

# CONSTRUCTION DRAWINGS FOR

## PROPOSED STREET & WATERLINE IMPROVEMENTS

FOR

### ATLAS PEAR DRIVE EXTENSION

### TRADITIONS PHASE 29

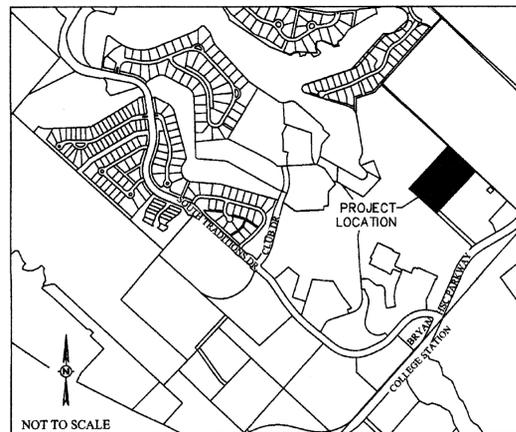
### BLOCK 2, LOT 1

### BRYAN, TEXAS

## OCTOBER 2015

RELEASED FOR CONSTRUCTION  
City of Bryan  
Engineering Services

VICINITY MAP



#### SCHEDULE OF SHEETS

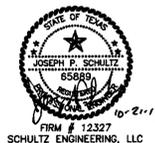
SHEET	TITLE
1	OVERALL LAYOUT AND EROSION CONTROL PLAN
2	ATLAS PEAR DRIVE STA. 0+00 TO 6+78 PLAN AND PROFILE/ACCESS & EXISTING ROAD MODIFICATIONS
3	GRADING PLAN
4	WATERLINE W-1, STA. 0+00 TO 0+70, PLAN & PROFILE
FIGURE ST	STANDARD STREET DETAILS
FIGURE SW	STANDARD SIDEWALK DETAILS
FIGURE W1	STANDARD WATER DETAILS SHEET 1 OF 2
FIGURE W2	STANDARD WATER DETAILS SHEET 2 OF 2



TBPE FIRM REGISTRATION NO. 12327  
2730 LONGMIRE, SUITE A  
COLLEGE STATION, TEXAS 77845  
979.764.3900

**OWNER/DEVELOPER:**  
BRYAN TRADITIONS, LP  
2100 TRADITIONS BLVD.  
BRYAN, TEXAS 77807

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY JOSEPH P. SCHULTZ, P.E., LICENSE NO. 65889 ON OCTOBER 19, 2015.  
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FIRM # 12327  
SCHULTZ ENGINEERING, LLC

RECEIVED BY  
OCT 28 2015  
ENGINEERING SERVICES

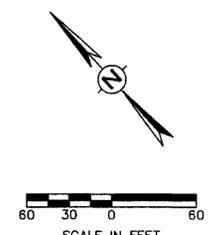
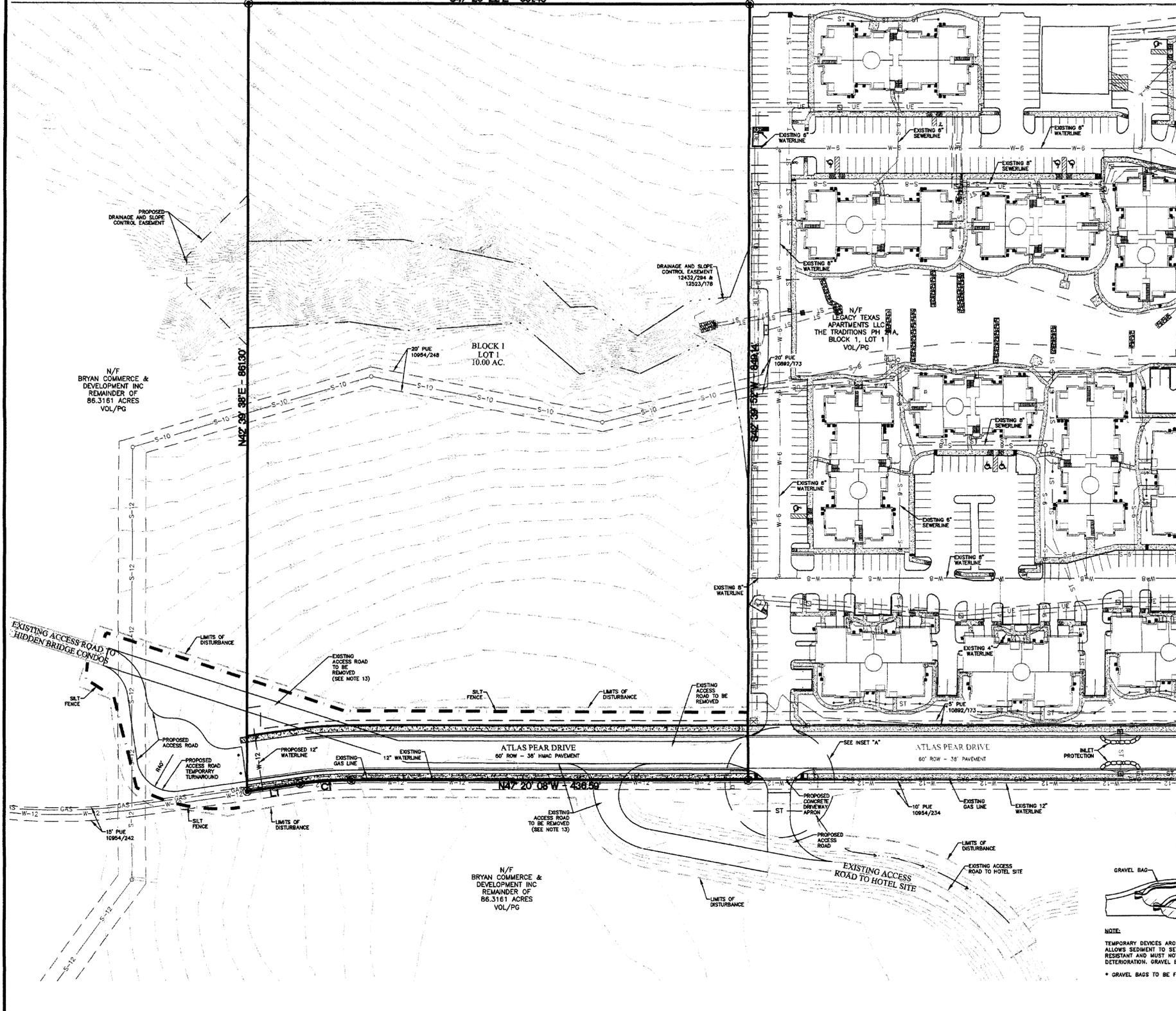
Approved

Trad Ph 29- Atlas Pear Ext.

FP 15-29

N/F  
STEPHANIE SINGLETON  
73.184 ACRE TRACT  
4000/299

847' 20" 22"E - 551'40"



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Engineering Services

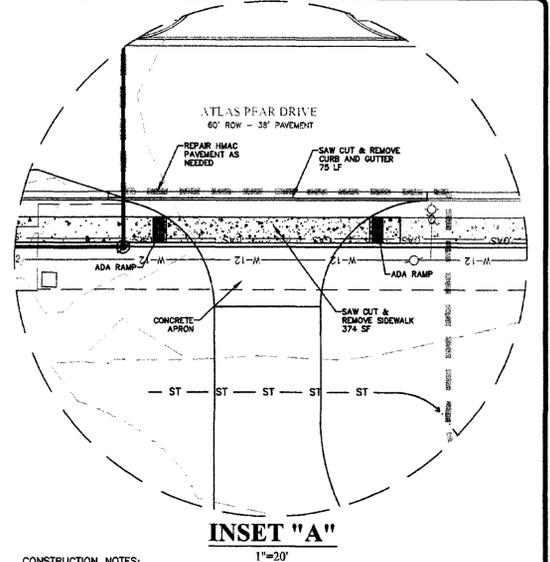
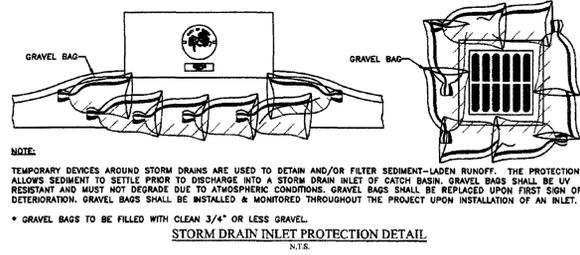
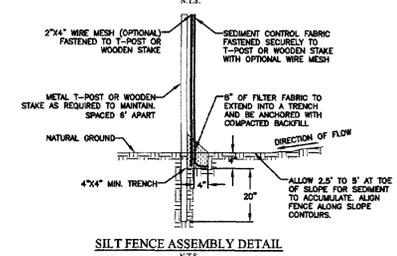
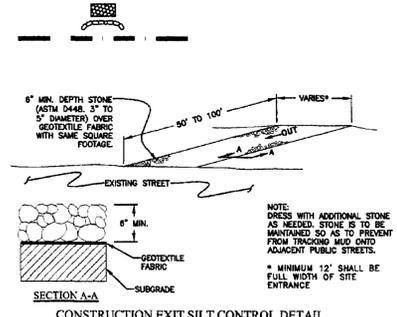
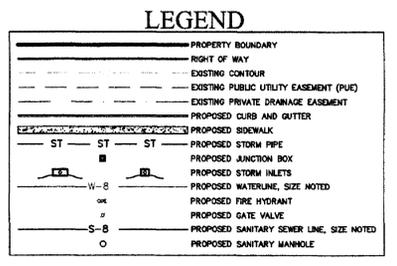
LINE TABLE

LINE #	LENGTH	DIRECTION
L1	59.13'	N50° 21' 44.46"W

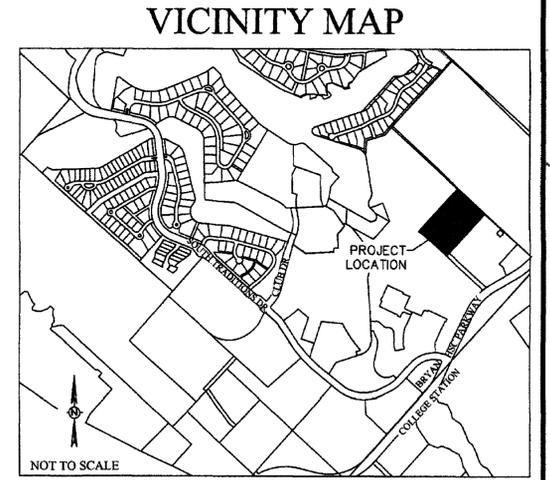
  

Curve Table

CURVE #	LENGTH	RADIUS	DELTA	TANGENT	CHORD	CHORD DIRECTION
C1	58.30'	402.50'	100°01'38"	28.24'	56.34'	N51°20'58"W



- CONSTRUCTION NOTES:
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT LOCATION OF ALL EXISTING UNDERGROUND UTILITIES. NOTIFICATION OF THE UTILITY COMPANIES 48 HOURS IN ADVANCE OF CONSTRUCTION IS REQUIRED.  
DIG TESS: (800) 344-8377  
ATMOS ENERGY: (978) 774-2506  
SUDDEN LINK COMMUNICATIONS: (979) 595-2429  
VERIZON: (979) 821-4770
  2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO USE WHATEVER MEANS NECESSARY TO MINIMIZE EROSION AND PREVENT SEDIMENT FROM LEAVING THE PROJECT SITE. THIS INCLUDES THE INSTALLATION OF A CONSTRUCTION EXIT AND SILT FENCE AS NECESSARY.
  3. THE CONTRACTOR IS RESPONSIBLE FOR INSPECTING AND MAINTAINING THE EROSION AND SEDIMENT CONTROL DEVICES. INSPECTIONS SHALL BE DONE EVERY 14 DAYS AND AFTER EVERY RAINFALL EVENT OF 1/2" OR MORE. THE CONTRACTOR SHALL REMOVE ALL MUD DEPOSITED ON THE ADJACENT STREETS AS A RESULT OF THE CONSTRUCTION OF THIS PROJECT.
  4. THE CONTRACTOR IS REQUIRED TO MAINTAIN THE TPDES GENERAL PERMIT NO. TXR 150000 REQUIREMENTS FOR CONSTRUCTION SITES.
  5. PERMANENT VEGETATION WILL BE ESTABLISHED ON THE DISTURBED AREAS AFTER CONSTRUCTION IS COMPLETE BY HYDROMULCHING AND SEEDING ALL DISTURBED AREAS.
  6. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2012 CITY OF BRYAN/COLLEGE STATION STANDARD SPECIFICATIONS AND DETAILS FOR WATER, SEWER, STREETS AND DRAINAGE. ALL CONSTRUCTION SHALL BE COORDINATED WITH THE CITY ENGINEER'S OFFICE.
  7. THE CONSTRUCTION SHALL COMPLY WITH OSHA STANDARD 29 CFR PART 1926 SUBPART P FOR TRENCH SAFETY REQUIREMENTS.
  8. THE CONTRACTOR SHALL REMOVE THE EROSION CONTROL MEASURES ONCE GRASS IS ESTABLISHED.
  9. INLET PROTECTION TO BE INSTALLED AT ALL PROPOSED AND EXISTING INLETS ADJACENT TO THE PROJECT SITE.
  10. THE CONTRACTOR SHALL REMOVE THE EXISTING TOPSOIL AND STOCKPILE FOR REUSE FROM ALL AREAS OF CONSTRUCTION. THIS INCLUDES THE PROPOSED LOT AREAS WHICH WILL RECEIVE FILL MATERIAL. THE CONTRACTOR SHALL NOTIFY THE ENGINEER ONCE TOPSOIL HAS BEEN REMOVED FROM AN AREA FOR THE ENGINEER TO APPROVE THE CONTRACTOR TO BEGIN EXCAVATION OR FILL PLACEMENT.
  11. TOPSOIL REPLACEMENT IS REQUIRED TO A MINIMUM DEPTH OF 3" IN ALL RIGHT OF WAY AND EASEMENT AREAS AND A DEPTH OF 4" IN THE DETENTION POND AREAS. CONTRACTOR WILL UTILIZE EXISTING TOPSOIL FROM THE SITE, NO IMPORT OF TOPSOIL IS REQUIRED.
  12. A MINIMUM OF 4' OF COVER MUST BE MAINTAINED FROM FINISHED GRADE TO TOP OF PIPELINE. ALL BURIED LINES CROSSING EXPLORER PIPELINES RIGHT OF WAY SHALL MAINTAIN A MINIMUM SEPARATION OF 24 INCHES BETWEEN THE TWO LINES. SIX INCH WIDE BURIAL WARNING TAPE MUST BE PLACED 12 TO 18 INCHES ABOVE SEWER AND WATER LINES WITHIN THE PIPELINE RIGHT OF WAY. AN EXPLORER PIPELINE REPRESENTATIVE MUST BE PRESENT DURING EXCAVATION WITHIN THE PIPELINE RIGHT OF WAY.
  13. ROAD BASE MATERIAL REMOVED FROM EXISTING ACCESS ROAD SHALL BE STOCKPILED ON SITE IN AREA DESIGNATED BY OWNER TO BE WITHIN 1,500 FEET OF PROJECT AREA. NO ROAD BASE MATERIAL REMOVED FROM THE EXISTING ACCESS ROAD SHALL BE HAULED OFF OR USED FOR NEW ACCESS ROAD.



MARK	REVISION	BY	DATE

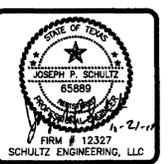
**Schultz Engineering, LLC**  
2730 Longmire, Suite A  
College Station, Texas 77845  
979.764.3900

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RELEASED FOR CONSTRUCTION

SURVEYED	DESIGNED	DRAWN	APPROVED	JOB NO.	DATE
KERR	JPS	DLD	JPS	15-405	OCTOBER 2015

TPBE NO. 12327



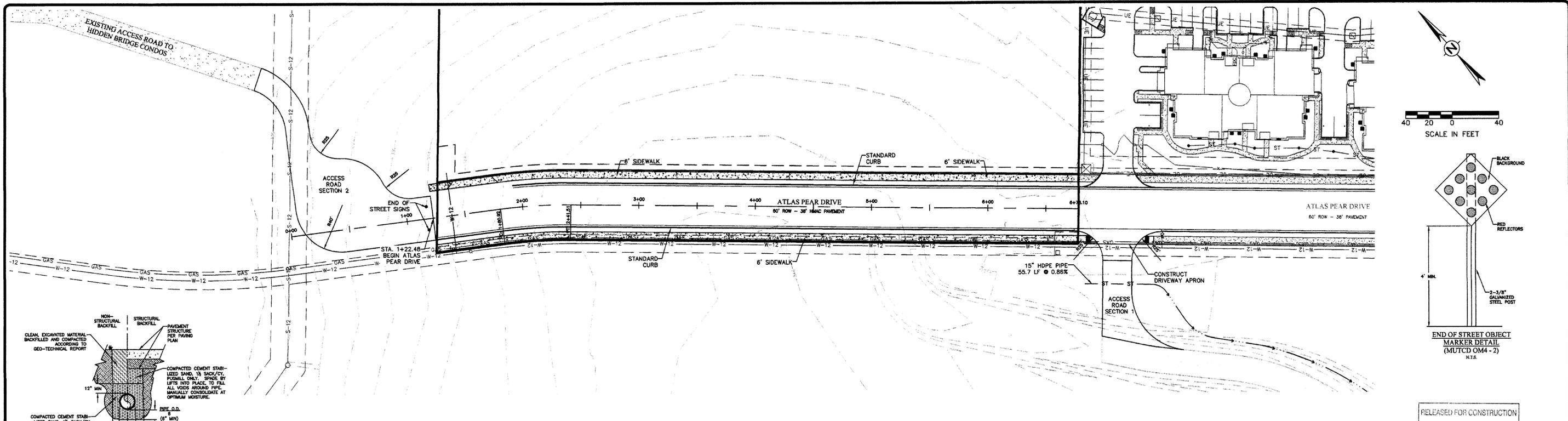
TRADITIONS PHASE 29  
ATLAS PEAR DRIVE EXTENSION  
BRYAN, TX

OVERALL LAYOUT & EROSION  
CONTROL PLAN

SCALE

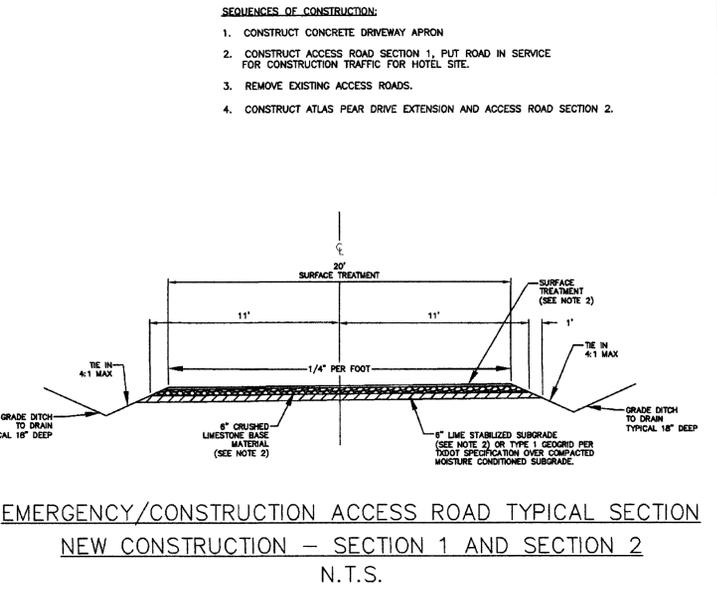
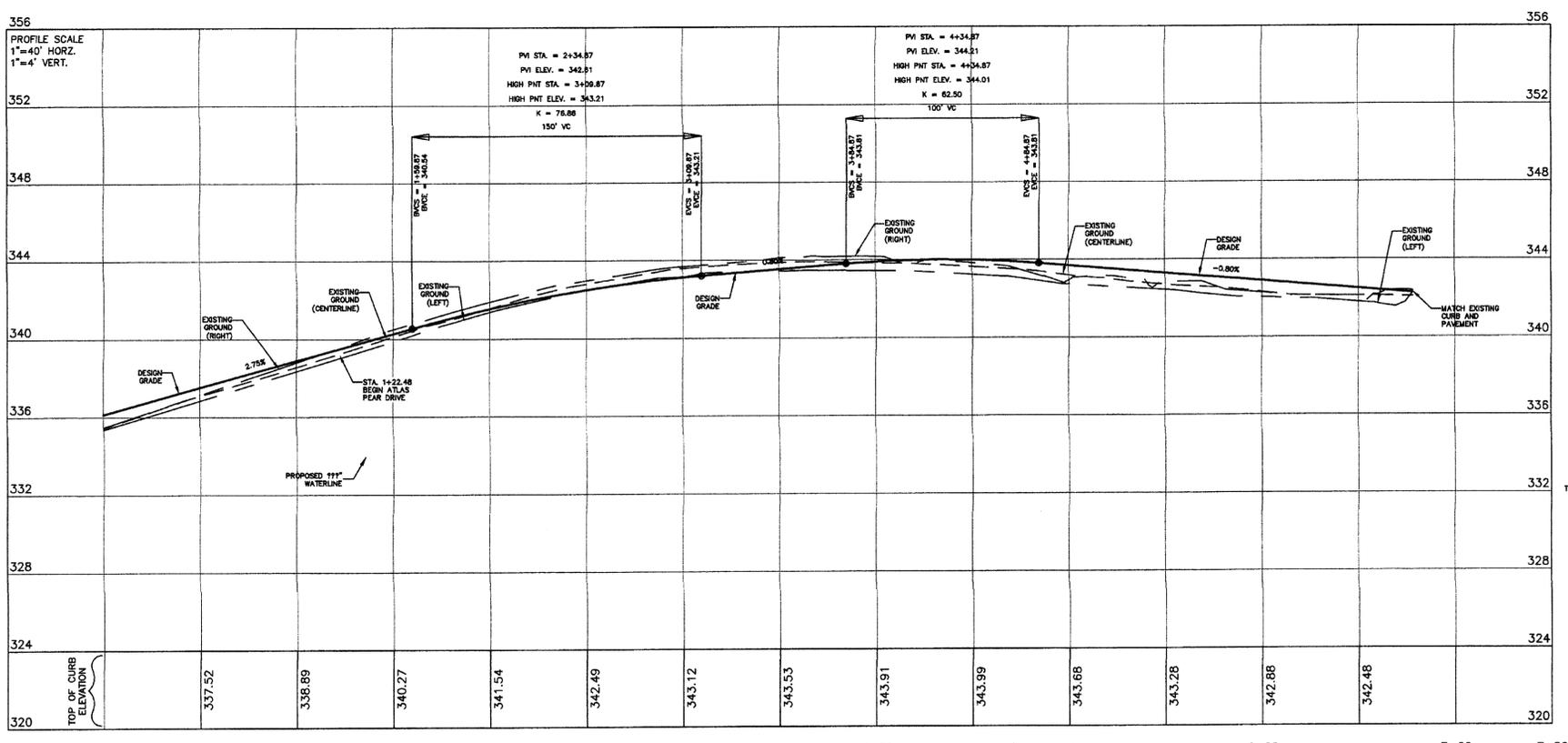
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HORIZONTAL	1"=60'
PLOTTING SCALE:	1:1
FILE NAME:	15-405

SHEET  
1  
4



Number	Start Station	End Station	Length	Line/Chord Direction	Radius	Delta	DOC	Mid Ord	Tangent	Start Northing	Start Easting	End Northing	End Easting
L1	0+00.00	1+80.92	180.92	S55° 21' 44"E						10205191.68	3530347.40	10206088.83	3530498.28
C1	1+80.92	2+41.51	60.59	S51° 20' 58"E	432.60	60°01'36"	013.2478	1.06	30.34	10205088.83	3530498.28	10206051.02	3530543.54
L2	2+41.51	6+78.10	436.59	S47° 20' 08"E						10206051.02	3530543.54	10206755.14	3530664.58

- NOTES:**
- EXISTING GROUND PROFILE SHOWN IS BASED ON FIELD SURVEY DATA.
  - FILL MATERIAL USED TO ACHIEVE GRADE IN AREAS TO RECEIVE PAVEMENT OR WITHIN THE STREET RIGHT-OF-WAY SHALL BE COMPACTED TO AT LEAST 98% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST, (ASTM D998), AT A MOISTURE CONTENT FROM OPTIMUM MOISTURE CONTENT TO 4% ABOVE THE OPTIMUM MOISTURE CONTENT. AREAS OUTSIDE OF THE STREET RIGHT-OF-WAY SHALL BE COMPACTED TO 93% OF THE MAXIMUM DRY DENSITY.
  - FOR TYPICAL STREET CONSTRUCTION DETAILS REFER TO DETAILS ST1-00, ST1-01, ST2-01, ST3-00, ST4-04 AND ST4-05 ON FIGURE ST.
  - SIDEWALKS SHALL BE CONSTRUCTED PER FIGURE SW, DETAILS SW1-00 AND SW1-02. ADA RAMPS SHALL BE CONSTRUCTED PER THE AMBULATORY RAMP DETAILS ON THE STANDARD SIDEWALK DETAILS SHEET (REFER TO DETAILS SW3-00, AND SW3-05 ON FIGURE SW). ALL RAMPS SHALL HAVE A DETECTABLE WARNING SURFACE.
  - ADA RAMPS SHALL BE CONSTRUCTED PER THE AMBULATORY RAMP DETAILS ON THE STANDARD SIDEWALK DETAILS SHEET (REFER TO DETAILS SW1-02, AND SW3-00 ON FIGURE SW). ALL RAMPS SHALL HAVE A DETECTABLE WARNING SURFACE.
  - PAVEMENT STRUCTURE FOR ATLAS PEAR DRIVE SHALL BE AS FOLLOWS:  
 8" LIME STABILIZED SUBGRADE OR CEMENT STABILIZED SUBGRADE AS REQUIRED BY SOIL P.I.  
 8" CRUSHED LIMESTONE BASE MATERIAL  
 2" HOT MIX ASPHALTIC CONCRETE (REFER TO DETAIL ST4-04 ON FIGURE ST)  
 OR  
 8" LIME STABILIZED SUBGRADE OR CEMENT STABILIZED SUBGRADE AS REQUIRED BY SOIL P.I.  
 8" REINFORCED CONCRETE PAVEMENT  
 38" WIDE, 4,000 PSI (REFER TO DETAIL ST3-00 AND ST4-05 ON FIGURE ST)
  - REFER TO GRADING PLAN FOR DESIGN GRADES AT THE STREET RIGHT-OF-WAY.
  - THE TOP OF PAVEMENT DESIGN GRADE FOR THE CENTERLINE OF THE STREET IS 1" HIGHER THEN THE TOP OF CURB. STREET CROSS SLOPE=3.0%

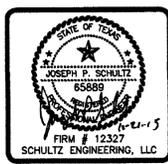


MARK	REVISION	BY	DATE

**Schultz Engineering, LLC**  
2730 Longmire, Suite A  
College Station, Texas 77845  
979.764.3900

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RELEASED FOR CONSTRUCTION

SURVEYED	DESIGNED	DRAWN	APPROVED	JOB NO.	DATE
KERR	JPS	DLD	JPS	15-405	OCTOBER 2015



**TRADITIONS PHASE 29**  
**ATLAS PEAR DRIVE EXTENSION**  
BRYAN, TX

**ATLAS PEAR DRIVE**  
STA. 0+00 TO 6+78  
**PLAN & PROFILE/**  
**ACCESS & EXISTING ROAD MODIFICATIONS**

**SCALE**

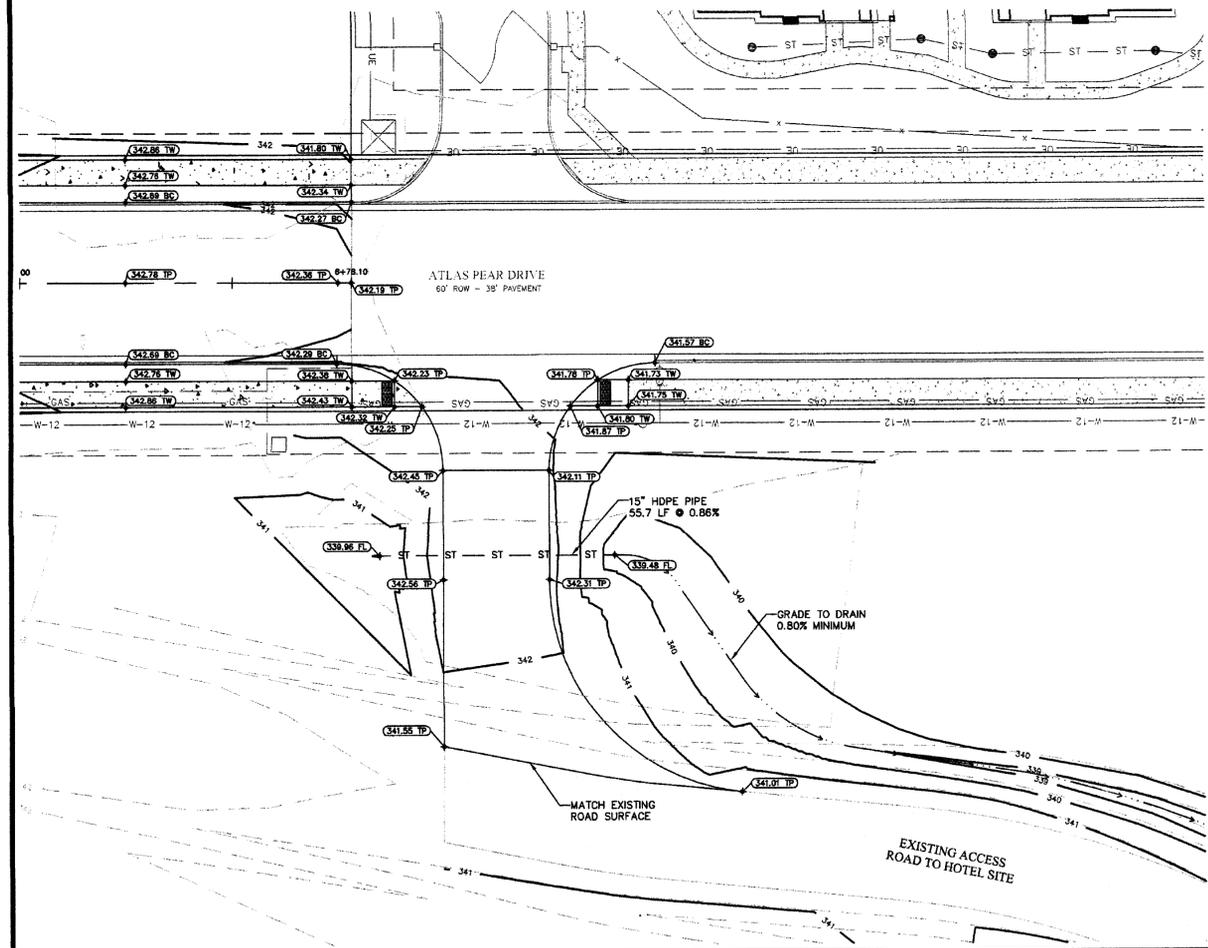
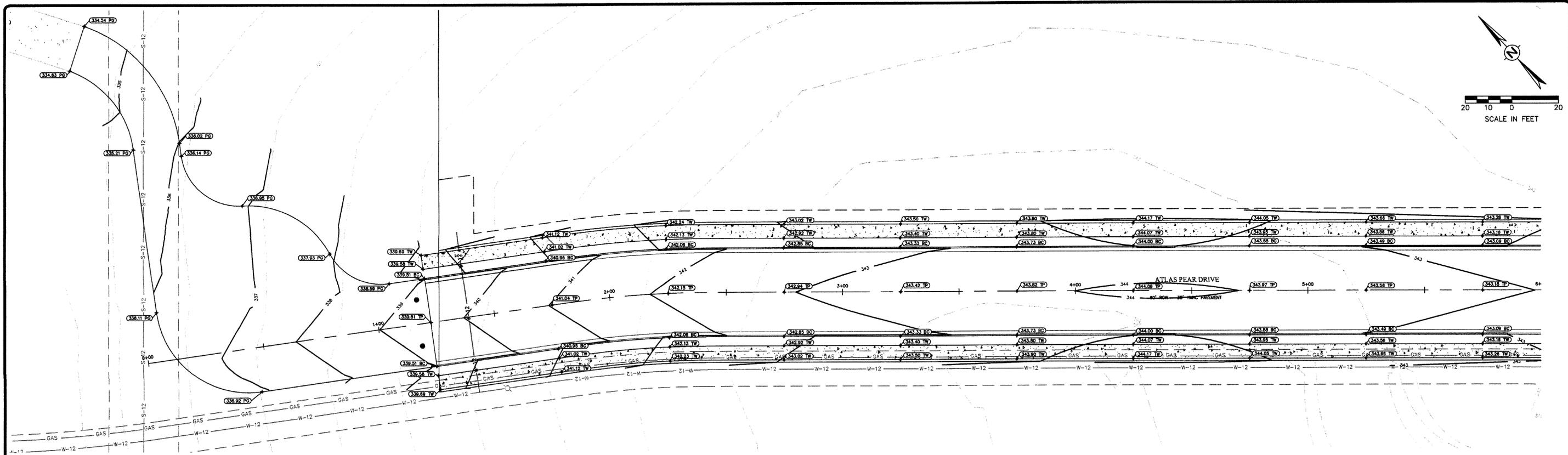
VERTICAL 1"=4'

HORIZONTAL 1"=40'

PLOTTING SCALE: 1:1

FILE NAME: 15-405

**SHEET**  
2  
4



- GRADING CONSTRUCTION NOTES:
1. FILL MATERIAL USED TO ACHIEVE GRADE IN AREAS TO RECEIVE PAVEMENT OR WITHIN THE STREET RIGHT-OF-WAY SHALL BE COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST, (ASTM D698), AT A MOISTURE CONTENT FROM OPTIMUM MOISTURE CONTENT TO 4% ABOVE THE OPTIMUM MOISTURE CONTENT. AREAS OUTSIDE OF THE STREET RIGHT-OF-WAY SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY.
  2. THE SUBGRADE BENEATH THE CONCRETE SIDEWALKS SHALL BE COMPACTED AND "PROOF-ROLLED". ANY WEAK OR SOFT AREAS IDENTIFIED BY THE "PROOF-ROLLING" SHALL BE REMOVED AND REPLACED.
  3. HANDICAP RAMP SLOPES SHALL NOT EXCEED 1V:12H.
  4. THE TOPOGRAPHY SHOWN IS FROM FIELD SURVEY DATA.
  5. THE PROPOSED CONTOURS ARE APPROXIMATE ONLY. THE TOP OF CURB DESIGN GRADES FROM THE STREET PROFILES AND THE DESIGN GRADE SPOT ELEVATIONS SHOWN ON THIS SHEET SHOULD BE USED TO CONSTRUCT THE PROJECT.
  6. STRUCTURAL BACKFILL FOR UTILITY OR STORM DRAIN TRENCHES IS REQUIRED WHENEVER THE TRENCH IS WITHIN 5' OF PAVEMENT OR SIDEWALK.
  7. THE CONTRACTOR SHALL FOLLOW THE GENERAL INTENT OF THE GRADING PLANS. MINOR ADJUSTMENTS TO THE ACTUAL ELEVATIONS SHOWN ON THE GRADING PLAN MAY BE REQUIRED TO MATCH EXISTING GROUND ELEVATIONS AND STRUCTURES. THE PROPOSED CONTOUR LINES SHOWN ARE APPROXIMATE ONLY, THE DESIGN GRADE SPOT ELEVATIONS SHOULD BE USED FOR CONSTRUCTION OF THE SITE WORK.

**LEGEND**

	PROPERTY BOUNDARY
	RIGHT OF WAY
	EXISTING CONTOUR
	PROPOSED CONTOUR
	PROPOSED CONTOUR PREVIOUS DEVELOPMENT
	EXISTING PUBLIC UTILITY EASEMENT (PUE)
	EXISTING PRIVATE DRAINAGE EASEMENT
	PROPOSED CURB AND GUTTER
	EXISTING CURB AND GUTTER
	EXISTING SIDEWALK
	PROPOSED SIDEWALK
	EXISTING STORM PIPE
	PROPOSED STORM PIPE
	EXISTING JUNCTION BOX
	PROPOSED JUNCTION BOX
	EXISTING STORM INLETS
	PROPOSED STORM INLETS
	DESIGN GRADE
	BACK OF CURB
	TOP OF PAVEMENT

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 NOV 03 2015  
 City of Bryan  
 Engineering Services  
*J.M.*

MARK	REVISION	BY	DATE

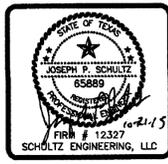
**Schultz Engineering, LLC**  
 2730 Longmire, Suite A  
 College Station, Texas 77845  
 979.764.3900

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SURVEYED	DESIGNED	DRAWN	APPROVED	JOB NO.	DATE
KERR	JPS	DLD	JPS	15-405	OCTOBER 2015

TBPE NO. 12327



**TRADITIONS PHASE 29  
 ATLAS PEAR DRIVE EXTENSION  
 BRYAN, TX**

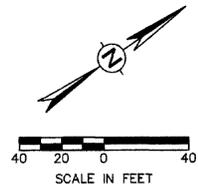
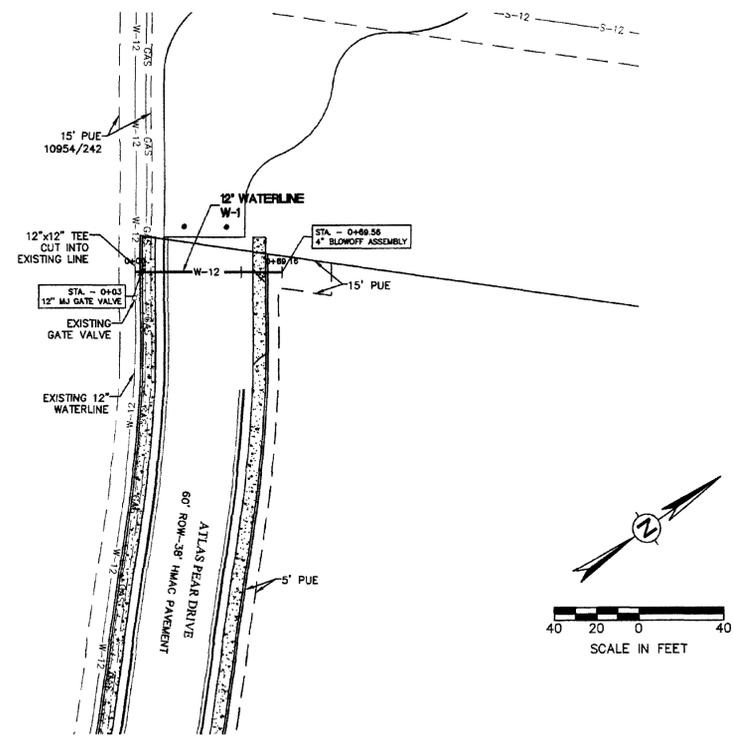
**GRADING PLAN**

**SCALE**

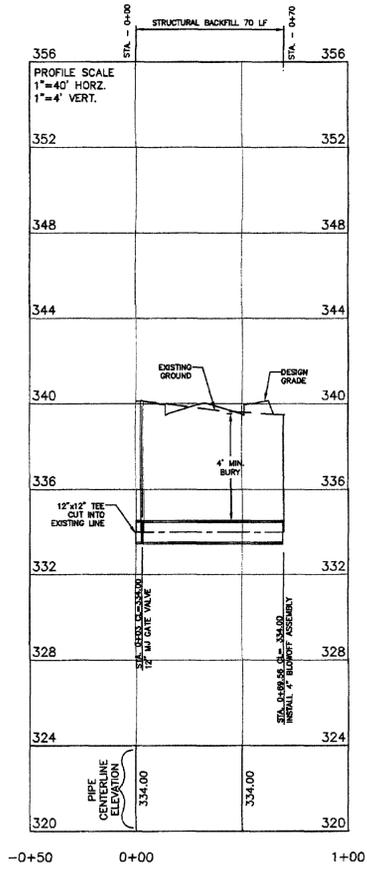
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HORIZONTAL	1"=20'
PLOTTING SCALE:	1:1
FILE NAME:	15-405

**SHEET**

3
4



Number	Start Station	End Station	Length	Line/Chord Direction	Radius	Delta	DOC	Mid Ord	Tangent	Start Northing	Start Easting	End Northing	End Easting
L4	0+00.00	0+69.18	69.18	N34° 38' 18\"/>									



- NOTES:
- ADJUST FIRE HYDRANT AND VALVE BOXES TO MATCH FINAL GRADE.
  - REFER TO PLAN VIEW FOR WATER SERVICE LINE LOCATIONS.
  - WATER SERVICE MATERIAL - TYPE "K" COPPER TUBING.
  - WATERLINE PIPE MATERIAL:  
12" PVC, DR-14 (AWWA C-905, CL 200)  
REFER TO WATERLINE DETAILS SHEET FOR EMBEDMENT AND BACKFILL REQUIREMENTS.
  - EXISTING GROUND PROFILE SHOWN IS BASED ON FIELD SURVEY DATA.
  - WATER SERVICES SHALL NOT BE ANY DEEPER THAN 3 FEET NOR ANY SHALLOWER THAN 2 AT THEIR TERMINUS AS COMPARED TO FINISHED GROUND.
  - ALL SERVICES SHOULD TERMINATE WITH A BALL VALVE INSTALLED BY THE DEVELOPER.

RELEASED FOR CONSTRUCTION  
NOV 9 8 2015  
City of Bryan  
Engineering Services  
*J.M.*

PROFILE - 12" WATERLINE W-1

MARK	REVISION	BY	DATE

**Schultz Engineering, LLC**  
2730 Longmire, Suite A  
College Station, Texas 77845  
979.764.3900

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10-21-15  
FIRM # 12327  
SCHULTZ ENGINEERING, LLC

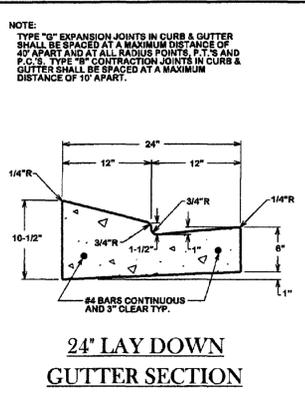
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KERR	JPS	DLD	JPS	15-405	OCTOBER 2015

TRADITIONS PHASE 29  
ATLAS PEAR DRIVE EXTENSION  
BRYAN, TX

WATERLINE W-1, STA. 0+00 TO 0+70  
PLAN & PROFILE

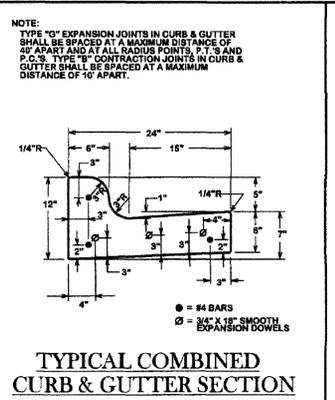
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HORIZONTAL 1"=40'  
PLOTING SCALE: 1:1  
FILE NAME: 15-405

SHEET  
4  
4



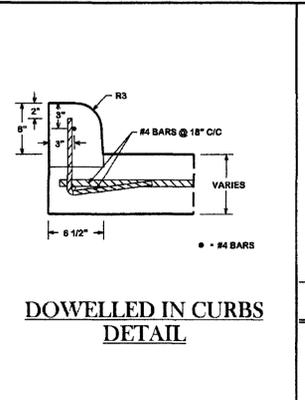
**24" LAY DOWN GUTTER SECTION**

ST1-00



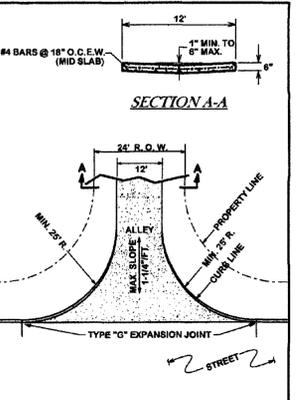
**TYPICAL COMBINED CURB & GUTTER SECTION**

ST1-01



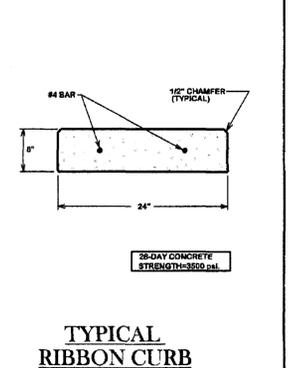
**DOWELLED IN CURBS DETAIL**

ST1-02



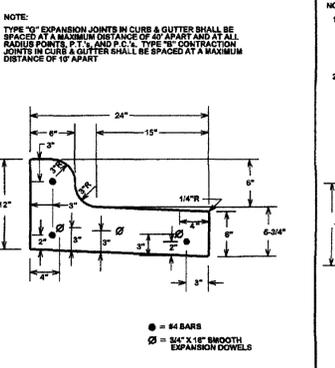
**ALLEY PAVING**

ST1-06



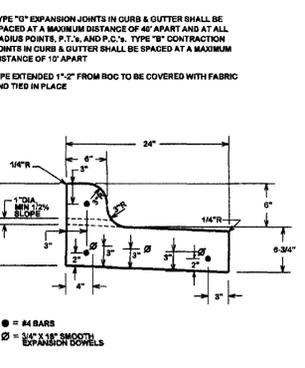
**TYPICAL RIBBON CURB**

ST1-03



**TYPICAL COMBINED SPILL CURB**

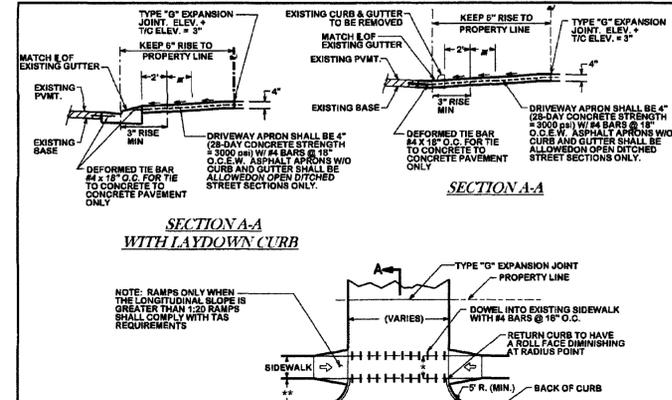
ST1-04



**TYPICAL WEEPHOLE CURB**

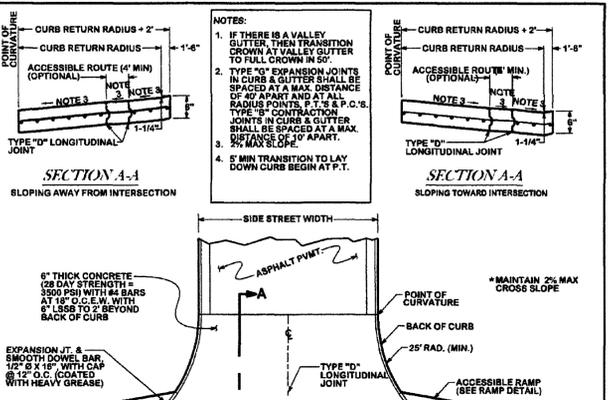
ST1-05

**GENERAL NOTES:**  
 ALL AREAS WHERE EXISTING VEGETATION AND GRASS COVER HAVE BEEN REMOVED BY CONSTRUCTION SHALL BE APPROPRIATELY BLOCK BARRIERS OR HYDROMULCHED AND WATERED UNTIL GROWTH IS ESTABLISHED. IN DEVELOPED AREAS WHERE GRASS IS PRESENT, BLOCK BARRIERS WILL BE REQUIRED. BARRIERS SHALL BE SPACED OR BARRIERS WITHIN 14 CALIBER DAYS OF LAST DISTURBANCE.  
 APPROVED EROSION CONTROL MEASURES MUST BE INSTALLED DURING THE ENTIRE TIME THAT EARTH HAS BEEN BARED BY CONSTRUCTION. EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL VEGETATIVE GROWTH IS ESTABLISHED AFTER CONSTRUCTION IS COMPLETE AND THEN REMOVED BY CONTRACTOR.  
 ALL EROSION CONTROL MEASURES SHOULD BE CLEANED OF SILT AFTER EVERY RAIN.  
 ALL TRAFFIC SIGNALS AND APPURTENANCES, AND ALL PAYMENT MARKINGS AND MARKERS SHALL BE IN ACCORDANCE WITH TxDOT STANDARDS.  
 REFER TO SPEC 3117.23.23 (PAVEMENT MARKINGS) FOR ADDITIONAL LOCAL REQUIREMENTS.



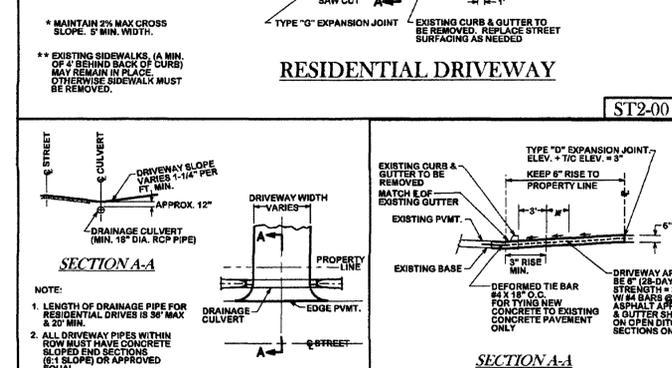
**RESIDENTIAL DRIVEWAY WITH LAYDOWN CURB**

ST2-00



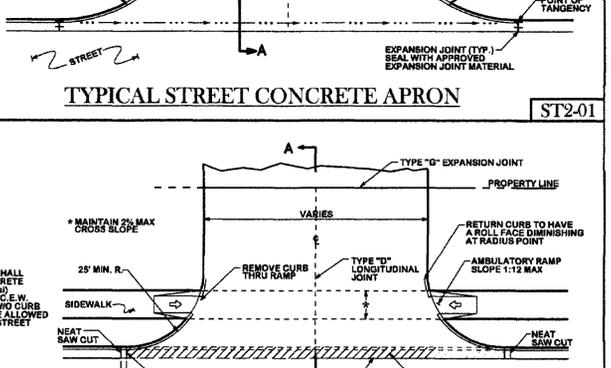
**TYPICAL STREET CONCRETE APRON**

ST2-01



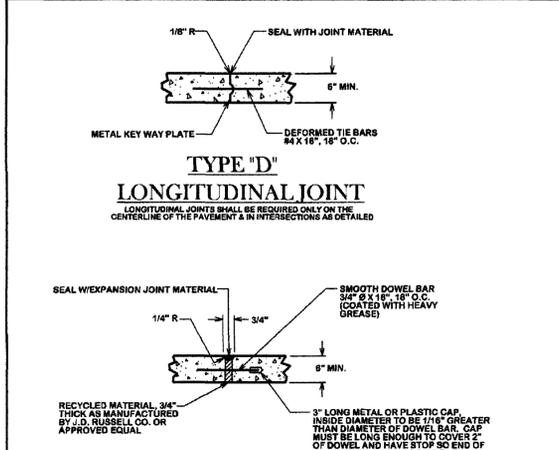
**TYPICAL DRIVEWAY ENTRANCE WITH CURB**

ST2-02



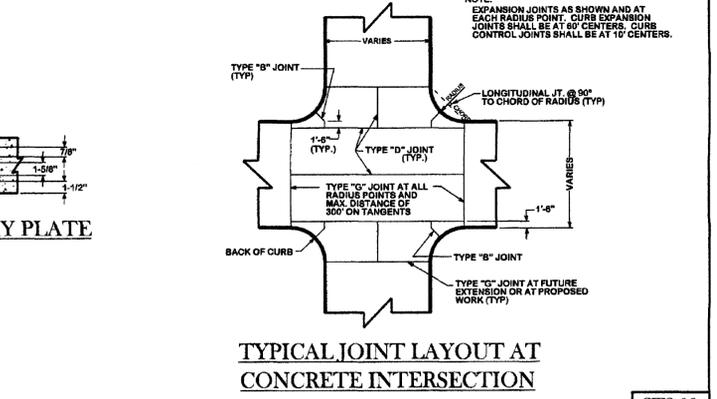
**COMMERCIAL DRIVEWAY**

ST2-03

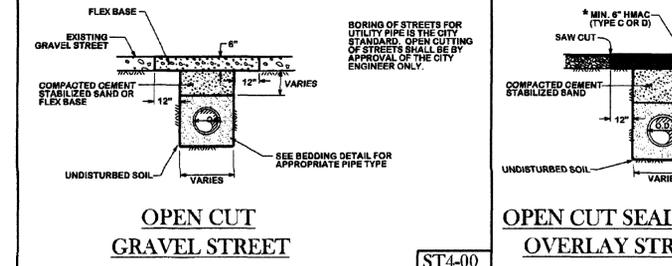


**TYPICAL JOINT & REINFORCEMENT LAYOUT FOR CONCRETE PAVEMENT**

ST3-00

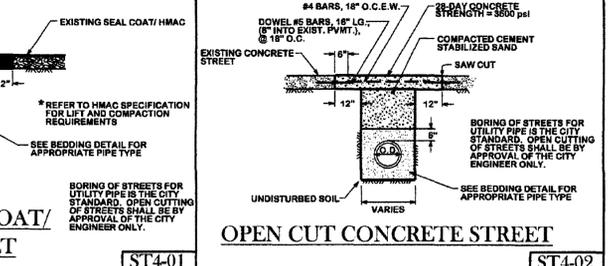


**TYPICAL JOINT LAYOUT AT CONCRETE INTERSECTION**



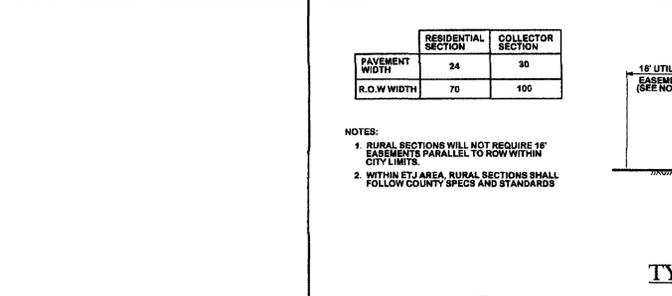
**OPEN CUT GRAVEL STREET**

ST4-00



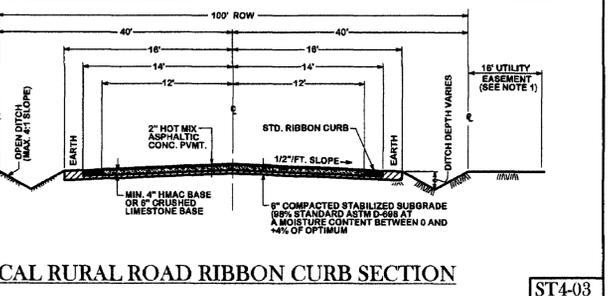
**OPEN CUT CONCRETE STREET**

ST4-02



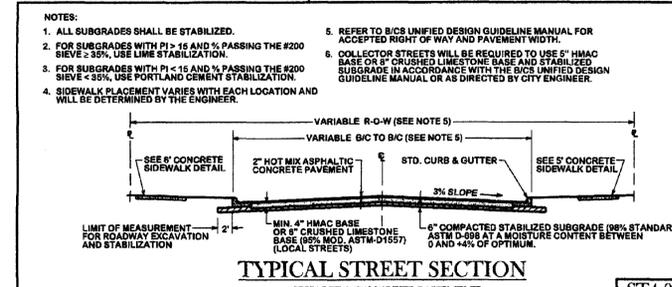
**OPEN CUT SEAL COAT/ OVERLAY STREET**

ST4-01



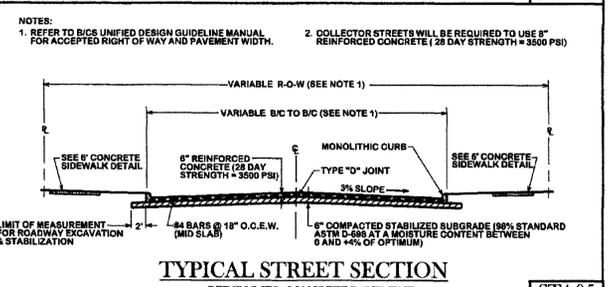
**TYPICAL RURAL ROAD RIBBON CURB SECTION**

ST4-03



**TYPICAL STREET SECTION ASPHALTIC CONCRETE PAVEMENT**

ST4-04



**TYPICAL STREET SECTION REINFORCED CONCRETE PAVEMENT**

ST4-05

**BRYAN - COLLEGE STATION STANDARD STREET DETAILS**



**CITY OF BRYAN**  
*The Good Life, Texas Style!*  
 DRAWN BY: C.L.M.  
 DATE: 08-01-12  
 SCALE: N T S  
 APPROVED: W.P.K.  
 FIGURE:  
**ST**  
 SHEET 1 OF 1





REVISIONS:

**BRYAN - COLLEGE STATION  
STANDARD WATER DETAILS**

