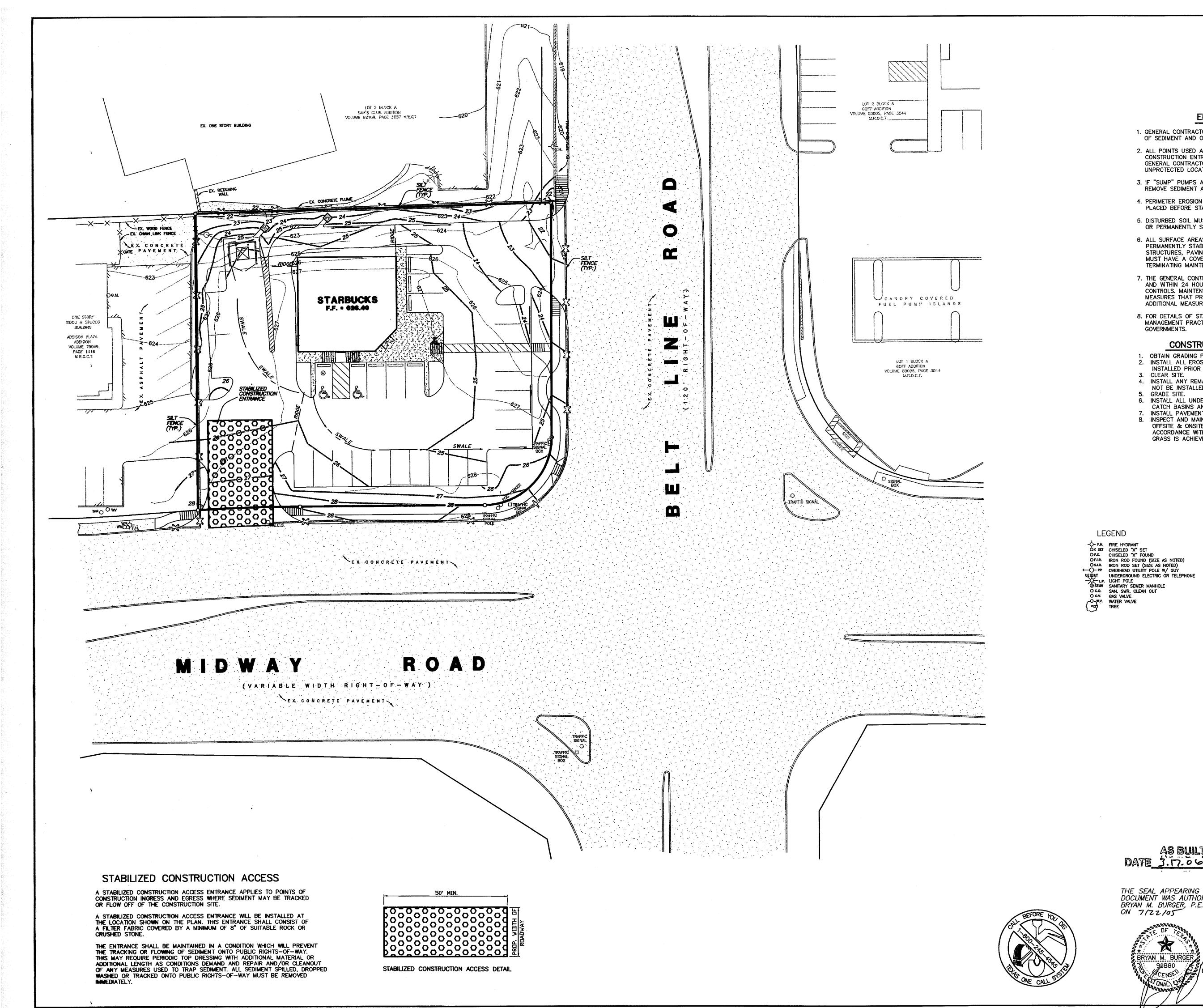
CONSTRUCTION OF ANY SUCH CROSSING.

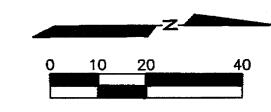
UPON COMPLETION OF THIS PROJECT.

FROM THESE PLANS.

CONTRACTOR SHALL VERIFY THAT NECESSARY CROSSING CLEARANCES

- 6. THE CONTRACTOR SHALL SET UTILITIES TO PROPER LINE AND GRADE PRIOR TO THE PLACING OF PERMANENT PAVEMENT.
- 7. SANITARY SEWER PIPE SHALL CONFORM TO TOWN SPECIFICATIONS AND SHALL BE MANUFACTURED FROM ONE OF THE FOLLOWING MATERIALS: a. Polyvinyl/Chloride (PVC) ASTM D 3034 SDR 35
- 8. SANITARY SEWER PIPE MUST BE KEPT CLEAR OF BROKEN CONCRETE, DIRT OR ANY OTHER DEBRIS RESULTING FROM CONSTRUCTION OPERATIONS.
- 9. ALL SANITARY SEWER MAINS ARE TO HAVE 1-21' JOINT CENTERED ON EITHER SIDE OF WATER MAINS WHERE CROSSING OCCUR.
- IO. CONTRACTOR SHALL TIE A I" WIDE PIECE OF RED PLASTIC FLAGGING TO THE END OF SEWER SERVICE AND SHALL LEAVE A MINIMUM OF 36" OF FLAGGING EXPOSED AFTER BACKFILL. AFTER CURB AND PAVING IS COMPLETED, CONTRACTOR SHALL MARK THE LOCATION OF THE SEWER SERVICE ON THE CURB IN ACCORDANCE WITH THE STANDARD TOWN SPECIFICATIONS.
- II. THE CONTRACTOR SHALL FURNISH A MAINTENANCE BOND TO THE TOWN TO RUN TWO (2) YEARS FROM THE DATE OF FINAL ACCEPTANCE OF THE SYSTEM BY THE TOWN.
- 12. ALL SANITARY SEWER LATERALS SHALL BE SIZED AND LOCATED AS
- 13. ALL SANITARY SEWER LATERALS LOCATED OUTSIDE OF ESMTS SHALL BE INSTALLED BY A PLUMBER.
- 14. CONTRACTOR TO INCLUDE ALL REQD. BONDS, TAP FEES, CAMERA FEES IN PROPOSAL.
- 15. ALL PROPOSED MANHOLES SHALL BE VACUUM TESTED.





#### EROSION CONTROL GENERAL NOTES

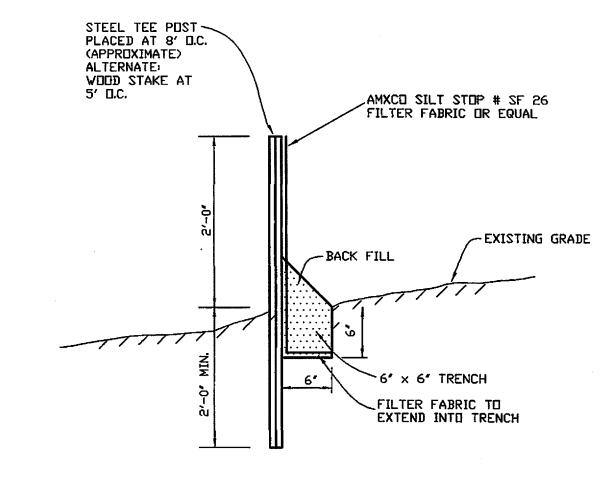
- 1. GENERAL CONTRACTOR AND OWNER ARE RESPONSIBLE FOR PREVENTING THE FLOW OR OFF-SITE TRACKING OF SEDIMENT AND OTHER POLLUTANTS TO EXISTING STREETS AND ADJACENT PROPERTIES.
- 2. ALL POINTS USED AS AN EXIT FROM AREAS OF EXPOSED SOIL MUST HAVE A ROCK STABILIZED CONSTRUCTION ENTRY/EXIT FIFTY FEET (50') IN LENGTH WITH THREE INCH (3") DIAMETER STONE COVER GENERAL CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ACCESS POINTS AND PREVENTING EXIT AT UNPROTECTED LOCATIONS.
- 3. IF "SUMP" PUMPS ARE USED TO REMOVE WATER FROM EXCAVATED AREAS, FILTER THE DISCHARGE TO REMOVE SEDIMENT AND OTHER POLLUTANTS BEFORE THE WATER LEAVES THE SITE.
- 4. PERIMETER EROSION CONTROL MEASURES AND THE ROCK STABILIZED CONSTRUCTION EXIT MUST BE IN PLACED BEFORE STARTING SOIL DISTURBANCE.
- 5. DISTURBED SOIL MUST BE STABILIZED WITHIN 14 DAYS IN AREAS WHERE GRADING IS TEMPORARILY OR PERMANENTLY STOPPED FOR MORE THAN 21 DAYS.
- 6. ALL SURFACE AREAS DISTURBED WITHIN OR ADJACENT TO THE CONSTRUCTION LIMITS MUST BE PERMANENTLY STABILIZED. STABILIZATION IS OBTAINED WHEN THE SITE IS COVERED WITH IMPERVIOUS STRUCTURES, PAVING OR A UNIFORM PERENNIAL VEGETATIVE COVER. THE PERENNIAL VEGETATION MUST HAVE A COVERAGE DENSITY OF AT LEAST 70 PERCENT. STABILIZATION IS REQUIRED BEFORE TERMINATING MAINTENANCE AND REMOVAL OF EROSION CONTROL MEASURES.
- 7. THE GENERAL CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES AT LEAST ONCE EACH WEEK AND WITHIN 24 HOURS AFTER A STORM EVENT OF 0.5 INCH OR GREATER TO MAINTAIN FUNCTION OF THE CONTROLS. MAINTENANCE IS CRUCIAL TO EROSION CONTROL EFFECTIVENESS. EROSION CONTROL MEASURES THAT PROVE TO BE INEFFECTIVE SHALL BE REPLACED WITH MORE EFFECTIVE MEASURES OR ADDITIONAL MEASURES.
- 8. FOR DETAILS OF STABILIZATION AND EROSION CONTROL MEASURES, REFER TO THE CONSTRUCTION BEST MANAGEMENT PRACTICES (BMP) MANUAL PUBLISHED BY NORTH CENTRAL TEXAS COUNCIL OF

#### CONSTRUCTION SEQUENCE

- OBTAIN GRADING PERMIT. 2. INSTALL ALL EROSION CONTROL MEASURES AND DEVICES THAT CAN BE
- INSTALLED PRIOR TO SITE CLEARING.
- CLEAR SITE. 4. INSTALL ANY REMAINING CONTROL MEASURES AND DEVICES THAT COULD
- NOT BE INSTALLED PRIOR TO SITE CLEARING.
- 6. INSTALL ALL UNDERGROUND UTILITIES. INSTALL EROSION CONTROL AROUND CATCH BASINS AND INLETS.
- INSTALL PAVEMENT.

OF F.H. FIRE HYDRANT
OX SET CHISELED "X" SET
OF X. CHISELED "X" FOUND
OF J.R. IRON ROD FOUND (SIZE AS NOTED)

8. INSPECT AND MAINTAIN ALL EROSION MEASURES UNTIL ALL DISTURBED OFFSITE & ONSITE AREAS HAVE BEEN HYDROMULCHED OR SODDED (IN ACCORDANCE WITH THE LANSCAPE PLAN) AND A MOWABLE STAND OF GRASS IS ACHIEVED.



EROSION CONTROL FENCE

**EROSION CONTROL LOCATION** 

CONTRACTOR SHALL MAINTAIN SILT FENCE THROUGHOUT DURATION OF PROJECT.

**BENCHMARK:** 

"CUT ON VAULT AT NORTHEAST CORNER OF THE INTERSECTION OF BELTLINE ROAD & MIDWAY ROAD. ELEVATION= 627.93'

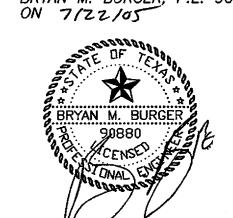


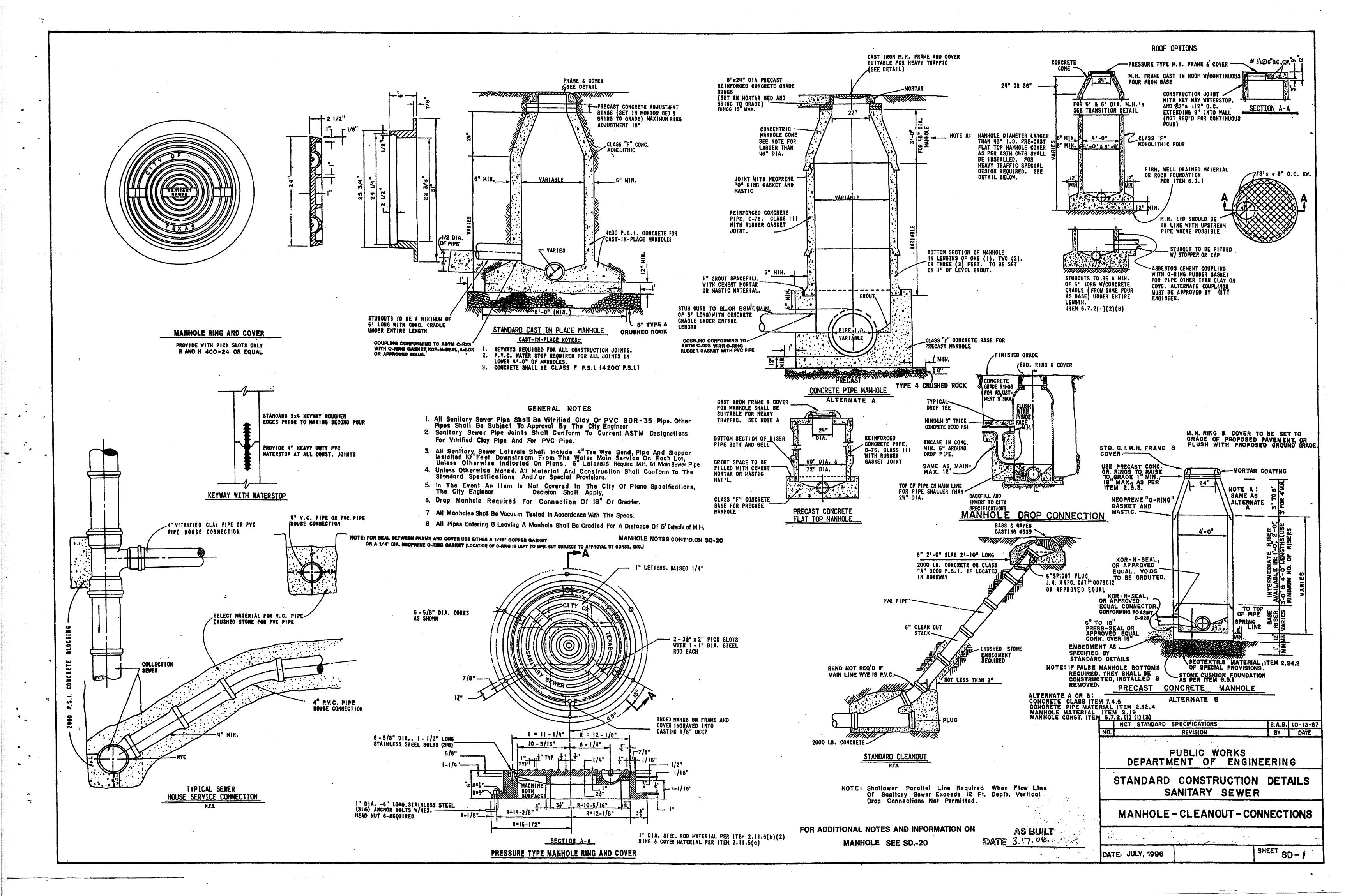


#### **EROSION CONTROL PLAN** STARBUCKS - ADDISON PLAZA ADDITION S.W.C. BELT LINE RD. & MIDWAY RD.

THE TOWN OF ADDISON, TEXAS LAWRENCE A. CATES & ASSOC., LLP CONSULTING ENGINEERS
DALLAS, TEXAS 14800 QUORUM DRIVE, SUITE 200 (972) 385-2272 DATE SCALE DESIGN DRAWN 6/04 1"= 20' D.P. **EROSION** 

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY BRYAN M. BURGER, P.E. 90880





# TYPICAL CONSTRUCTION WARNING SIGN SIZE AND SPACING

ROADWAY CLASSI- FICATION	POSTED SPEED	SIGN SPACING	MAJOR CONSTRUCTION OR MAJOR MAINTENANCE APPROACH WARNING SIGNS CW 20 SERIES AND CW22-1 SIGN		O MAJOR MA APPROACH SI	NSTRUCTION R INTENANCE I WARNING GNS SERIES	OTHER WARNING SIGNS
			STANDARD	MINIMUM <sup>4</sup>	STANDARD	MINIMUM <sup>4</sup>	STANDARD
	MPH	FT.(APPRX.)	INCHES	INCHES	INCHES <sup>7</sup>	INCHES 7	INCHES <sup>7</sup>
CONVEN.	30	80	48 X 48	36 X 36	30 X 30 OR	24 X 24 OR	30 X 30 OR
	35	120			36 X 36	36 X 36	36 X 36
	40	160		<b>↓</b>		<b>\</b>	
	45	240					
	50	320		USE STANDARD		USE STANDARD	
<b>↓</b> .	55	500 <sup>2</sup>	]	SIZE	<b>+</b>	SIZE	<b> </b>
EXP OR FWY	55	500 <sup>3</sup>			48 X 48*	48 X 48*	48 X 48*

▲ MINIMUM DISTANCE FROM WORK TO 1ST ADVANCE WARNING SIGN AND/OR DISTANCE BETWEEN EACH ADDITIONAL SIGN.

\*SMALLER SIGN SIZES MAY BE USED WHERE SIGN DESIGNS HAVE NOT BE INCLUDED IN THE STANDARD TRAFFIC SIGNS DESIGN BOOKLET.

#### GENERAL NOTES:

- 1. SPECIAL OR LARGER SIZE SIGNS MAY BE USED AS MAY BE NECESSARY.
- 2. DISTANCE BETWEEN SIGNS SHOULD BE INCREASED AS REQUIRED TO HAVE 1500' ADVANCED WARNING.
- 3. DISTANCE BETWEEN SIGNS SHOULD BE INCREASED AS REQUIRED TO HAVE 1/2 MILE OR MORE ADVANCE WARNING.
- 4. FOR USE ON SECONDARY ROADS OR CITY STREETS WHERE SPEEDS ARE LOW.
- 5. ONLY DIAMOND SHAPED WARNING SIGN SIZES ARE INDICATED.
- 6. SEE SIGN SIZE LISTING IN APPENDIX A FOR COMPLETE LIST OF ALL AVAILABLE SIGN DESIGN SIZES.
- 7. WHERE TWO SIZES ARE LISTED. SEE SIGN SIZE LIST IN APPENDIX A FOR PROPER SIZE.

# TYPICAL TRANSITION LENGTHS AND SUGGESTED MAXIMUM SPACING OF DEVICES

		M T	INIMUM DESIF APER LENGTH	RABLE IS **	SUGGESTED MAX SPACING OF DEV		
POSTED SPEED	FORMULA	10' OFFSET	11' OFFSET	12' OFFSET	ON A TAPER	ON A TANGENT	
30		150'	165'	180'	30'	60'-75'	
35	$L = \frac{WS^2}{60}$	205'	225'	245'	35'	70'-90'	
40	L <sup>_</sup> 60	265'	295'	320'	40'	80'-100'	
45		450'	495'	540'	45'	90'-110	
50		500'	550'	600'	50'	100'–125'	
55	L≖ WS	550'	605'	660'	55'	110'-140'	
60		600'	660'	720'	60'	120'-150'	

- \* 85TH PERCENTILE SPEED MAY BE USED ON ROADS WHERE TRAFFIC SPEEDS NORMALLY EXCEED THE
- POSTED SPEED LIMIT.

  \*\* TAPER LENGTHS HAVE BEEN ROUNDED OFF.

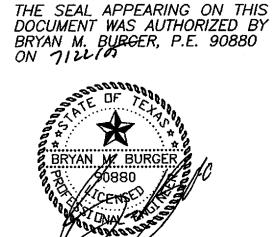
#### 1. TAPER FORMULA END ROAD WORK L = S X W FOR SPEED OF 45 MPH OR MORE. $L = \frac{WS^2}{60}$ FOR SPEEDS OF 40 MPH OR LESS. L = MINIMUM LENGTH OF TAPERS = NUMERICAL VALUE OF POSTED SPEED LIMIT PRIOR TO WORK OR 85 PERCENTILE SPEED W = WIDTH OF OFFSETBARRICADE OR TRUCK 2. THE MAXIMUM SPACING BETWEEN CHANNELIZING WITH ARANGE FLAGS DEVICES IN A TAPER SHOULD BE APPROXIMATELY OR WARNING LIGHTS EQUAL IN FEET TO THE SPEED LIMIT. 3. FLASHING WARNING LIGHTS AND/OR FLAGS MAY BE USED TO CALL ATTENTION TO THE ADVANCE WARNING SIGNS AND/OR EQUIMPMENT. 4. ALL DISTANCES AND SPACINGS SHOWN ARE APPROXIMATE. 5. THE WORD UTILITY MAY BE SUBSTITUTED FOR ROAD IN ALL SIGNS WHERE APPLICABLE. 6. ONE OR MORE FLAGGER TO BE USED WHERE TRAFFIC, ROAD CONDITIONS, OR TERRAIN FORM ONE LINE LEFT WARRENT THEIR USE. POSTED SPEED OR MIN. DISTANCE 85% SPEED (FEET) (MPH) MERGE 30 OR LESS 120 35 160 240 320 500 CLOSED ---CHANNELIZING DEVICES ∞ARROW PANNEL (OPTIONAL) **∆**OPTIONAL WORK **◆ DIRECTION OF TRAFFIC**

MINOR OPERATION ON 4-LANE DIVIDED ROADWAY WHERE ONE LANE IS CLOSED

#### GENRAL NOTES FOR TRAFFIC CONTROL

- 1. FLASHING WARNING LIGHTS AND/OR FLAGS MAY BE USED TO CALL ATTENTION TO THE EARLY WARNING SIGNS.
- 2. DEVICES USED IN A SERIES FOR CHANNELIZATION PURPOSE AT NIGHT SHOULD BE SUPPLEMENTED WITH STEADY BURN LIGHTS OR DELINEATORS AS NEEDED.
- 3. ALL DISTANCES AND SPACINGS SHOWN ARE APPROXIMATE.
- 4. ALL TRAFFIC CONTROL DEVICES USED AT NIGHT SHALL BE REFLECTORIZED OR ILL-UMINATED.
- 5. THE WORD "AHEAD" MAY BE SUBSTITUTED FOR THE ACTUAL DISTANCES ON THE AD-ADVANCE WARNING SIGNS WHERE APPLICABLE.
- 6. THE WORD UTILITY MAY BE SUBSTITUTED FOR ROAD IN ALL SIGNS WHERE AP-PLICABLE.
- 7. WHERE A TAPER IS USED THE TAPER FORMULA IS:
- L= S X W FOR SPEEDS OF 45 MPH OR MORE. L=  $\frac{WS^2}{S}$  FOR SPEEDS OF 40 MPH OR LESS.
- WHERE : L = MINIMUM LENGTH OF TAPER
  - S = NUMERICAL VALUE OF POSTED SPEED LIMIT PRIOR TO WORK OR 85
    PERCENTILE SPEED
  - W = WIDTH OF OFFSET
- 8. WHERE CHANNELIZING DEVICES ARE USED THE MAXIMUM SPACING BETWEEN
  CHANNELIZING DEVICES IN A TAPER SHOULD BE APPROXIMATELY EQUAL IN FEET TO
  THE SPEED LIMIT.
- 9. ONE OR MORE FLAGGERS TO BE USED WHERE TRAFFIC, ROAD CONDITIONS, OR TERRAIN WARRANT THEIR USE. IF FLAGGER IS USED TAPER MAY BE REDUCED TO 50'
- 10. APPROPRIATE ADVISORY SPEED PLATES MAY BE USED IN CONJUNCTION WITH WARNING SIGNS WHEN NEEDED.

AS BUILT DATE 3.17.06



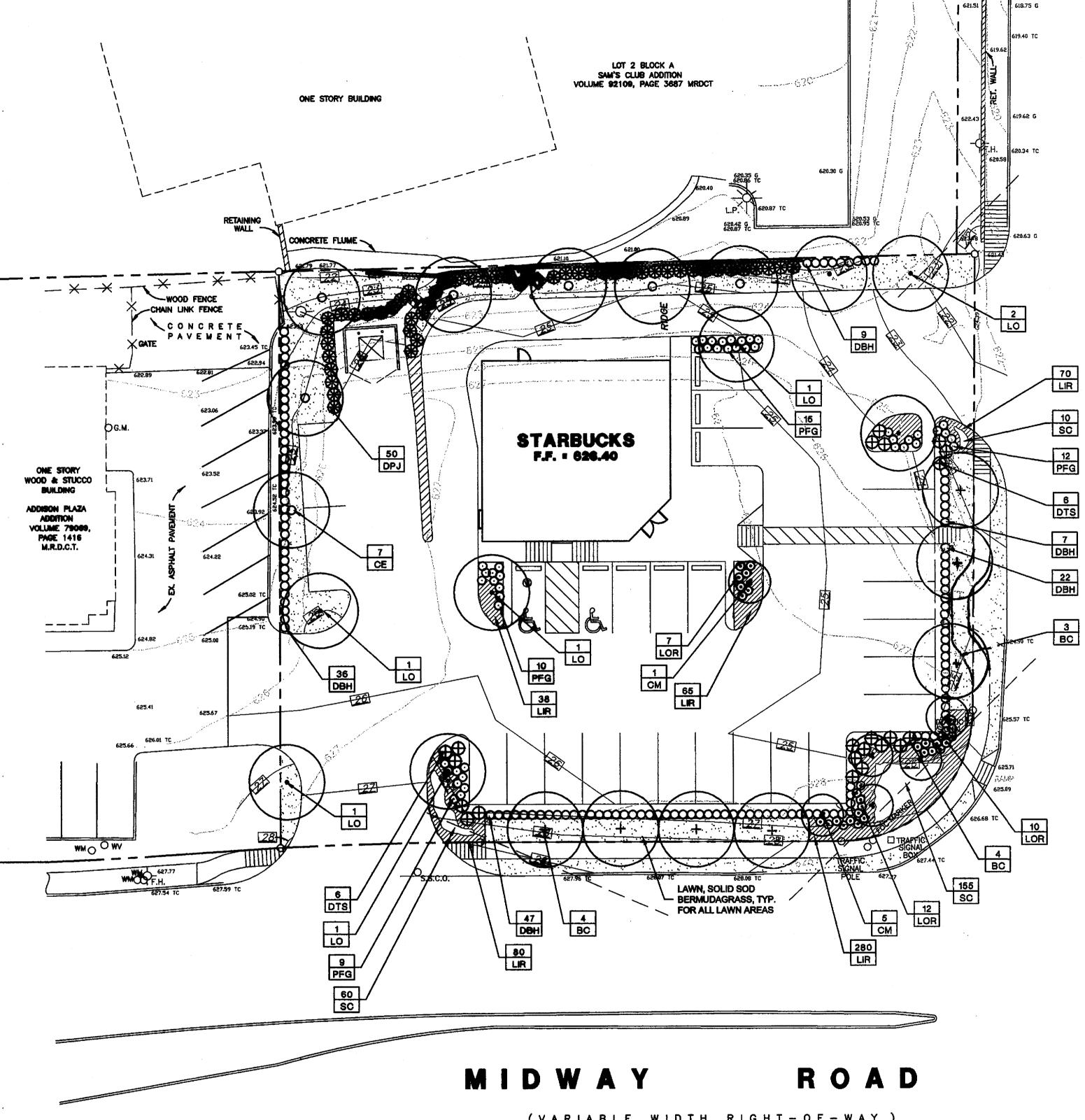
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		T	RA	FI	FIC	CC	N	TR	OL	
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	S.V	N.C.	BEL.	T	LINE	RD.	&	MIDV	VAY	RD.

CITY OF ADDISON, TEXAS

LAWRENCE A. CATES & ASSOC., LLP CONSULTING ENGINEERS 14800 QUORUM DRIVE, SUITE 200 (972) 385-2272 DALLAS, TEXAS

DESIGN DRAWN DATE SCALE NOTES FILE NO.

BMB CAC 6/04 N/S D.P. 23113 TAFFCTRL SD-2



(VARIABLE WIDTH RIGHT-OF-WAY) EX. CONCRETE PAVEMENT

**PLANT LIST BOTANICAL NAME** COMMON NAME container grown, 15' ht. 5' spread, matching Quercus virginiana Taxodium distichum Live Oak Baid Cypress Cedar Elm B&B, 14' ht., 5' spread, matching 7 4" cal. B&B, 14' ht., 5' spread, matching, berried 6 7' ht. container grown, 3-5 cane, no cross caning, 4' spread Crepe Myrtle 'Red' NOTE: ALL TREES TO HAVE STRAIGHT TRUNKS AND BE MATCHING WITHIN VARIETIES SHRUBS/GROUNDCOVER **BOTANICAL NAME** COMMON NAME llex comute 'Burfordii nene'

**Dwerf Burford Holly** container full, 20" ht. 20" spread, 24" o.c. container full, 20" ht. 20" spread, 36" spread Juniperus pfitzeriana nana **Dwarf Pfitzer Junips** 617 4" pots container full top of container, 12" o.c. Liriope muscari 'Big Blue' Liriope 'Big Blue' Loropetalum chinese 'Rubrum container full, 20" spread min., 24" o.c. container full, 18" spread, 24" o.c. Pennesetum alepecuroides container full, 20" ht. 20" spread Leucophyllum x 'Green Cloud' solid sod, refer to notes 225 4" pots container, full plant, 12" o.c.

SYMBOL PLANT TYPE Live Oak CE BC CM DTS DBH Cedar Elm Bald Cypress Crepe Myrtle **Dwarf Texas Sage Dwarf Burford Holly Dwarf Pfitzer Juniper** 

Loropettalum

Lirlope 'Big Blue'

Seasonal Color

**Perennial Fountain Grass** 

**PLANT LEGEND** 

QUANTITY PLANT TYPE

LOR PFG LIR SC

LANDSCAPE NOTES

irrigation permits.

1. Contractor shall verify all existing and proposed site elements and notify Architect of any discrepancies. Survey data of existing conditions was supplied by others.

2. Contractor shall locate all existing underground utilities and notify Architect of any conflicts. Contractor shall exercise caution when working in the vicinity of underground utilities.

3. Contractor is responsible for obtaining all required landscape and

4. Contractor to provide a minimum 2% slope away from all structures.

5. All planting beds and lawn areas to be separated by steel edging. No steel to be installed adjacent to sidewalks or curbs.

6. All landscape areas to be 100% irrigated with an underground

automatic irrigation system and shall include rain and freeze sensors.

7. All lawn areas to be Solid Sod Bermudagrass, unless otherwise noted on the drawings.

**MAINTENANCE NOTES** 

1. The Owner, tenant and their agent, if any, shall be jointly and severally responsible for the maintenance of all landscape.

2. All landscape shall be maintained in a neat and orderly manner at all times. This shall include mowing, edging, pruning, fertilizing, watering, weeding and other such activities common to landscape

3. All landscape areas shall be kept free of trash, litter, weeds and other such material or plants not part of this plan.

4. All plant material shall be maintained in a healthy and growing condition as is appropriate for the season of the year.

5. All plant material which dies shall be replaced with plant material of equal or better value.

6. Contractor shall provide separate bid proposal for one year's maintenance to begin after final acceptance.

**GENERAL LAWN NOTES** 

0

1. Fine grade areas to achieve final contours indicated on civil plans.

Adjust contours to achieve positive drainage away from buildings. Provide uniform rounding at top and bottom of slopes and other breaks in grade. Correct irregularities and areas where water may

3. All lawn areas to receive solid sod shall be left in a maximum of 1" below final finish grade. Contractor to coordinate operations with on-site Construction Manager.

4. Contractor shall provide (2") two inches of imported topsoil on all areas to receive lawn. ADD ALTERNATE.

5. Imported topsoil shall be natural, friable soil from the region, known as bottom land soil, free from lumps, clay, toxic substances, roots, debris, vegetation, stones, containing no salt and black to brown in

6. All lawn areas to be fine graded, irrigation trenches completely settled, and finish grade approved by the Owner's Construction

7. All rocks 3/4" diameter and larger, dirt clods, sticks, concrete spoils, etc. shall be removed prior to placing topsoil and any lawn

**SOLID SOD NOTES** 

1. Fine grade areas to achieve final contours indicated. Leave areas to receive topsoil 3" below final desired grade in planting areas and 1" below final grade in turf areas.

2. Adjust contours to achieve positive drainage away from buildings. Provide uniform rounding at top and bottom of slopes and other breaks in grade. Correct irregularities and areas where water may

3. All lawn areas to receive solid sod shall be left in a maximum of 1" below final finish grade. Contractor to coordinate operations with on-site Construction Manager.

4. Contractor to coordinate with on-site Construction Manager for availability of existing topsoil.

5. Plant sod by hand to cover indicated area completely. Insure edges of sod are touching. Top dress joints by hand with topsoil to fill

6. Roll grass areas to achieve a smooth, even surface, free from unnatural undulations.

7. Water sod thoroughly as sod operation progresses.

8. Contractor shall maintain all lawn areas until final acceptance. This shall include, but not limited to: mowing, watering, weeding, cultivating, cleaning and replacing dead or bare areas to keep plants in a vigorous, healthy condition.

9. Contractor shall guarantee establishment of an acceptable turf area and shall provide replacement from local supply if necessary.

10. If installation occurs between September 1 and March 1, all sod areas to be over-seeded with Winter Ryegrass, at a rate of (4) pounds per one thousand (1000) square feet.

LANDSCAPE TABULATIONS

SITE REQUIREMENTS Requirements: 20% of gross site to be landscape Total Site: 22,733 s.f.

4,546 s.f. (20%) 4,610 s.f. (20%)

STREET FRONTAGE Requirements: 10' buffer along street frontage (1) tree 4" cal. per 20 l.f., (8) shrubs per 20 l.f.

Belt Line Road: 98 l.f. (less drives) Required (5) trees, 4" cal. (5) trees, 4" cal. (50) shrubs, 5 gal. (40) shrubs, 5 gal.

Midway Road: 122 l.f. (less drives) Required (6) trees, 4" cal. (50) shrubs, 5 gal. (48) shrubs, 5 gal.

PARKING LOT SCREEN Requirements: 20" ht., 3' o.c.,

Provided: 20" ht., 2' o.c. linear row

PERIMETER LANDSCAPE Requirements: 5' wide buffer, (1) 4" cal. tree and (8) shrubs per 35 l.f.

West Property Line: 138 i.f. (less drives) (4) tree, 4" cal. (4) trees, 4" cal. (36) shrubs, 5 gal. (32) shrubs, 5 gal.

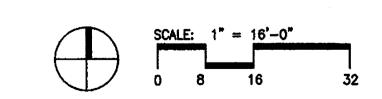
North Property Line: 166 l.f. (5) trees, 4" cal. (5) trees, 4" cal. (40) shrubs, 5 gal. (40) shrubs, 5 gal.

PARKING LOT - INTERIOR LANDSCAPE Requirement: 8% of the parking area must be landscape Parking lot: 9,073 s.f.

850 s.f. (8%) 726 s.f. (8%)

PARKING LOT Requirement: (1) tree per 10 regular spaces Total Parking: 28 spaces (3) trees, 4" cal.

> AS BUILT DATE 3.17.06



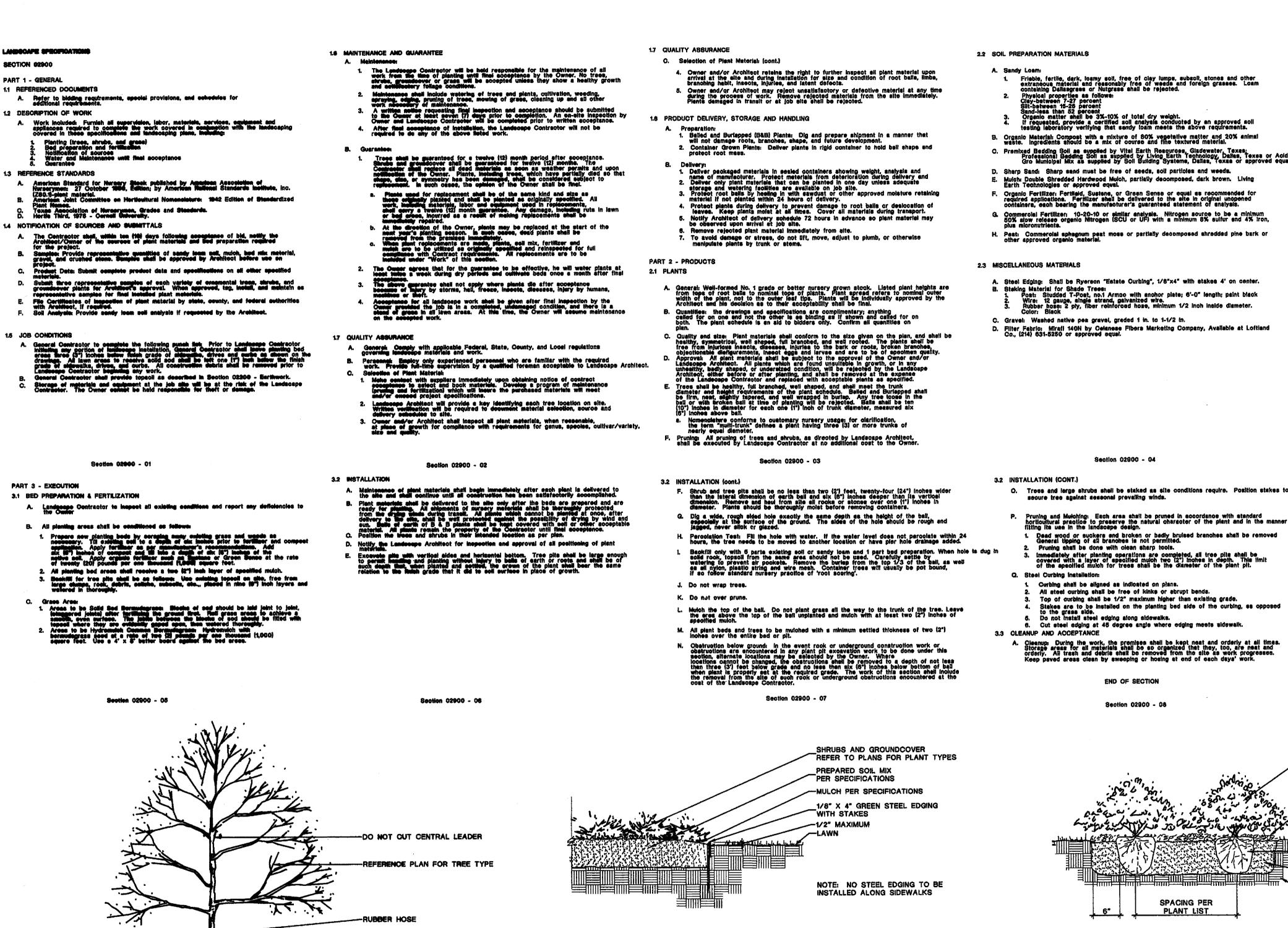




LANDSCAPE PLAN STARBUCKS - ADDISON PLAZA ADDITION S.W.C. BELT LINE ROAD & MIDWAY RD.

THE TOWN OF ADDISON, TEXAS LAWRENCE A. CATES & ASSOC., LLP CONSULTING ENGINEERS 14800 QUORUM DR., SUITE 200 (972) 385-2272 DALLAS, TEXAS DESIGN DRAWN DATE SCALE NOTES BDA 4-28-05 | 1" = 16'

NOTE: Plant list is an aid to bidders only. Contractor shall verify all quantities on plan. All heights and spreads are minimums. All plant material shall meet or exceed remarks as indicated.



2 STRANDS NO. 12 GAUGE

GALVANIZED WIRE, TWISTED

METAL T-POST PAINTED

Green triangular spacing.

-CRUSHED ROCK

PREVAILING WINDS.

ROOTBALL, DO NOT DISTURB. TOP OF ROOTBALL TO BE SET 1" ABOVE

iative soil, ref. **specifications** 

NOTE: LOCATE STAKES OUTSIDE

OF TREE WELL. POSITION STAKES TO SECURE TREE AGAINST SEASONAL

EXISTING GRADE. REMOVE TOP 1/3 BURLAP.

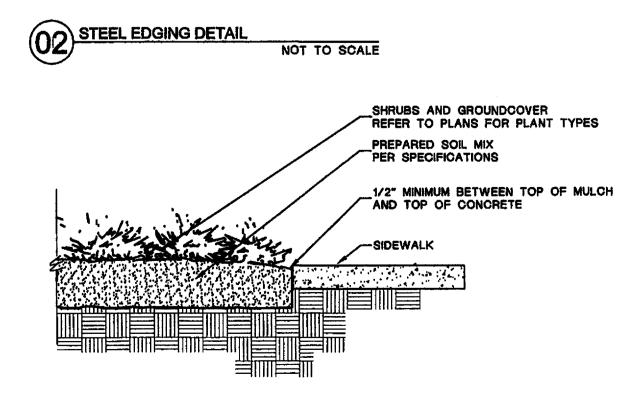
4" DIA. PERFORATED

PVC PIPE W/ CAP-PAINTED BLACK

2X DIAMETER

OF ROOTBALL

2" LAYER MULCH, REF. SPECIFICATIONS



O4 SIDEWALK / MULCH DETAIL
no steel along sidewalks NOT TO SCALE

REF. PLAN FOR SHRUB TYPE

2" LAYER OF SPECIFIED BARK MULCH

FINISH GRADE

ROOTBALL, DO NOT DISTURB

PREPARED SOIL MIX PER SPECS.
8" MIN. OF PREPARED SOIL MIX

TILLED INTO EXISTING SOIL TO

A DEPTH OF 6"

NATIVE SOIL

NOTE: POCKET PLANTING
NOT ALLOWED

NOT TO SCALE

as Built Date 3.17.06

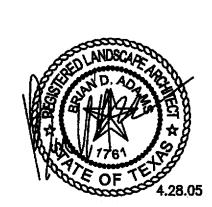
BDA

BDA

4-28-05

SMI landscape architects, inc. 1708 N. Griffin Street Dallas, Texas 75202 Tel 214.871.0083 Fax 214.871.0545

Email smr@smr-la.con



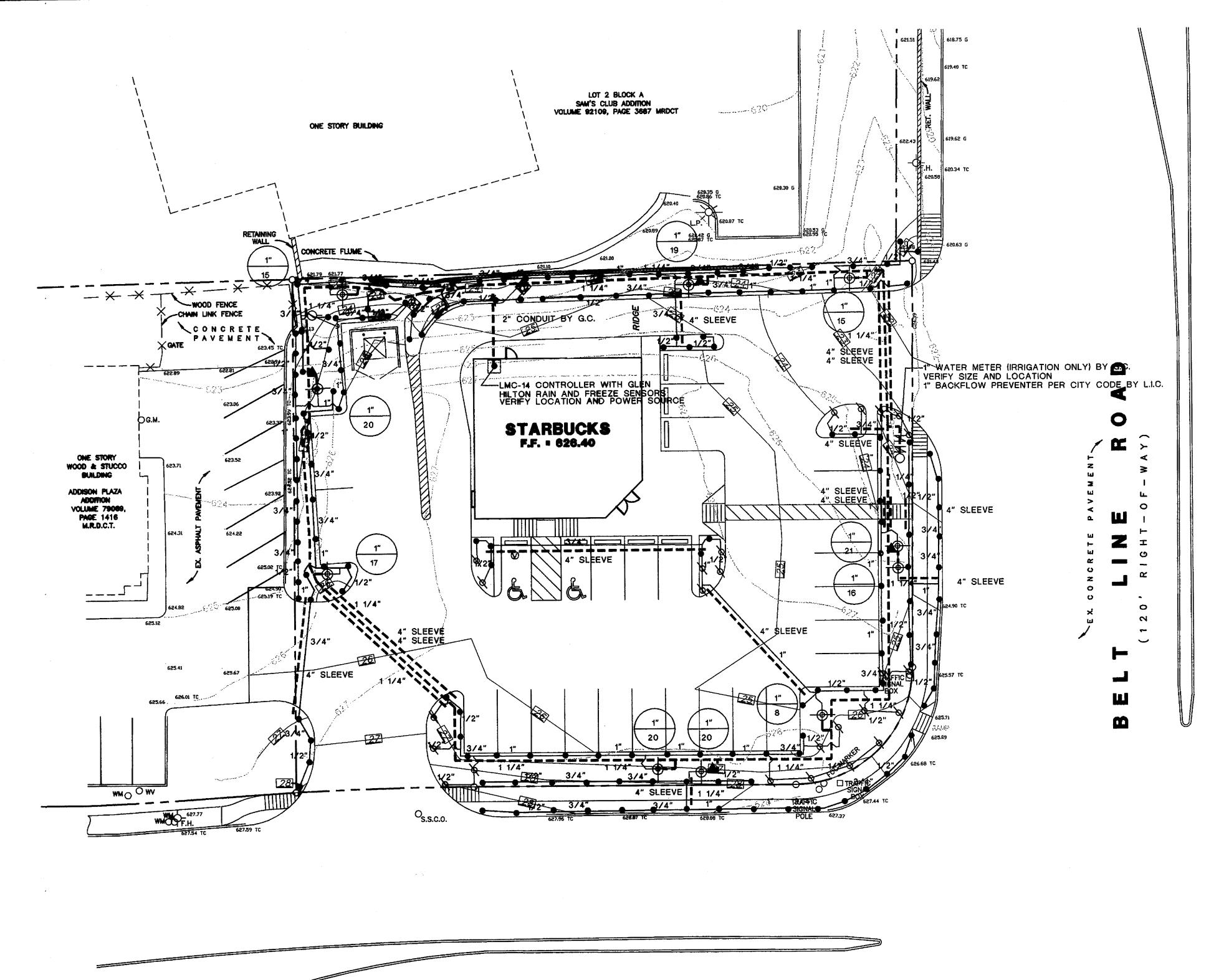
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LANDSCAPE	<b>SPECIFICATIONS</b>
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none

S.W.C. BELT LINE ROAD & MIDWAY RD.

THE TOWN OF ADDISON, TEXAS

LAWRENCE A. CATES & ASSOC., LLP
14800 QUORUM DR., SUITE 200 (972) 385-2272 CONSULTING ENGINEERS
DESIGN DRAWN DATE SCALE NOTES FILE NO.



MIDWAY

ROAD

(VARIABLE WIDTH RIGHT-OF-WAY) EX. CONCRETE PAVEMENT

#### **BUBBLER PIPING CHART**

1-5 BUBBLERS - 1/2" PIPE 6-10 BUBBLERS - 3/4" PIPE 11-20 BUBBLERS - 1" PIPE 21-30 BUBBLERS - 1 1/4" PIPE 31-40 BUBBLERS - 1 1/2" PIPE

#### IRRIGATION LEGEND

- WEATHERMATIC LX-4 POP-UP LAWN HEAD
- WEATHERMATIC LX-12 POP-UP SHRUB HEAD
- WEATHERMATIC TURBO ROTARY FC
- WEATHERMATIC TURBO ROTARY PC
- 106.5 BUBBLER (2 PER TREE)
- WEATHERMATIC 11000 SERIES ELECTRIC VALVE WEATHERMATIC V075R QUICK COUPLER
- CONTROLLER, SIZE AS INDICATED
- WATER METER, SIZE AS INDICATED
- D.C.A., SIZE AS INDICATED
- PVC CLASS 200 LATERAL LINE
- PVC CLASS 200 MAINLINE
- PVC SCHEDULE 40 SLEEVING



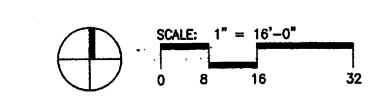
#### **SLEEVING NOTES**

- Contractor shall lay sleeves and conduits at twenty-four (24") inches below finish grade of the top of pavement.
- 2. Contractor shall extend sleeves one (1') foot beyond edge of all
- Contractor shall cap pipe ends using PVC caps.
- All sleeves shall be Schedule 40 PVC pipe.
- Contractor shall furnish Owner and Irrigation Contractor with an 'as-built' drawing showing all sleeve locations.

#### IRRIGATION NOTES

- 1. All sprinkler equipment numbers reference the Weathermatic equipment catalog unless otherwise indicated.
- 2. LAWN SPRAY HEADS are LX-4 installed as per detail shown.
- 3. SHRUB SPRAY HEADS are LX-12 installed as per detail shown.
- 4. ELECTRIC CONTROL VALVES shall be #11000 CR installed per detail shown. Size valves as sown on plan. Valves shall be installed in value boxes large enough to permit manual operation, removal of solenoid and/or valve cover without any earth excavation.
- QUICK COUPLING VALVES shall be #VO75R installed per detail shown. Swing joints shall be constructed using 3/4" Schedule 80 elbows. Contractor shall supply owner with three (3) #CO75 couplers and three (3) #10 swivel hose ells as part of this contract.
- AUTOMATIC CONTROLLER shall be installed at location shown.
   Power (120V) shall be located in a junction box within five (5') feet of controller location by other trades.
- Ali 24 volt valve wiring is to be UF 14 single conductor. All wire splices are to be permanent and waterproof.
- 8. SLEEVES shall be Installed by General Contractor. Sleeve material shall be Schedule 40. Size as indicated on plan.
- 9. Ten days prior to start of construction, Landscape or Imigation Contractor shall verify static water pressure. If static pressure is less than 65 P.S.I., do not work until notified to do so by Owner.
- 10. All main line and lateral piping to a minimum of 12 inches of cover. All piping under paving shall have a minimum of 18" of cover.
- 11. The Irrigation Contractor shall coordinate installation of the system with the Landscape Contractor so that all plant material will be watered in accordance with the intent of the plans and specifications.
- 12. The Irrigation Contractor shall select the proper arc and radius for each nozzle to insure 100% and proper coverage of all lawn areas and plant material. All nozzles shall be Weathermatic 5500 Series. All nozzles in parking lot islands and planting beds shall be low angle to minimize over spray on pavement surfaces. No water will be allowed to spray on building.

as Built DATE 3.17.06



smr landscape architects, inc. 1708 N. Griffin Street
Dallas, Texas 75202
Tel 214.871.0083
Fex 214.871.0545
Email amr@smr-la.com

REV. DATE REMARKS

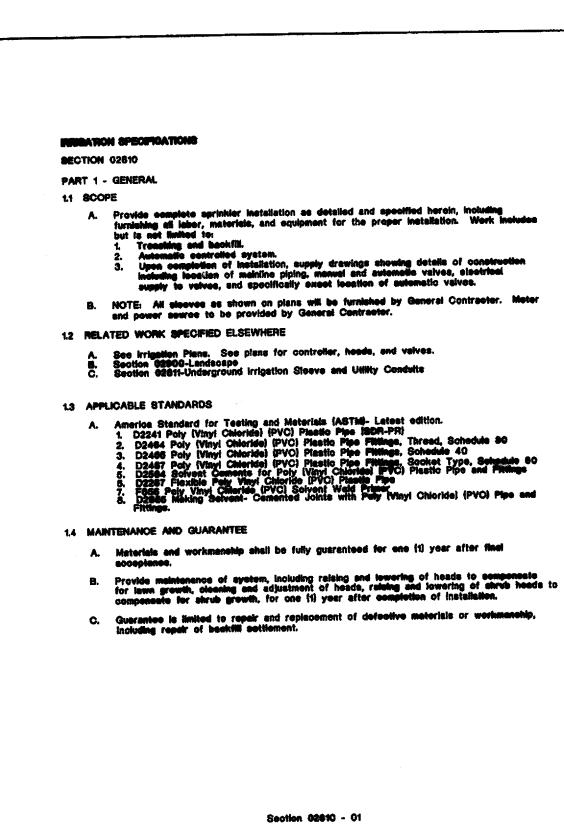
IRRIGATION PLAN

STARBUCKS - ADDISON PLAZA ADDITION

S.W.C. BELT LINE ROAD & MIDWAY RD.

THE TOWN OF ADDISON, TEXAS LAWRENCE A. CATES & ASSOC., LLP CONSULTING ENGINEERS
DALLAS, TEXAS 14800 QUORUM DR., SUITE 200 (972) 385-2272 DESIGN SCALE NOTES DATE FILE DRAWN JJW JJW 4-28-05 | 1" = 16'





A. Sprinkler Mains: Test aprinkler main only for a period of twelve (12) to feurteen (14) hours under normal pressure. If tesks ecour, replace joint or joints and repeat test.

8. Complete tests prior to backfilling. Sufficient backfill material may be placed in tranches between fittings to insure stability of line under pressure. In each case, leave fittings and couplings open to visual inspection for full period of test.

A. After inetallistion has been completed, make final adjustment of sprinkler system in properation for Landscape Architect's final inspection. Completely flush system to remove debrie from these and turning on system. Check sprinklers for preper operation and proper alignment for direction of flow. Check each sestion of spray heads for operating pressure and belance to other sections by use of flow adjustment and top of each valve. Check nozzling for proper coverage. Preveiling wind conditions may indicate that arch of engle of spray should be other than shown on drawings. In this case, shance nozzles to provide correct coverage.

END OF SECTION Section 02810 - 05

case, change nozzies to provide correct coverage.

Section 02810 - 02

FINISHED GRADE - MULCH

SPECIFIED SPRAY NOZZLE AND BODY

S X S X T PVC SCHEDULE 40 PVC OUTLET TEE OR ELL

SCHEDULE 40 PVC STREET ELL (S X MPT)

CLASS 200 PVC LATERAL LINE

MALE ADAPTER (MIPT X S)

FLEXIBLE PVC (LENGTH AS REQUIRED)

approvel.

Project Record Documents

1. Comply with Division 1 requirements.
2. Leasts by written dimension, reuting of mainline piping, remote control valves and
3. When dimensioning is complete, transpose work to myler reproducible tracings.

Weekings will be provided by Architect.

4. Submit completed tracings prior to final acceptance. Mark tracings "Record Prints

5. Provide three complete operation menuals and equipment brochures neetly bound in

5. Provide three complete operation menuals and equipment brochures nestly bound in Quick Coupter Keys: Provide 3 coupter keys with boiler drains attached using brass reduces Controller Keys: Provide two sets of keys to controller enclosure(s). Use of meterials differing in quality, size, or performance from those specified will only be allowed uses written approved of Counce/Landscape Architect. The decision will be based on comparative ability of meterial or article to parform fully all pruposes of mechanics and general design considered to be possessed by item specified.

Bitaliers destine to make a substitution for specified sprinklers shall submit manufacturers contains about the state of each type sprinkler proposed as a substitute, including discharge in GPM meximum allowable operating pressure at apprinter.

eprintier.

Approved of substitute aprinter shall not relieve Contractor of his responsibility to demonstrate that final installed aprinter system will operate seconding to intent of columnly designed and specified system.

It is the responsibility of the irrigation Contractor to demonstrate that final installed aprinter system will operate seconding to intent of originally engined and specified system. If trigation Contractor notes any problems in head specing or potential ecuarage, it is his responsibility to notify the Landscape Architect in writing, before proceeding with work. Irrigation Contractor guarantees 186% coverage of all areas to be irrigated.

A. Perform testing required with other trades, including sertimork, paving, and plumbing, to avoid unnecessary outling, petching and boring.

B. Weter Pressure: Prior to starting construction, determine if static water pressure is at

A. Coordinate installation with other trades, including earthwork, paving, and plumbing, to avoid unnecessary outling, patching and boring.
 Coordinate to ensure that electrical power source is in piece.

Coordinate system installation with work specified in other sections and occidents with leaderspe installer to ensure plant material is uniformly watered in accordance with intent shown on drawings.

A. Meinline: Piping from water source to operating valves. This portion of piping is subject to surges, being a closed pertion of sprinkler system. Hydrent lines are considered a part of sprinkler main.

B. Lateral Piping: Lateral piping is that portion of piping from operating valve to aprinkler heads. This portion of piping is not subject to surges, being an "open end" portion of aprinted system.

1.5 SUBMITTALS

PART 2 - PRODUCTS

Section 02810 - 03

2.2 POLY VINYL CHLORIDE PIPE (PVC PIPE)

2.4 COPPER TUBE FITTINGS

2.7 MATERIALS - See irrigation Pian

plented trace or shrubs.

A. PVO pipe shall be manufactured in accordance with commercial standards noted herein.

O. PVC Pipe Fittings: Shall be of the same material as the PVC pipe specified and shall be compatible with PVC pipe furnished.

A. Type UF with 4-64" insulation which is Underwriter's Laboratory approved for direct underground burist when used in a National Electric Code Class ii Circuit (30 volts AC or less).

A. Composed of Standard Schedule 40 PVC Fittings and PVC meeting noted standards. No clamps or wires may be used. Nipples for 1812 heads and shrub risers to be nominal one-half (1/2") inch diameter by eight (8") inches long, where applicable.

B. Polyethylene nipples six (8") inches long to be used on all 1804 and 1806 pop-up spray heads.

A. Sprinkler heads in lawn area as specified on plan.

B. PVC Pipe: Class 200, SPR 21
Copper Tubing (City Connection): Type "M"
24V Wire: Size 14, Type U.F.

C. Electric valves to be all plastic construction as indicated on plans.

D. Refer to drawing for backflow prevention requirements and flow valve. Coordinate exact location with Landscape Architect.

A. Staking: Before installation is started, place a stake where each sprinkler is to be located, in accordance with drawing. Staking shall be approved by Landscape Architect before proceeding.

B. Excavations: Excavations are unclassified and include earth, locae rock, rock or any combination thereof, in wet or dry state. Beakfill transhes with material that is suitable for compaction and contains no lumps, clods, rock, debris, etc. Special backfill specification, if furnished take preference over this general specification.

C. Backfill: Flood or hand-tamp to prevent after settling. Hand rake transhes and adjoining area to leave grade in as good or better condition than before installation.

D. Piping Layout: Piping layout is disgrammatic. Route piping around trees and shrubs in such a manner as to avoid damage to plantings. Do not dig within bell of newly planted trees or shrubs.

A. Hard, straight, lengths of domestic manufacture only. No copper tube of foreign extrusion or any so-called irrigation tubing (thin wall) shall be used.

A. Cast brass or wrought copper, sweat-solder type.

B. Marking and identification: PVC pipe shall be continuously and permanently marked with the following information: manufacturer's name, pipe size, type of pipe, and material, SDR number, product standard number, and the NSF (National Sanitation Foundation)

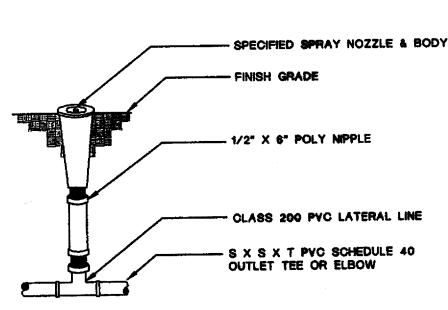
A. Sprinkler Mains: Install a four (4") Inch minimum trench with a minimum of eighteen (18") inches of cover.

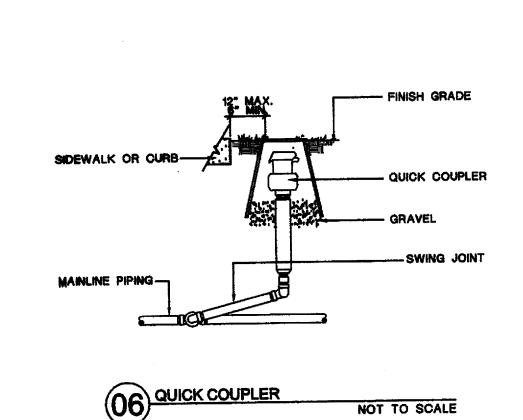
B. Lateral Piping: install a four (4") inch wide minimum trench deep enough to allow for installation of sprinkler heads and valves, but in no case, with less than twelve (12") inches of cover.

C. Trenching: Remove lumber, rubbish, and large rocks from trenches. Provide firm, uniform bearing for entire length of each pipe line to prevent uneven settlement. Wadging or blocking of pipe will not be permitted. Remove foreign matter or dirt from inside of pipe before welding, and keep piping clean by approved means during and 3.3 PVC PIPE AND FITTING ASSEMBLY A. Solvent: Use only solvent recommended by manufacturer to make solvent-welded joints. Thoroughly clean pipe and filtings of dirt, dust and moisture before applying B. PVC to metal connection: Work metal connections first. Use a non-hardening pipe dope such as Permatex No. 2 on threaded PVC adapters into which pipe may be A. Clean pipe and fitting thoroughly and lightly send pipe connections to remove residue from pipe. Attach fittings to tubing in an approved manner using 50-50 soft solid core 3.5 SHRUB SPRAY HEADS (FIXED) A. Shrub Spray Heads: Supply in accordance with materials list, with nozzling in accordance with drawings. Drawings indicate size of nozzling and degree of arc. Determine correct degree of arc of nozzle (if conditions warrant) by area to be covered and by wind conditions that may affect coverage.

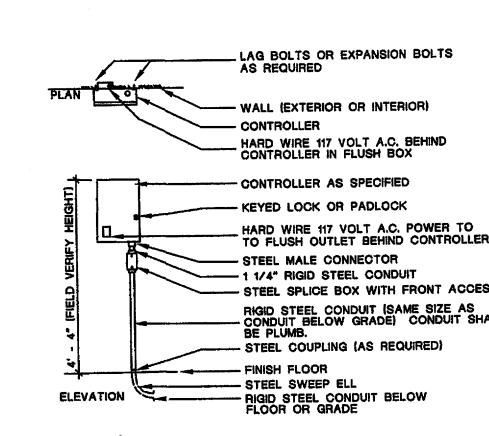
B. Height: Install heads on PVC Schedule 80 risers sufficiently high to water under shrubs and plants, or as directed by the Landscape Architect. Supply pop-up spray heads in accordance with materials list and plan. Attach sprinkler to lateral piping with a semi-flexible polyethylene nipple not less than tree (3") inches or more than six (6") inches long. A. Supply valves in accordance with materials list and sized eccording to drawings. Install valves in a level position in accordance with Manufacturer's Specifications. See plan for typical installation of electric valve, valve box. A. Supply wiring from the automatic sprinkler controls to the valves. No conduit will be required for U.F. wire unless otherwise noted on the plan. Wire shall be tucked under the plan. B. A separate wire is required from the control to each electric valve. A common neutral wire is also required from each control to each of the valves served by each particular Bundle multiple wires and tape them together at ten (10") foot intervals. Install ten (10") inch expension coll at not more than one hundred (100") foot intervals. Make spilces 3.9 AUTOMATIC SPRINKLER CONTROLS A. Supply in accordance with irrigation Plan. Install according to manufacturer's

FINISH GRADE ROTARY HEAD SWING JOINT 01 ROTARY HEAD NOT TO SCALE

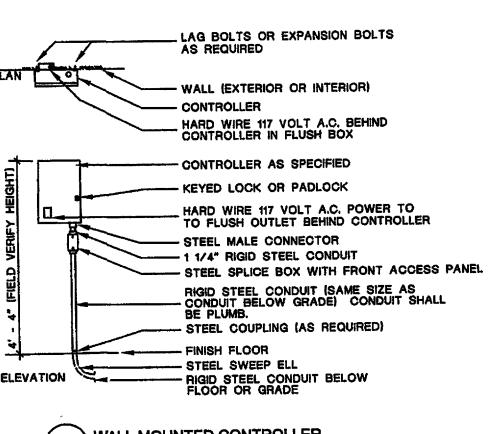




ELEVATION



ISOMETRIC



- VALVE BOX FLUSH WITH FINISH GRADE

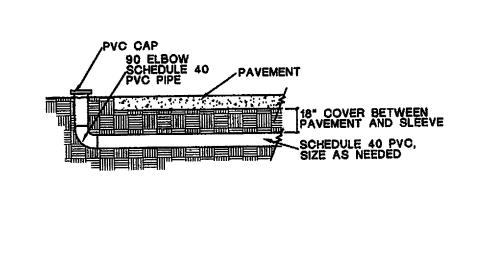
REMOTE CONTROL VALVE WITH 24" LONG LOOP OF CONTROL WIRE

SCHEDULE 40 PVC FITTINGS

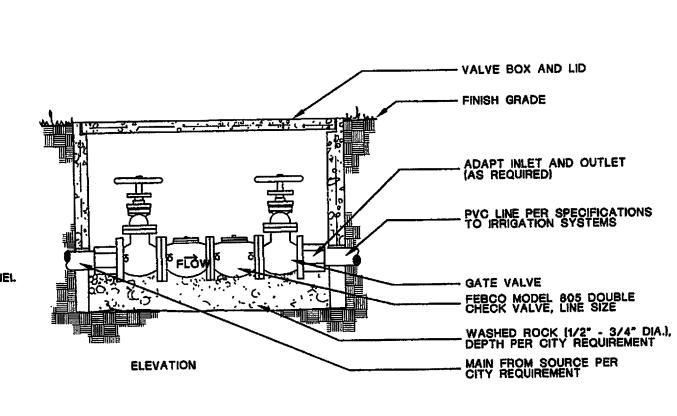
NOT TO SCALE

- PEA GRAVEL

- 45 DEGREE ELL

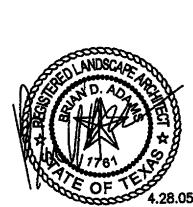


NOT TO SCALE



04 SLEEVE DETAIL

NOT TO SCALE



as Built DATE 3.17.06

• •

IRRIGATION SPECIFICATIONS STARBUCKS - ADDISON PLAZA ADDITION S.W.C. BELT LINE ROAD & MIDWAY RD. THE TOWN OF ADDISON, TEXAS

landscape architects, inc.

1708 N. Griffin Street Dallas, Texas 75202 Tel 214.871.0083 Fax 214.871.0545

LAWRENCE A. CATES & ASSOC., LLP CONSULTING ENGINEERS DALLAS, TEXAS 14800 QUORUM DR., SUITE 200 (972) 385-2272 NOTES DATE SCALE DESIGN 4.28.05 BDA BDA none

#### MECHANICAL AND ELECTRICAL SPECIFICATIONS

PART 1 - GENERAL

#### 1.1. CODES AND STANDARDS

- A. Obtain all permits, inspections and approvals required by authorities having jurisdiction. All fees and costs incidental thereto shall be assumed and paid for.
- B. All work shall be executed in accordance with all local, state and national codes, ordinances and regulations governing the particular class of work involved.
- C. All work shall be executed according to current best practices.

#### 1.2 SCOPE

A. This specification includes the furnishing of all labor, materials, tools, equipment drayage, rigging, fees, permits, etc. (unless specifically indicated to be furnished by others) necessary or reasonably required for the completion of installation of all work shown on the drawings and herein specified. Verify all utility requirements prior to purchasing and installing equipment. The entire work shall be delivered complete in perfect working order and to the complete satisfaction of the Owner's representative.

#### 1.3 WARRANTY

A. Warrant that all labor and materials provided in execution of work under this contract to be free from defects for a period of one year from date of final acceptance of the work. Any malfunction, breakdown or failure of the installation herein described which may be due to defects in the work or the materials employed shall be replaced promptly without further cost to the Owner and to the full satisfaction of the Owner's representative.

#### 1.4 RELATED WORK SPECIFIED ELSEWHERE

A. Division 1 through 14 and General Conditions including Addenda and Supplementary Instructions.

#### 1.5 BACKFILLING AND TRENCHING

- A. Minimum cover to top of lines to be per N.E.C. and utility companies' requirements, unless noted otherwise.
- B. Backfill may be material obtained from trenching, less rocks and hard objects.
- C. Maintain required clearances from other utility systems' buried lines.

#### 1.6 UTILITIES

- A. Contractor shall coordinate all required utilities and shall provide all necessary materials, labor and equipment in a timely manner to facilitate reception of utilities services at the convenience of the involved utilities.
- B. Contractor shall verify all utility requirements prior to purchasing and installing
- C. Existing service facilities are illustrated in a general manner. Contractor shall visit the site and determine the exact conditions pertaining to existing service facilities prior to submitting his bid as Contractor is responsible for all work involved with existing service facilities.
- D. Extend site utilities to building to make complete systems regardless of plan dimensions, indications, etc.
- E. Provide written confirmation of coordination to Owner's representative prior to commencing work.
- F. Coordinate installation of utility companies work to maintain construction

#### 1.7 SUBMITTALS

- A. Provide shop drawings and product data for the following, as applicable:
  - Light fixtures and poles
  - Wiring devices and coverplates
  - Pull, outlet and junction boxes
  - Disconnect switches Panelboards
  - Fu**se**s
  - Breakers Time clocks
  - 10. Lighting contactors
  - 11. Cabinets 12. Conduit and fittings
  - 13. Wires and cables 14. Supports
  - 15. Identifying materials

#### B. Provide samples upon written request.

#### 1.8 SUBSTITUTIONS

- A. Substitutions will be considered after a contract is awarded. Prior approval of proposed substitutions is specifically excluded from this work.
- B. Proposed substitutions data submitted shall include all data necessary to prove substitute equal to specified products and shall include a unit cost change to the contract amount.

#### 1.9 IDENTIFICATION

- A. Contractor shall identify all electrical equipment as follows:
  - 1. For wire: Brady, Ideal or equal self-laminating adhesive wrap-on markers at each accessible point.
  - 2. For buried conduits: Brady indent—o—line or equal inert tape in trench 12" above top of conduit.
  - 3. For switchgear and cabinets: Embossed brass tags secured to item with non-corroding screws.
  - 4. For panelboards' circuits: Typewritten circuit directories in plastic envelope secured inside panelboard door.

#### 1.10 DISCREPANCIES

A. Contractor shall refer all discrepancies to Owner's representative for resolution in writing prior to bid or Contractor assumes responsibility for resolving discrepancies in a manner designated by Owner's representative at no extra cost

#### PART 2 - PRODUCTS AND INSTALLATION

#### 2.1 MATERIALS

- A. New, free from defects.
- B. Standard products of manufacturers.
- C. Like materials of same manufacturer.
- D. Specification grade for commercial construction.

#### 2.2 CONDUITS

- A. Direct buried Schedule 40 PVC with GRS elbows and GRS where exposed. Provide GRS where required by authorities or utility companies.
- B. Concealed conduits in dry locations; EMT.
- C. Provide bonding bushings as required by City.
- D. Where conduits are installed in landscape area, install conduits as close to curb as practical in order to avoid subsequent installation of landscape items.
- E. Field stake all buried raceways and call Owner's representative for authorization to proceed prior to commencing installation.
- F. Coordinate all openings, holes, slots, etc. with other trades prior to commencing work. Resolve discrepancies in the work to the satisfaction of the Owner's representative without additional costs to the Owner.

#### 2.3 CONDUCTORS

- A. Copper, 98% conductivity, 600 volt, 90°C, #12 minimum.
- B. For feeders and branch circuits in conduit type THHN/THWN.
- C. Color coding:
  - 120/208
  - Phase A black
  - Phase C blue

Phase B - red

- Neutral white
- Ground green
- D. Connections mechanical clamp type or compression type. Split bolt connectors not permitted.

#### 2.4 PULL, JUNCTION AND OUTLET BOXES

- A. Materials and Location:
  - 1. Exterior malleable cast iron or Ferralloy with gaskets, corrosion resistant
- 2. Buried Brooks Products or equal concrete with concrete locking covers.
- B. Boxes shall be of size and shape to best meet the needs of their particular purpose and location. Specified sizes shall not be altered without express written approval of the Owner's representative.

#### 2.5 SWITCHGEAR

- A. Square D. Siemens, Challenger or approved equal.
- B. Panelboards:
  - 1. Of ratings, capacities and mounting indicated 2. Do not use main breakers unless indicated otherwise 3. Bond neutrals to ground at panels per City inspector requirements.
- C. Circuit breakers:
  - 1. Thermal magnetic, quick-make, quick-break, trip-free, indicating with ratings indicated and required, ambient compensated.
- 2. Multi-pole breakers with common trip and one handle. Handle ties not permitted.
- D. Disconnect switches: NEMA 3R, heavy duty of ratings indicated.
- E. Fuses: Bussmann current limiting type of ratings indicated.
- F. Time clocks and lighting contactors: as indicated on plans.

#### 2.6 GROUNDING

A. Provide grounding (circuit, system and equipment) per Article 250 of NEC, IEEE applicable standards and the requirements of local authorities having jurisdiction.

#### 2.7 DESCRIPTION OF GAS PIPING SYSTEM

- A. Coordinate, verify and provide all work and materials as required by gas company. Provide written confirmation of coordination to Owner's representative prior to commencing work. Coordinate installation of gas company work to maintain construction schedules.
- B. Verify exact location of all gas piping stub—ups and piping prior to gas company

AS BUILT DATE 3.17.06



ROBINETT & ASSOCIATES

2714 W. KINGSLEY ROAD SUITE B1 GARLAND, TEXAS 75041

(972) 840-8989

MEP REQUIREMENTS STARBUCKS - ADDISON PLAZA ADDITION

2 11/01/05 DELETED SITE LIGHTING SPECIFICATIONS, SCHEDULE AND BASE DETAIL REV. DATE REMARKS

S.W.C. BELT LINE RD. & MIDWAY RD THE TOWN OF ADDISON, TEXAS

LAWRENCE A. CATES & ASSOCIATES, L.L.P. CONSULTING ENGINEERS (972) 385-2272 DATE | SCALE | NOTES DESIGN DRAWN NO. 1"=20" RAR RAR 08/24/05 R&A#36-04

\*\*\begin{align\*} \begin{align\*} \beg +0.3 +0.4 +0.6 +0.9 +1.5 +24 +3.1 +3.5 +3.6 +3.9 +3.8 +3.5 +3.6 +3.9 +3.8 +3.9 +3.7 +3.8 +4.4 +4.0 +2.6 +1.7 +0.6 +0.6 +0.4 +0.2 +0.2 +0.1  $^{\dagger}0.3$   $^{\dagger}0.4$   $^{\dagger}$   $^{\dagger}0.6$   $^{\dagger}1.0$   $^{\dagger}1.7$   $^{\dagger}2$   $^{\dagger}$   $^{\dagger}4.3$   $^{\dagger}$   $^{\dagger}6.6$   $^{\dagger}7/2$   $^{\dagger}7$ #\$\\ \frac{1}{6\overline{10}} \quad \frac{1}{6.6} \quad \frac{1}{7.1} \quad \frac{1}{8.0} \quad \frac{1}{13.4} \quad \frac{1}{9.1} \quad \frac{1}{6.9} \quad \frac{1}{2.5} \quad \frac{1}{1.1} \quad \frac{1}{0.7} \quad \frac{1}{0.4} \quad \frac{1}{0.2} \quad \frac{1}{0.1} \quad \quad \frac{1}{0.1} \quad \qu +0.3 +0.5 +0.8 +1.2 +2.1 | 3.9 +5.9 | +7.0 +7.1 +6.8 | †0.3 †0.5 †0.9 †1.4 †2.5 | 5.4 | †7.9 †9.3 †6.2 | †5.3  $^{+}3.6$   $^{+}3.6$   $^{+}4.3$   $^{+}6.7$   $^{+}12.9$   $^{+}9.4$   $^{+}7.5$   $^{+}3.4$   $^{+}1.6$   $^{+}0.8$   $^{+}0.5$   $^{+}0.3$   $^{+}0.2$ +0.3 +0.5 +0.8 +1.3 +3.5 71.4 +9.0 +12.7 +4.9 +3.7  $^{+}2.8$   $^{+}2.8$   $^{+}3.3$   $^{+}4.2$   $^{+}6.1$   $^{+}6.7$   $^{+}6.7$   $^{+}6.1$   $^{+}3.6$   $^{+}1.9$   $^{+}1.0$   $^{+}0.7$   $^{+}0.4$   $^{+}0.2$  $^{\dagger}0.3$   $^{\dagger}0.5$   $^{\dagger}0.8$   $^{\dagger}1.3$   $^{\dagger}3.6$   $^{\dagger}7.0$   $^{\dagger}8.4$   $^{\dagger}9.9$   $^{\dagger}4.1$   $^{\dagger}2.8$ +0.3 +0.8 +1.3 +2.4 +3.0 +6.5 +7.5 +3.6 +2.4 +2.2 +2.3 +2.4 +2.5 +3.0 +3.5 +5.0 +8.8 +7.4 +5.2 +2.4 +1.2 +0.8 +0.4 +0.2 +0.3 +0.4 +0.7 +1.0 +1.7 +3.4 +4.1 +3.4 +2.5 +2.3 +2.3 +2.3 +2.3 +2.3 +2.3 +2.3 +2.5 +2.9 +3.4 +4.7 +10.2 +4.5 +6.5 +3.8 +1.3 +0.8 +0.4 +0.2 +<del>0.2</del> +<del>0.4</del> +0.6 +0.9 +1.5 +2.5 +3.2 +3.0 +2.8 +3.0 +2.8 +3.0 +2.6 +2.6 +2.6 +2.6 +2.6 +2.6 +2.7 +3.0 +3.0 +4.1 +4.6 +10.2 +8.5 +4.8 +3.8 +3.8 +1.5 +1.0 +0.6 +0.3 +0.2 +0.3 +0.5 +0.9 +1.6 +2.1 +2.5 +3.3 +4.6 +4.4 +4.6 +3.7 +2.9 +3.3 +3.8 +3.5 +3.2 +3.6 +5.5 +5.7 +8.1 +7.1 +7.1 +5.1 +2.8 +1.8 +1.3 +0.6 +0.3  $^{+}0.2$   $^{+}0.4$   $^{+}0.6$   $^{+}1.2$   $^{+}1.8$   $^{+}2.4$   $^{+}4.0$   $^{+}9.9$   $^{+}7.5$   $^{+}11.3$   $^{+}6.2$   $^{+}3.9$   $^{+}5.1$   $^{+}5.2$   $^{+}5.1$   $^{+}4.4$   $^{+}4.8$   $^{+}10.3$   $^{+}8.6$   $^{+}12.4$   $^{+}7.7$   $^{+}4.2$   $^{+}2.5$   $^{+}1.6$   $^{+}0.9$   $^{+}0.5$   $^{+}0.2$ 0.1 | +0.1 | +0.2 +0.3 +0.6 +1.2 +2.0 +3.7 +6.4 | +7.7 | +5.8 +5.2 +9.8 +6.9 +1.1 +6.8 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 | +8.1 +5.7 \*\*To.0 \*\*O.1 \*\*O.1 \*\*O.1 \*\*O.1 \*\*O.2 \*\*O.3 \*\*O.5 \*\*O.7 \*\*O.6 \*\*O.8 \*\*1.0 \*\*1.0 \*\*1.3 \*\*1.7 \*\*1.7 \*\*1.1 \*\*1.0 \*\*1.1 \*\*1.0 \*\*0.7 \*\*O.4 \*\*O.2 \*\*O.1 \*\*O.1

#### NOTES

- Caic at grade level
   Mounting Height based on
- 2. Mounting Height based on a 20' pole on a 30" pier

STATISTICS						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	+	2.3 fc	13.4 fc	0.0 fc	N/A	N/A

						₹ .v			
Symbol	Label	Qty	Catalog Number	Description	Lamp	File	Lumens	LLF	Watts
	SA	6	CM-A-H400-H3-F-Q- -PS-F2-HS	MEDALLIONLI RECTANGULAR AREA LIGHT TYPE III REFLECTOR CLEAR FLAT GLASS LENS INTERNAL HOUSE SHIELD	400W CLEAR ED28 METAL HALIDE, HORIZONTAL POSITION	L4990CM.ies	36000	0.72	400
	SB	2	CM-A-H400-H5-F-Q- -PS-F2	MEDALLION RECTANGULAR AREA LIGHT TYPE V REFLECTOR, CLEAR FLAT GLASS LENS	400W CLEAR ED28 METAL HALIDE	L5090CM.ies	36000	0.72	800

Date 3.17.06



ROBINETT & ASSOCIATES

2714 W. KINGSLEY ROAD SUITE B1 GARLAND, TEXAS 75041

(972) 840-8989

SITE PLAN - PHOTOMETRICS

STARBUCKS - ADDISON PLAZA ADDITION

S.W.C. BELT LINE RD. & MIDWAY RD.

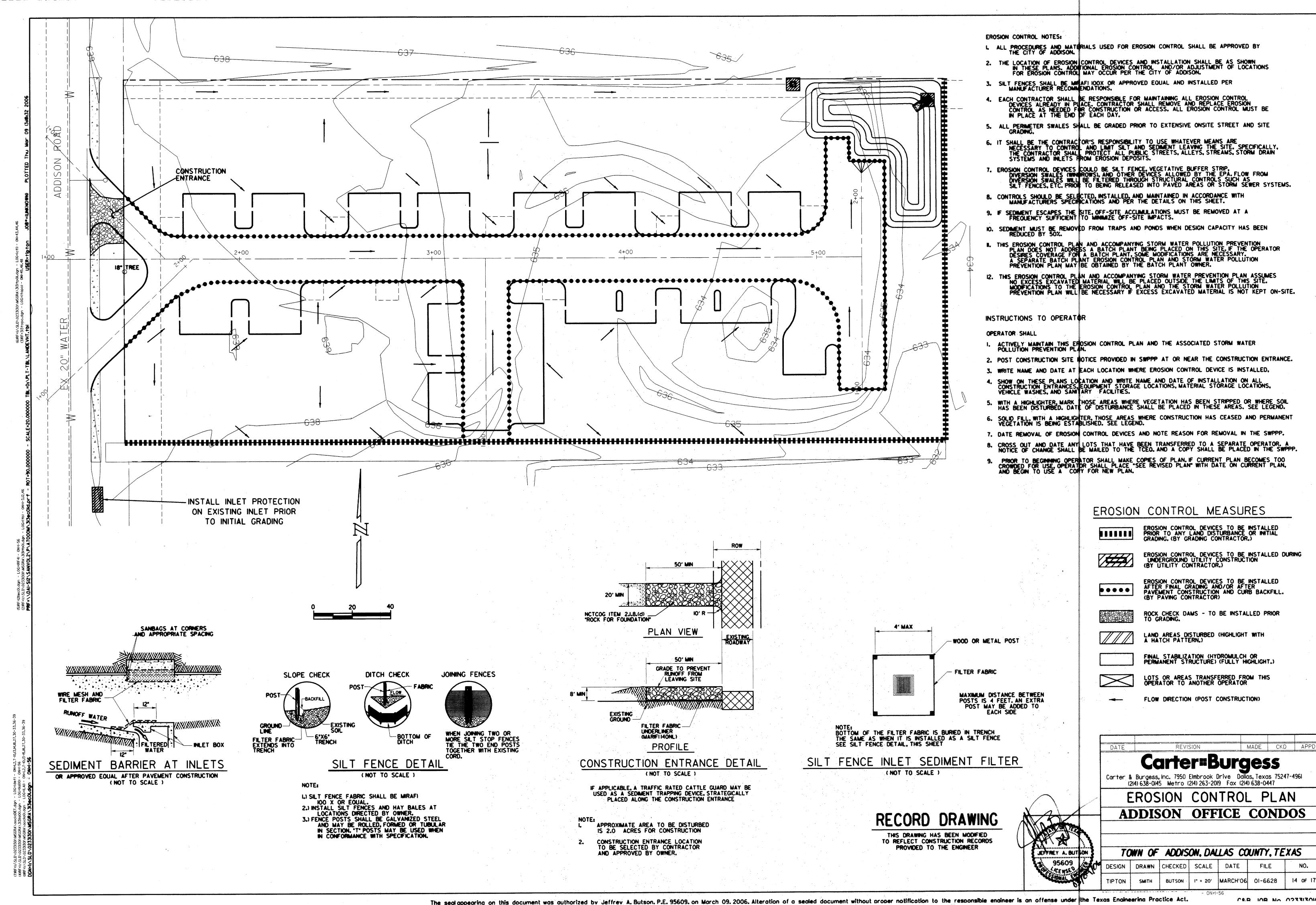
THE TOWN OF ADDISON, TEXAS

THE TOWN OF ADDISON, TEXAS

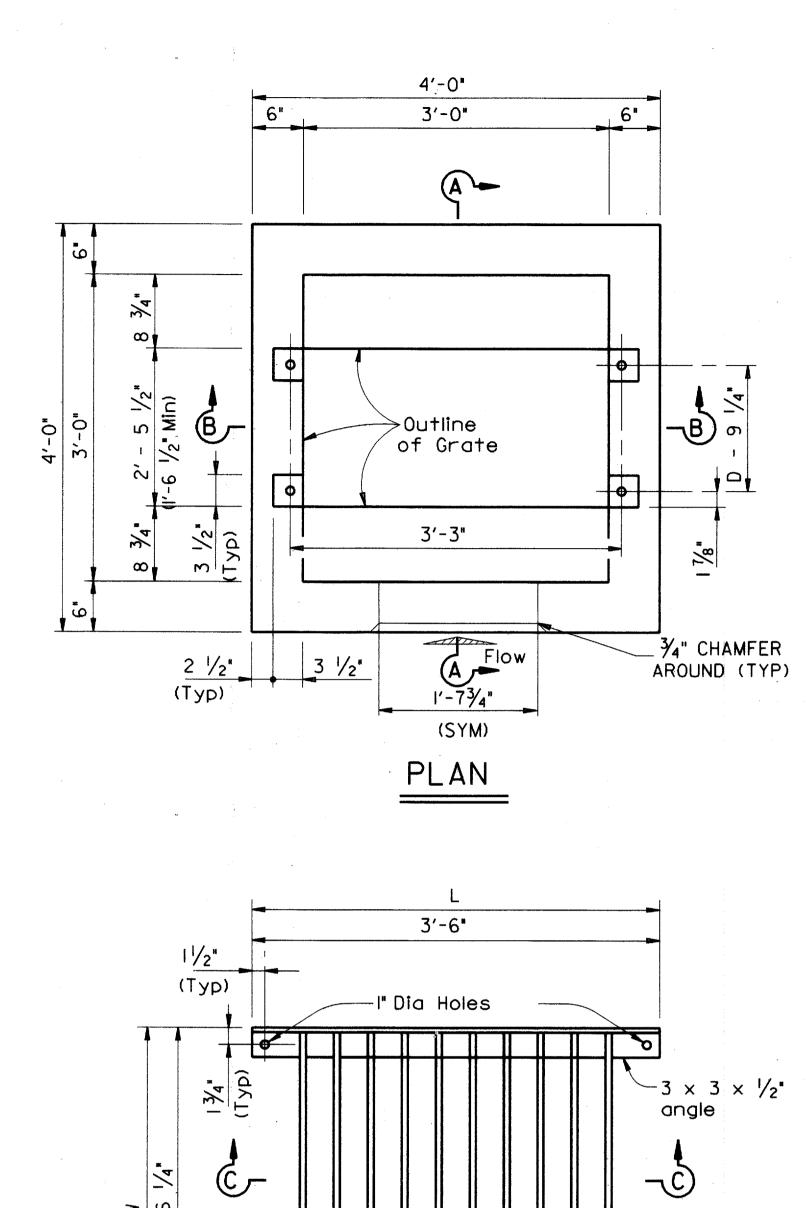
LAWRENCE A. CATES & ASSOCIATES, L.L.P. CONSULTING ENGINEERS DALLAS, TEXAS

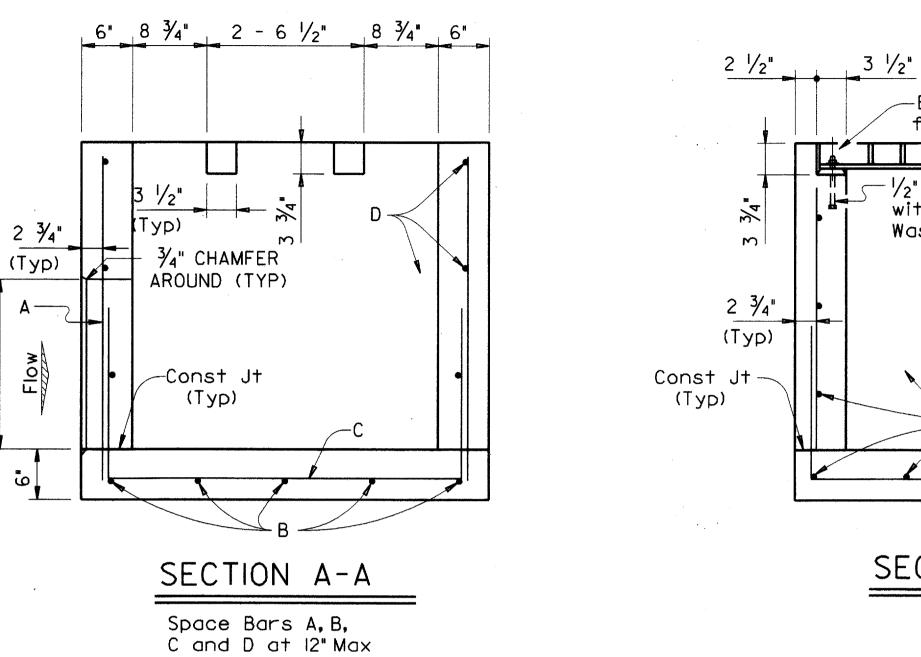
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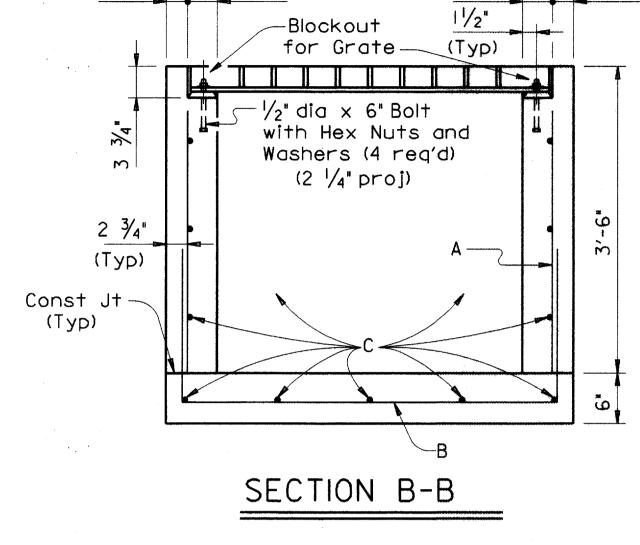
RAR RAR 08/24/05 1"=20' - 23113 R&A#36-04 MEP-3

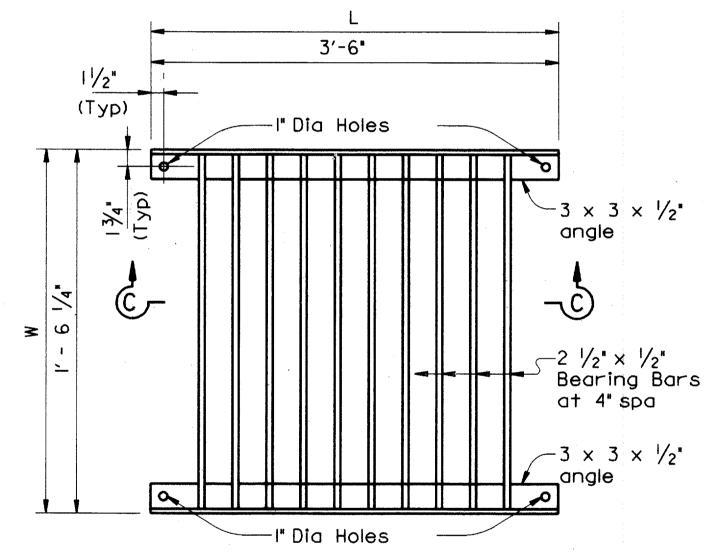


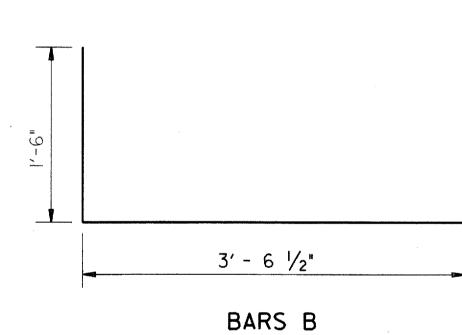
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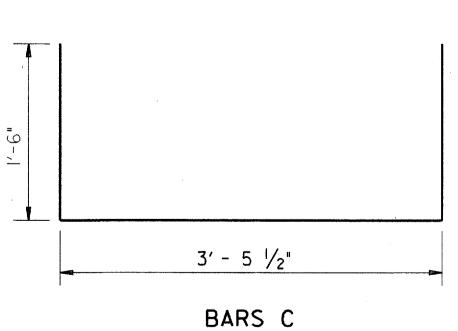


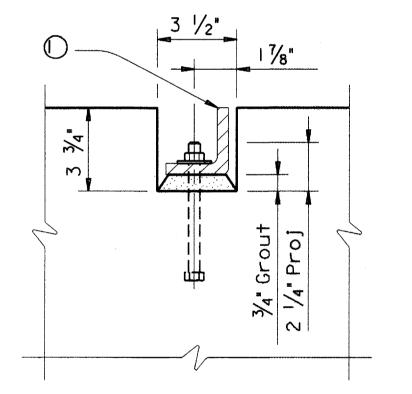






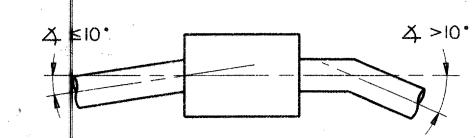
7 ¾ (DIA)





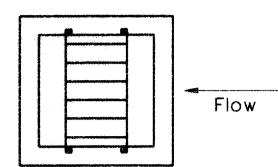
#### GRATE MOUNTING DETAIL

OInterior angle with 4 ~  $\frac{1}{2}$ " dia x 6" Bolts, Hex Nuts and Washers



PIPE CONNECTION DETAIL

Connecting pipes should enter within 10° of normal to inlet wall. If necessary, pipe elbow or curved approach alignment should be used to stay within this limit.



#### GENERAL NOTES:

Duantities shown hereon are for Contractor's information only. Unless otherwise shown in the plans, payment will be made for each inlet of the Type specified.

Alternate design drawings bearing the seal of a registered professional engineer will be acceptable for precast construction of the

Shop drawings will not be required.
The Contractor may with the approval of the Engineer furnish inlets of equivalent structural

n areas of conflict between reinforcing steel, blockouts, pipes, anchor belts or other reinforcing steel, the reinforcement shall be bent or adjusted to clear as directed by the Engineer.

Structural Steel for grates shall conform to the requirements of ASTM Designation A-36 or AIS Designation MI010-MI020.

All reinforcing steel shall be #4 unless

otherwise noted.

The pipe diameter, "D", to be used in determining horizontal dimensions of Type "H" Inlet, shall be the largest pipe entering or exiting the inlet which would control that particular walldimension. For vertical dimension, use largest "D" or 1'-0" above highest pipe soffit as a minimum dimension. All steel components except reinforcing,

shall be galvanized after fabrication. Galvanizing damaged during transport or construction shall be repaired in accordance with the specifications.

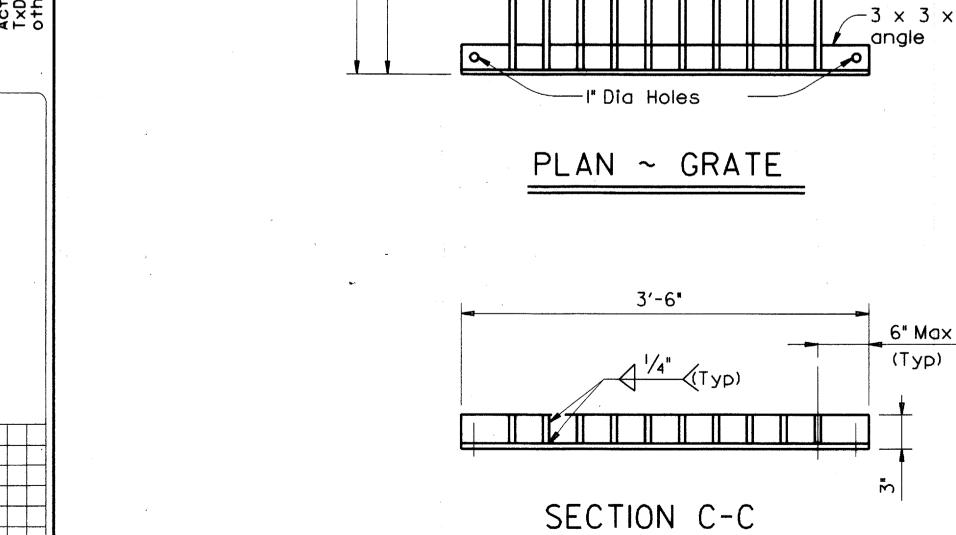


Texas Department of Transportation Bridge Division

HORIZONTAL INLET TYPE H

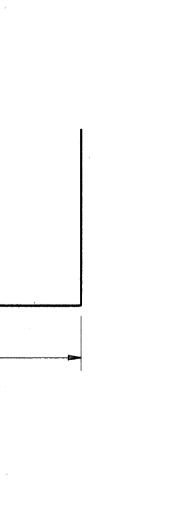
IL-H

DN: TXDOT CK: TER DW: MCB CK: TER/GAF il-hstde.dgn xDOT September 2000 DISTRICT FEDERAL AID PROJECT SHEET 15 OF I REVISIONS CONTROL SECT JOB HIGHWAY COUNTY



rd is governed by the "Texas Engineering Find is made by TxDOT for any purpose what lity for the conversion of this standard rect results or damages resulting from its

++-+-



		DETENT	ION BA	ISIN FL	OW	DATA		
	Direct	Diverted	Total	Time of	Woited	Intensity	100 Yr	
<b>Des</b> cription	Area	Area	Area	Conc. •	Coef.	100 Year	Flow Rate	REMARKS
	(Acres)	(Acres)	(Acres)	(min)	"c"	(In./Hr.)	(cfs)	·
	2	3	4	5	6	7	8	9
SIDE DITCH DRAMAGE AREA *****								
PROPOSED CONDITIONS ••	0.26		0.26	10	0.80	8.74	1.82	For design of West property line swale.
including: Commercial Development	0.26		0.26	10	0.80	8.74	1.82	
L OFFSITE AREA								
EXISTING CONDITIONS •	2.2		2.2	15	0.40	7.52	6.62	
IL STORM DRAIN LINE SD-I	2.46		2.46	15	0.44	7.52	8.18	Only for design of SD-I
V. PROPOSED BUSINESS TRACT FLOW								
EXISTING CONDITIONS .	1.86		1.86	15	0.40	7.52	5.59	
PROPOSED CONDITIONS	1.86		1.86	10	0.80	8.74	13	
including: Commercial Development	1.86	<b>.</b>	1.86	10	0.80	8.74	13	
V. TOTAL ULTIMATE QUITFLOW ***								
EXISTING CONDITIONS	4.06		4.06	15	0.40	7.52	12.2	Flow for sizing the controlling structure
PROPOSED CONDITIONS	4.06		4.06	15	0.58	7.52	17.8	Assumed with detained offsite flow.

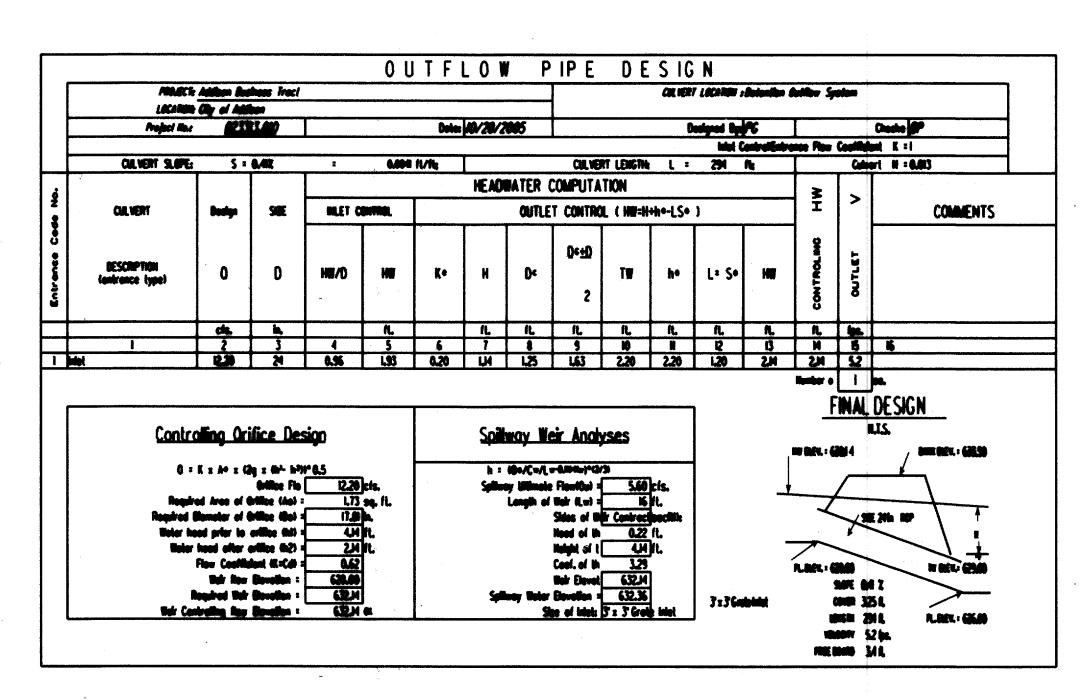
Motes: • - Time of Concentration is estimated, based on single-family residential development land use.

•• - Detention volume determined as a difference of the proposed Commercial and single-family residential land use.

••• - Detention Basin Controlling structure sized based on ultimate combined outflow through detention basin.

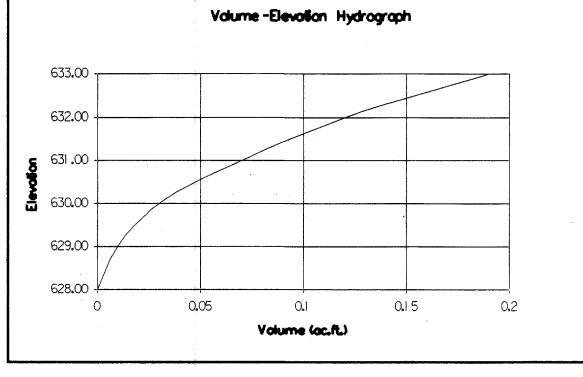
•••• - Offsite area flows is assumed to be detained by others.

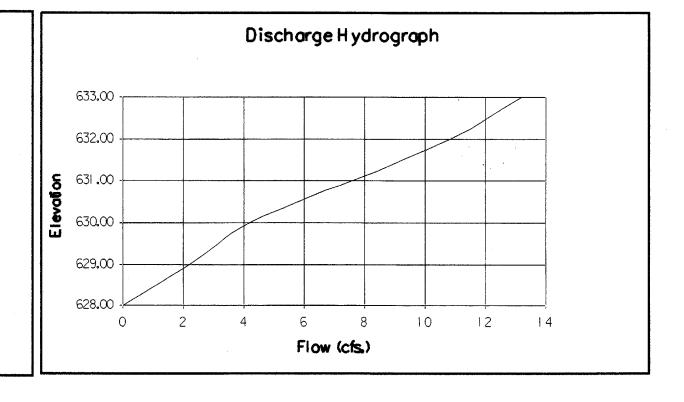
·	VIII.	are oreu	10 m2 12 0	Southed (	U DE DE	TUMBU U	Other 20							
DETENTION BASIN CALCULATIONS														
•		EXISTING			PROPOSE	0	Total	Area	Rain	() main	() main	() main	High Water	Storage
<b>Designation</b>	Coef.	Tc	Intensity	Coef.	Tc	Intensity	Existing	Proposed	Frequency	Existing	Proposed	Released	Elevation	Volume
Area	"C"	(min)	(in/hr.)	"c"	(min)	(in/hr.)	(Ac.)	(Ac.)	(yr.)	(cfs)	(cfs)	(cfs)	(Ft.)	(c.f.)
l	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Addison Business Tract	0.40	15	7.52	0.58	15	7.52	4.06	4.06	100	12.2	17.8	12.2	632.14	5,663



PROJECT: Addition Business Tract							IPE DESIGN  COLUENT LOCATION: Bockside Drahaga, Line SD-1										
LOCATION City of Addison						The second contrast to the second to the second sec											
Project No.s 023313.010				Dates	10/20/2	005	Designed BysiPG						Checke (AP				
				<u> </u>										nfrance Flow Coefficient   K : 1			
	CULVERT SLOPE:	<b>S</b> :	4,762	3	0.04%	fl/ft;		***	CILVE	T LENGTH	. L :					rt N = 0.013	
٠						HEADWATER COMPUTATION								_			
į	CULVERT	Deelen	SIZE	MLET C	ON TOOL	QUTLET CONTROL ( HW=H+h+-LS+						1		<b>≱</b> >		COMMENTS	
Ì		ouey.		met'E, A	mer comme content				1 Constant (188-11-11-172- )				1		COMMENTS		
Ü									De#D					9			
ğ	DESCRIPTION	•				<b>.</b>			עביט	-		ا . ا		3			
Entrone	(antrance type)	0	0	HW/D	HW	K•	H	D<		TW	h•	L: S•	HW	CONTROLING	DUTLET	•	
									2					į	°		
		cis.	in,	ļ	(L		14.	fl.	4	4.	45	61	4	1.	i dan		
		2	3	4	5	6	7	16	11,	/L	11.	fi. 12	1 <u>L</u> 13	14	<b>15</b>	K	
ī	3 x 3 Drep Idel	LIE	18	1,09	1,64	0.20	0.53	LJ0	130	314	314	1,00	2.67	2,57	146	<del></del>	
			Culvert o	pproach (					<u> </u>					Number o		<b>16.</b>	
_	Channel II =	0.030		<u> </u>	<del></del>		CEONETH	7	<del></del>		···				L	***	
1														FIN		<u>ESIGN</u>	
Ĭ	COMMEL LOCATION	Rain Intensity	Design Flow() d	Bottom MAN	Side Slope (Z/I)	Dopthd	ie.	StepeS	Hyd RodH	Vol. Flow V	Flow AreeA				N.T.S	i.	
	FACTORISM				12/1/	-			'				, HOT EI	er: 632.6	7	MAR ELEV. : 635.30	
٥.		yeer	cls	ft		11	A	Z	ft.	ips	<b>36.</b> /L						
I	UPSTREAM	100	1,82	0	3	0.58	3	0,77	0.27	LB.	\$		<u> </u>	/		\	
					1				del Sizing -Ameriyasi	<u> </u>	7	1		I			
									Flow(Os) =	5.60	lete				/9E		
							-		Ber (Lw) =	15				*		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
									rection (1th		each		6.6	Ev. : 6300		W ELEV- 63214	
									Head of th	0.27			ruci		e akz	IN COLUMN COLUMN	
									Height of t		Jtt.				2 359 L		
								<b>L-A</b> -	Coel, of th	3.40					- 33.2 1 3 L		
								Milion	Elevetten =	634.00 634.27					Y II SE		
									High Bole ze of Inick:		1	I		FREE BOAR			

DETENTION VOLUME ANALYSIS							
Volume	Area	Area	Volume	Volume Sum	Flow		
Elev.	(sq.ft.)	(ac.)	(ac.ft.)				
628.00	0	0.000	0.00	0.00	0		
629.00	759	0.017	0.01	0.01	2.2		
630.00	1,325	0.030	0.02	0.03	2.2 4.2		
631.00	1,943	0.045	0.04	0.07	7.6		
632.00	2,824	0.065	0.05	0.12	10.8	le collect	
633.00	3,645	0.084	0.07	0.19	13.2	1	
				·_			
	IOO YEAR	DETENTION	VOLUME	ANALYSIS			
	Require	Detention	Volume =	0.13	ac.ft.		
	Require Hi	gh Water E	levation:	632.14			
	Design Hi	632.14					
	•	Detention		0.13	ac.ft.	<b>L</b>	





RECORD DRAWING

13.00

THIS DRAWING HAS BEEN MODIFIED TO REFLECT CONSTRUCTION RECORDS PROVIDED TO THE ENGINEER

PHOTE COLLER	7
87141 Cr ase Onal	3

Detention Basin-C Outflow Hydrograph

DETENTION

Rain Intensity ( = 7.52 in/hr.

Rain Intensity | 4 = 8.74 in/hr.

riangular pattern of Design Storm Duration (Tb=Y1/04+30): 2012 min. Required Design Storm Duration (Tp=Tb+3/8):

iting Required Storage Volume SVR =Max(Sv); 5,655 cl.

The same in (acre-ft) 0,13 acre-ft.

Time Lag of Design Storm Duration (Tieg=Tc (d)-Tp): 2.# min.

otal Design Rainfall (TR =| •T ¢/60):

Peak Runoff Ratio (go / gi): 0.43

for 100

all (TR =| •Tc/60): 1.46 in. Total Design Runoff (R =K•C•TR): 1.16 in.

Total Design Runoff Volume @ Proposed Site Condition(Vi =A•R•3630): 7,864 cf.

Total Runoff Valume from project site at existing condition (Vo =Tb+Qo+30)8.388 cf.

BASIN DESIGN

Hydrograph Required Storage Volume per Modified Rational Method (SVh =Vi-Vo): 3.576 cf.

Storm Frequency = 100

Storm Frequency = 100

The some in (ocre-ft)

COMMENTS & ASSUMPTIONS

100 Year Detention Volume Hydrograph

Time (min.)

Required Storage Volume SV =Max(Sv.SR): 5,655 cf.

Required Storage Volume in (acre-ft): 0.13 acre-ft Designed Storage Volume in (ocre-ft): 0.13 ocre-ft

----- Valume Hydrograph

0 ocre-ft.

100 Year Storm
Project No. 023313.010

DATE	REVISION	MADE	CKD	А
	Carter Bu	rges	5	
arter 8	Burgess.Inc. 7950 Elmbrook Drive	Dallas, Texa	s 75247-4	961

(214) 638-0145 Metro (214) 263-2019 Fax (214) 638-0447

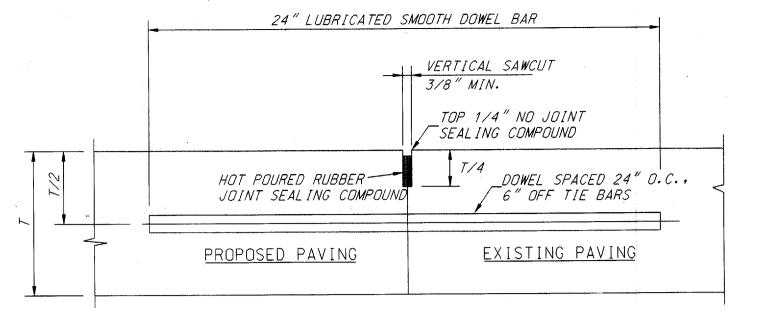
DRAINAGE CALCULATIONS

ADDISON OFFICE CONDOS

TOWN OF ADDISON, DALLAS COUNTY, TEXAS DESIGN DRAWN CHECKED SCALE

1. Incremental volume computed by the Conic Method for Reservoir Volumes.
2. Volume = (1/3) x (EL2 - EL1) x (Areal + Area2 + sq. rt. (Areal x Area2)) Where: ELI - Lower elevation of increment: EL2 - Upper elevation of increment. Areal - Lower area of increment: Area2 - Upper area of increment.

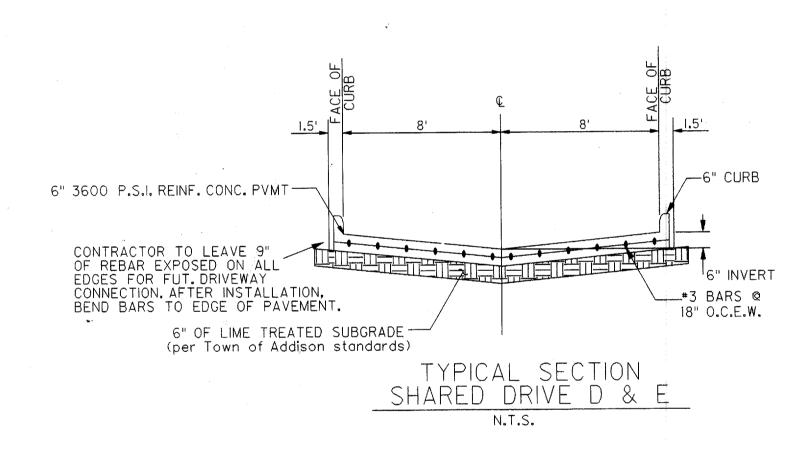
> DGN=d:\SLD\0233I30I\MSGRA\3I3Id+02.dgn
> Texas Engineering Practice Act. The seal appearing on this document was authorized by Pyotr I. Guler. P.E. 87141. on March 09, 2006. Alteration of a sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the sealed document wi CAR IND NIV USESISUIU

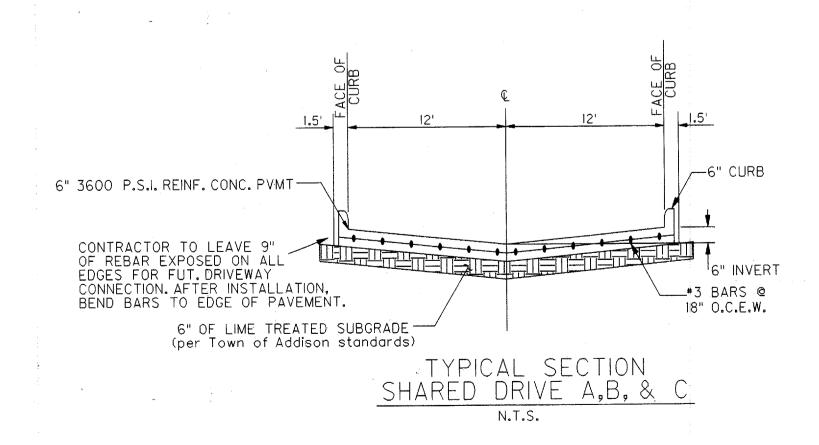


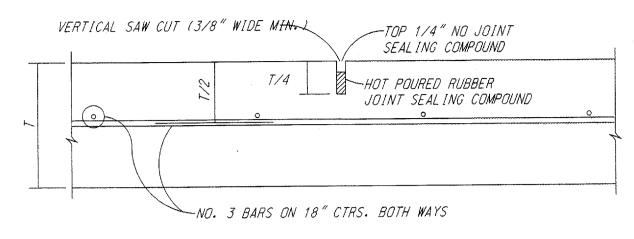
NOTE: 1. T-8" AND GREATER NO. 6 BAR, T-6" AND LESS NO. 5 BAR

- 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. HAND DRILLING NOT ACCEPTABLE. DAMAGE TO EXISTING PAVEMENT SHALL BE REMOVED BY CONTRACTOR AND JOINT CONSTRUCTED AT CONTRACTORS EXPENSE.
- 4. DOWEL BAR SHOWN IS IN ADDITION TO TIE BARS (12" O.C.-6" OFF DOWELS).
- 5. TIE BARS SHALL BE NO. 5 BAR DEFORMED. TIE BAR SHALL HAVE A LENGTH OF 24 INCHES.

#### <u>LONGITUDINAL BUTT JOINT</u>

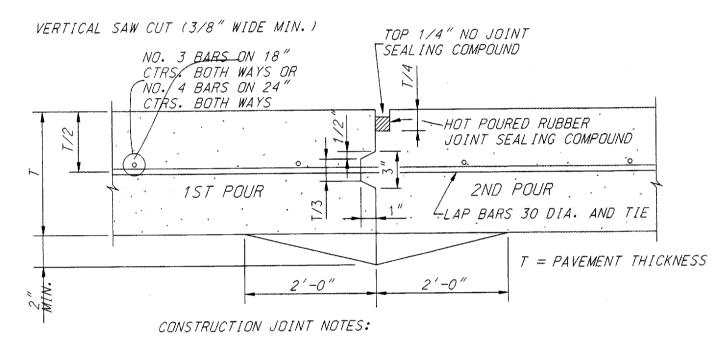






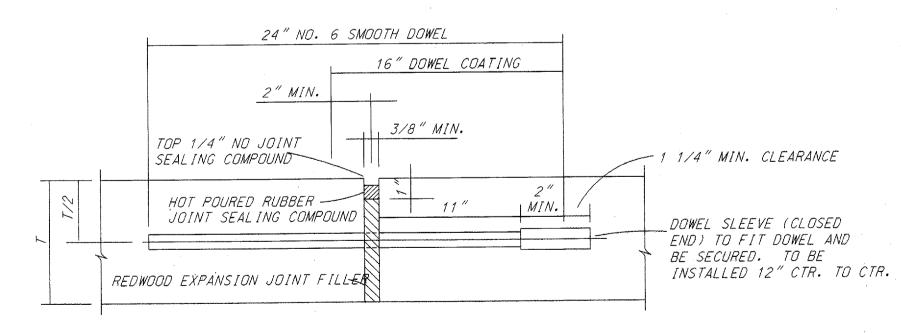
TRANSVERSE JOINTS SPACED 15 FT. C.-C. (MAX.) LONGITUDINAL JOINTS SPACED 20 FT. C.-C. (MAX.)

SAWED DUMMY JOINT



- 1. 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).
- 2. THICKENED EDGES ARE REQUIRED FOR FUTURE WIDENING ONLY.

CONSTRUCTION JOINT



TRANSVERSE EXPANSION JOINT NOTES:

- 1. DOWELS AND REINFORCING BARS SHALL BE SUPPORTED BY AN APPROVED DEVICE.
- 2. TRANSVERSE EXPANSION JOINTS SHALL BE SPACED AT 60 FT. MAXIMUM AND AT ALL INTERSECTIONS.

TRANSVERSE EXPANSION JOINT

## RECORD DRAWING

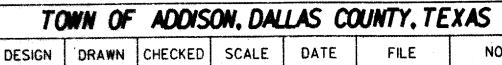
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#### DATE REVISION MADE | CKD | APPD

Carter & Burgess, Inc. 7950 Elmbrook Drive Dallas, Texas 75247-4961 (214) 638-0145 Metro (214) 263-2019 Fax (214) 638-0447

PAVING DETAILS

ADDISON OFFICE CONDOS



COD IND NA COTTION

1" = 20' MARCH'06 01-6628 TIPTON GUERIN POWELL

The seal appearing on this document was authorized by Rryan P. Powell, P.F. 94881, on March 07, 2006. Alteration of a sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsible engineer is an offense under the sealed document without proper notification to the responsibility of the res

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the Texas Engineering Practice Act.