

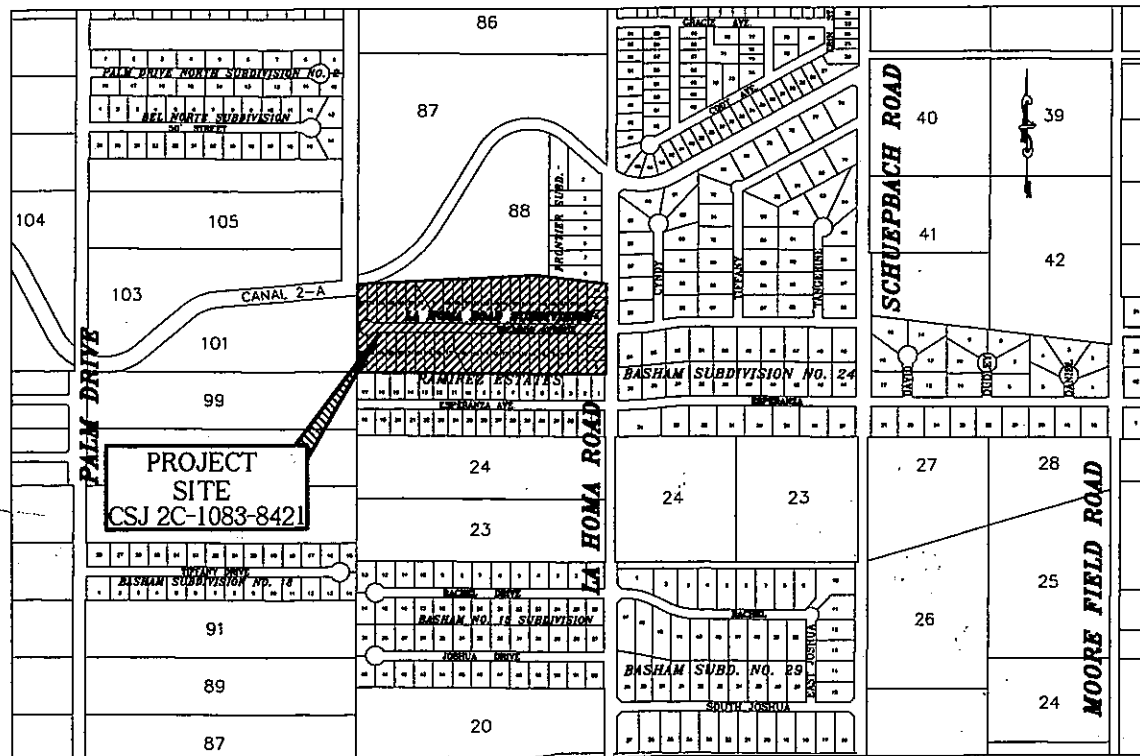
# HIDALGO COUNTY PRECINCT NO. 3

## CONSTRUCTION PLANS FOR BORDER COLONIA ACCESS PROGRAM ROUND II – ALLOCATED LA HOMA ROAD SUBDIVISION

**CSJ: 2C-1083-8421**

CONSTRUCTION OF LOCAL STREETS CONSISTING OF:  
GRADING, STRUCTURES, FLEXIBLE BASE  
AND ASPHALTIC CONCRETE PAVEMENT

PROJECT DATA  
DESIGN SPEED: 30 MPH  
EXCEPTIONS: NONE  
EQUATIONS: NONE



LA HOMA ROAD SUBDIVISION		AREA OF DISTURBED SOIL (AC)
CSJ: 2C-1083-8421 RICARDO AVENUE	1258 FT 24 MILES	1.56 ACRES
		1.56 ACRES

LOCATION MAP  
N.T.S.

**HIDALGO COUNTY COMMISSIONERS**

RAMON GARCIA . . . . .	COUNTY JUDGE
JOEL QUINTANILLA . . . . .	COMMR. PCT. No. 1
HECTOR "TITO" PALACIOS . . . . .	COMMR. PCT. No. 2
JOE M. FLORES . . . . .	COMMR. PCT. No. 3
OSCAR GARZA JR. . . . .	COMMR. PCT. No. 4

APPROVAL  
HIDALGO COUNTY COLONIA ACCESS PROGRAM  
*[Signature]*  
AGAPITO VARGAS JR, DIRECTOR  
DATE: 5/12/2011

APPROVAL  
HIDALGO COUNTY PRECINCT No.3  
*[Signature]*  
JOE M. FLORES, COMMISSIONER  
DATE:

APPROVAL  
HIDALGO COUNTY PLANNING DEPT.  
*[Signature]*  
RAUL SESIN P.E., PLANNING ADMINISTRATOR  
DATE: 05/17/11

CONCURRENCE  
HIDALGO COUNTY DRAINAGE DIST. No. 1  
*[Signature]*  
GODFREY GARZA JR, DISTRICT MANAGER.  
DATE: 5/18/11

STANDARD SHEETS IDENTIFIED ON THE INDEX ON SHEETS  
HAVEN BEEN SELECTED BY ME OR UNDER MY RESPONSIBLE  
SUPERVISION AS BEING APPLICABLE TO THIS PROJECT.

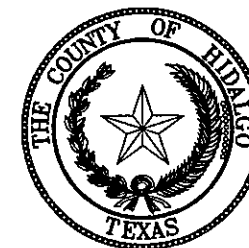
*[Signature]*  
JAVIER HINOJOSA P.E.

12/15/10  
DATE



JAVIER HINOJOSA ENGINEERING  
TBE FIRM NUMBER F-1295

SPECIFICATIONS ADOPTED BY THE TEXAS DEPARTMENT  
OF TRANSPORTATION ON JUNE 1,2004 SHALL GOVERN  
ON THE PROJECT.



HIDALGO COUNTY

**JEH**  
JAVIER HINOJOSA ENGINEERING  
CONSULTING ENGINEERS  
416 E. DOVE AVENUE McALLEN, TEXAS 78504  
PHONE (956) 666-1588

*LA HOMA ROAD SUBDIVISION*

*RICARDO AVENUE*

CSJ: 2C-1083-8421  
 BEG STA. 10+00  
 END STA. 22+58  
 NET LENGTH OF PROJECT: 1258 FT.=0.24 MI



HIDALGO COUNTY



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 416 E. DOVE AVENUE McALLEN, TEXAS 78504  
 PHONE (956) 668-1588

COLONIA ACCESS PROGRAM  
 SUBDIVISIONS LIMITS

HIDALGO COUNTY TEXAS

DN:		FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.	HIGHWAY NO.
CK DN:			TEXAS		
DV:					
CK DV:		STATE DIST. NO.	COUNTY	CONTROL NO.	SECT. NO.
TR:			HIDALGO		
CK TR:					2



SHEET NO.    DESCRIPTION

GENERAL

- 1            - TITLE SHEET
- 2            - SUBDIVISION LIMITS
- 3            - INDEX SHEET
- 4            - TYPICAL SECTION
- 5            - ESTIMATE AND QUANTITIES (LA HOMA ROAD SUBDIVISION)
- 6            - PROJECT LAYOUT -LA HOMA ROAD SUBDIVISION
- 7            - GENERAL NOTES

TRAFFIC CONTROL PLAN SHEETS

- 8            - TRAFFIC CONTROL NARRATIVE

STANDARDS

- 9            - BC(1)-99 (MDD) BARRICADE AND CONSTRUCTION STANDARDS
- 10           - WZ(VL)-03 SIGNS FOR UNEVEN LANES

ROADWAY DETAILS

- 11-13       - RICARDO AVENUE

STANDARDS

- 14           - DRIVEWAY SUMMARY TABLE
- 15           - (D) TURNOUTS DETAILS
- 16           - (D) DRIVEWAY DETAILS
- 17           - (D) DRIVEWAY & TURNOUTS PROFILE DETAILS

ENVIRONMENTAL ISSUES

- 18           - BORDER ACCESS COLONIA PROJECT  
(EROSION AND SEDIMENT CONTROLS)

STANDARDS

- 19           - EROSION AND SEDIMENT CONTROL DETAILS

LEGEND:

- [D] DENOTES DISTRICT STANDARD
- [S] DENOTES STATE STANDARD



HIDALGO COUNTY



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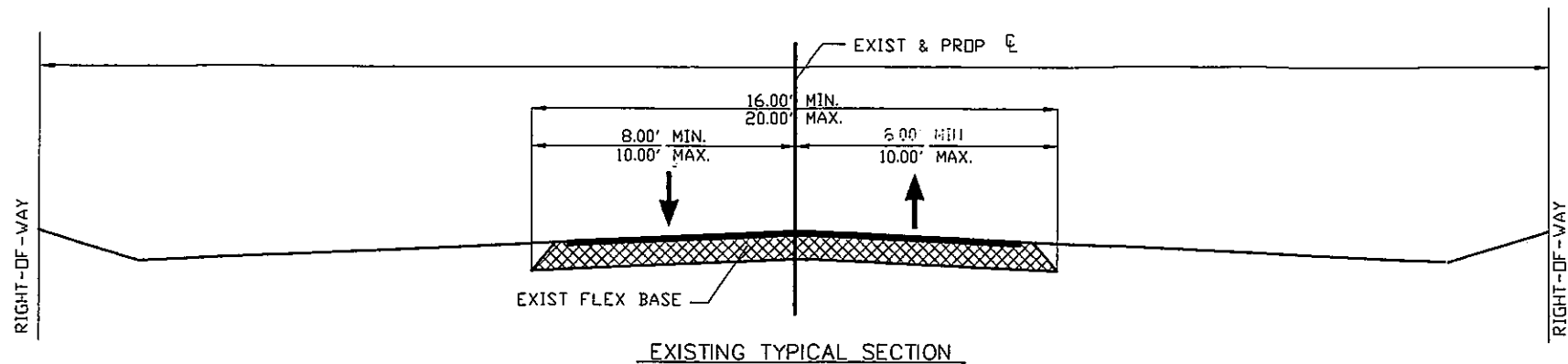
COLONIA ACCESS PROGRAM  
INDEX OF SHEET

HIDALGO COUNTY TEXAS

DN:	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.	HIGHWAY NO.
CK DN:		TEXAS		
DW:	STATE DIST. NO.	COUNTY	CONTROL NO.	SECT. NO.
CK DW:		HIDALGO		
TR:			JOB NO.	SHEET NO.
CK TR:				3



*Javier Hinojosa*  
12/15/10



EXISTING TYPICAL SECTION

GENERAL NOTES:

PVI - POINT OF VERTICAL INTERSECTION  
 PCJ - PERMISSIBLE CONSTRUCTION JOINT

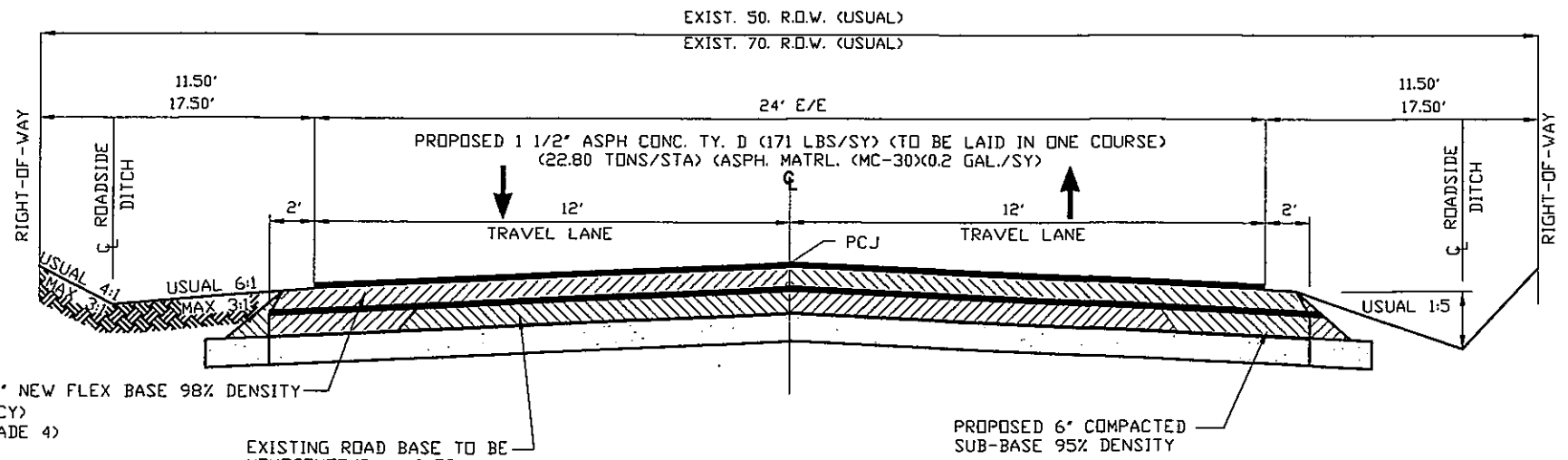
PERMISSIBLE CONSTRUCTION JOINT SHALL FALL ON THE PROPOSED ROADWAY CENTERLINE.

ALL GRADING SHALL BE WITHIN THE EXISTING RIGHT OF WAY LIMITS.

WHERE REQUIRED BY FIXTURES OR UNUSUAL CONDITIONS THE GOVERNING SLOPES MAY BE VARIED WHEN SPECIFICALLY DIRECTED BY THE ENGINEER.

THE COMPLETE BASE SHALL BE PROOF ROLLED BEFORE THE EARTH SHOULDER IS SHAPED, AND ITS FINAL COMPACTION WILL BE DONE OVER BASE AND EDGE OF SHOULDER THE EXISTING SUBGRADE OR ROADWAY SHALL BE SHAPED, BLADED, AND PROOF ROLLED A MINIMUM DISTANCE OF 2' BEYOND THE EDGE OF THE PROPOSED BASE COURSE ANY SOFT SPOT SHALL BE STABILIZED IN ACCORDANCE WITH ITEM 216.

SEE 'SUBDIVISION LIMITS' SHEET FOR PROJECT LIMITS.

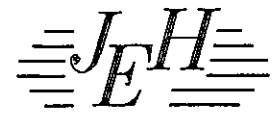


PROPOSED TYPICAL SECTION

SCALE: N.T.S. (LA HOMA ROAD SUBDIVISION)  
 (RICARDO AVENUE)



HIDALGO COUNTY



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COLONIA ACCESS PROGRAM  
 TYPICAL SECTION

HIDALGO COUNTY TEXAS

DN:		FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.	HIGHWAY NO.
CK DN:			TEXAS		
DN:		STATE DIST. NO.	COUNTY	CONTRL. NO.	SECT. NO.
CK DN:			HIDALGO		
TR:				JOB NO.	SHEET NO.
CK TR:					4



LA HOMA ROAD SUBDIVISION CSJ: 2C-1083-8421				PROJECT QUANTITIES					TOTAL	
RICARDO AVENUE				ITEM.	CODE	UNIT	DESCRIPTION	EST.	FIN.	
12.58				100	502	STA	PREPARING R.O.W.	12.58		
4179				247	699	SY	FL BS (COMPL IN PLACE) (TY E GR 4)	4179		
4179				251	---	SY	REWRKING BS MATL (DC) (TY D 6")	4179		
836				310	501	GAL	ASPH MATRL (MC-30)	836		
3590				340	---	SY	ASPH CONC (TY D)	3590		
1.5				502	501	MO	BARRICADES, SIGNS AND TRAFFIC HANDLING	1.5		
1011				530	540	SY	DRIVEWAY (ASPH-CONC-PAV) (PB-1)	1787		
1213				530	542	SY	DRIVEWAY (CONCRETE 3000 PSI)	1213		
30				530	655	SY	TURNOUTS (ASPH-CONC-PAV)(PBS-2)	30		
1493				464	200	LF	15" ADS CULVERT PIPE	1325		
70				464	---	LF	18" RCP CULVERT PIPE	70		
1				467	---	EA	SAFETY END TREATMENTS	2		
540				506	501	LF	TEMP SEDMT CONT FENCE	540		



HIDALGO COUNTY



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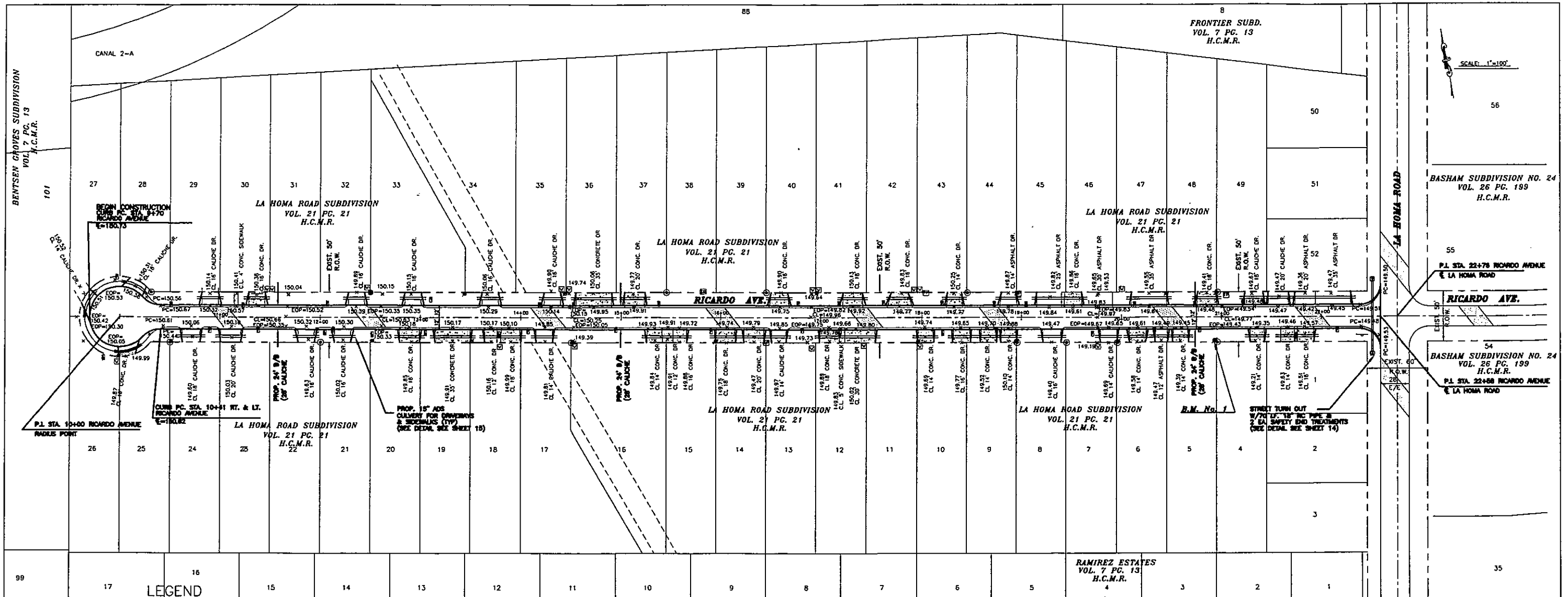
ESTIMATE & QUANTITIES

HIDALGO COUNTY TEXAS

DN:		FED. RD. DIV. NO.:	STATE:	FEDERAL AID PROJECT NO.:	HIGHWAY NO.:
CK DN:			TEXAS		
DW:		STATE DIST. NO.:	COUNTY:	CONTRL. NO.:	SECT. NO.:
CK DW:			HIDALGO		
TR:				JOB NO.:	SHEET NO.:
CK TR:					5



*Javier Hinojosa*  
5/12/11



- LEGEND**
- EXIST. LAMP POLE
  - EXIST. GUY WIRE
  - EXIST. POWER POLE
  - EXIST. EDGE OF PAVEMENT
  - EXIST. CENTER LINE
  - EXIST. PALM TREE
  - EXIST. 18" CULVERT
  - FOUND 1/2 IRON ROD
  - FOUND IRON PIPE
  - MAILBOX
  - MAILBOX
  - TELEPHONE PEDESTAL
  - WATERLINE METER
  - WATERLINE VALVE
  - WATERLINE MARKER
  - EXIST. FENCE
  - EXIST PAVEMENT
  - PAVEMENT
  - CONCRETE DRIVEWAY

**NOTE: DRAINAGE PATTERNS TO REMAIN THE SAME. DRAINAGE TO BE MAINTAINED AS PER EXISTING CONDITIONS**



**B.M. No. 1**  
 ELEVATION=152.15  
 X-MARK ON CONCRETE DRIVE

**TEXAS DEPARTMENT OF TRANSPORTATION**

**J E H**

**JAVIER HINOJOSA ENGINEERING**  
 CONSULTING ENGINEERS  
 418 E. DOVE AVENUE McALLEN, TEXAS 78804  
 PHONE (354) 888-1588

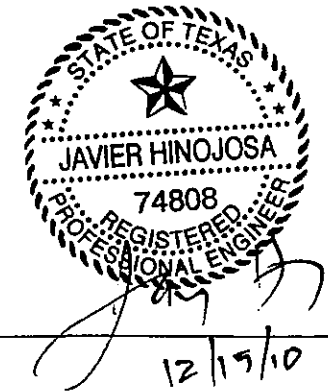
**LA HOMA ROAD SUBDIVISION PROJECT LAYOUT**


HIDALGO COUNTY TEXAS

DN:	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.	HIGHWAY NO.
CK DN:		TEXAS		
DN:	STATE DIST. NO.	COUNTY	CONTR. NO.	SECT. NO.
CK DN:		HIDALGO		
TR:				
CK TR:				6

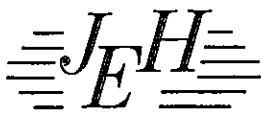
GENERAL NOTES:

1. THE CONTRACTOR MAY SUBMIT AN ALTERNATIVE CONSTRUCTION SEQUENCE AND TRAFFIC CONTROL PLAN TO THE ENGINEER FOR APPROVAL. ALL WORK AND MATERIALS REQUIRED FOR TRAFFIC HANDLING SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED PART OF ITEM 502, "BARRICADES, SIGNS, AND TRAFFIC HANDLING". ALL BARRICADES AND SIGNS TO REPLACE DAMAGED ONES.
2. FLASHING WARNING LIGHTS AND/OR FLAGS SHALL BE USED TO CALL ATTENTION TO THE EARLY WARNING SIGNS.
3. STEADY BURN (TY C) WARNING LIGHTS SHALL BE USED TO MARK CHANNELIZING DEVICES AT NIGHT AS NEEDED.
4. ADDITIONAL SIGNS, BARRICADES AND/OR OTHER CHANNELIZING DEVICES MAY BE REQUIRED AND/OR ADJUSTED AS DIRECTED BY THE ENGINEER.
5. SIGN AND/OR BARRICADE LOCATIONS SHALL BE IN ACCORDANCE WITH THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND/OR THE BC STANDARD SHEETS.
6. EXISTING CONNECTING ROADS AND PRIVATE DRIVES SHALL BE KEPT OPEN TO TRAFFIC AT ALL TIMES, EXCEPT AS OTHERWISE PROVIDED FOR OR APPROVED BY THE ENGINEER.
7. ALL SIGNING, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE IN ACCORDANCE WITH THE "T.M.U.T.C.D."
8. WHEN CONSTRUCTION OPERATIONS RESULT IN DROP OR MORE THAN 2' NEXT TO TRAVEL WAY, A 3:1 SLOPE AND 4.0' BUFFER ZONE WILL BE REQUIRED DURING NON WORKING HOURS.
9. FOR POSTED SPEED EXCEEDING 45 MPH, ADVISORY SPEED SIGNS WITH APPROPRIATE WARNING SIGNS, SHALL BE POSED IN THE VICINITY OF SPECIFIED WORK ZONES WITHIN THE PROJECT, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
10. LENGTH AND SPACING OF CHANNELIZING DEVICES SHALL BE AS SHOWN ON THE BC STANDARDS AND THE "T.M.U.T.C.D." OTHER SIGNS MAY BE USED IN ADDITION TO THOSE REQUIRED BY BARRICADE STANDARDS.
11. NON-REMOVEABLE WORK ZONE STRIPING FOR THIS PROJECT REQUIRED BY THE "T.M.U.T.C.D." SHALL CONSIST OF THERMOPLASTIC MATERIAL AND SHALL BE IN ACCORDANCE WITH THE "WORK ZONE PAVEMENT MARKINGS" STANDARD WZ(STPM)-97.
12. ALL WORK SHALL BE DONE EXPEDITIOUSLY DURING DAYLIGHT HOURS, AS DIRECTED BY THE ENGINEER. NECESSARY FLAGGERS AND APPROPRIATE SIGNING TO SAFETY GUIDE TRAFFIC THROUGH THE WORK AREA WILL BE REQUIRED A DIRECTED BY THE ENGINEER.
13. REFER TO STANDARD SHEETS BC(1)-99 THRU BC(9)-98 FOR OTHER PERTINENT INFORMATION NOT SHOWN.
14. DRIVEWAYS AND TURNOUTS ARE TO BE CONSTRUCTED AS PER TYPE AND WIDTH SHOWN ON THE DRIVEWAYS AND TURNOUTS DETAILS.
15. PROVIDE 15" ADS CORRUGATED PIPE FOR EXISTING DRIVEWAYS AND SIDEWALKS (SEE DETAIL SHEET 15)
16. DRAINAGE PATTERNS REMAINING THE SAME. DRAINAGE TO BE MAINTAINED AS PER EXISTING CONDITIONS.
17. SIGNS WILL BE INSTALLED BY HIDALGO COUNTY PRECINCT 3.
18. MAIL BOXES TO BE REMOVED AND REPLACED BY CONTRACTOR.
19. HORIZONTAL AND VERTICAL CONTROL POINTS TO BE SUPPLIED BY THE ENGINEER PRIOR TO COMMENCING WORK.
20. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UNDERGROUND UTILITIES. WHETHER SHOWN OR NOT SHOWN ON THE DRAWINGS, SUFFICIENTLY IN ADVANCE OF OPERATIONS TO PRECLUDE DAMAGE TO SAME.
21. WATER, SEWER, OR OTHER UTILITY SERVICES SHALL NOT BE INTERRUPTED. ANY DAMAGES TO EXISTING UTILITIES WILL BE THE CONTRACTOR'S RESPONSIBILITY.
22. IN THE EVENT OF DAMAGE TO UNDERGROUND FACILITIES, WHETHER SHOWN OR NOT SHOWN IN THE DRAWINGS, THE CONTRACTOR SHALL MAKE THE NECESSARY REPAIRS TO PLACE THE FACILITIES BACK IN SERVICE AT NO INCREASMT IN THE CONTRACTOR'S PRICE AND ALL SUCH REPAIRS SHALL CONFORM TO THE REQUIREMENTS OF THE COMPANY OR AGENCY SERVICING THE FACILITY.
23. THE CONTRACTOR SHALL EXERCISE EXTRA CARE TO PREVENT DAMAGE TO ALL OTHER STRUCTURES IN THE AREA INCLUDING BUILDINGS, FENCES, ROADS, PIPELINES, UTILITIES, ETC., WHETHER PUBLICLY OR PRIVATELY OWNED.
24. UNTIL ACCEPTANCE BY THE ENGINEER OF ANY PART OR ALL OF THE CONSTRUCTION, AS PROVIDED FOR IN THE PLANS AND THESE SPECIFICATIONS, IT SHALL BE UNDER THE CHARGE AND CARE OF THE CONTRACTOR, AND HE SHALL TAKE EVERY NECESSARY PRECAUTION AGAINST INJURY OR DAMAGE TO ANY PART OF THE WORK. THE CONTRACTOR SHALL REBUILD, REPAIR, RESTORE AND MAKE GOOD, AT HIS OWN EXPENSE, ALL INJURIES OR DAMAGE TO ANY PORTION OF THE WORK BEFORE ITS COMPLETION AND ACCEPTANCE.
25. NO OPEN TRENCHES OR EXCAVATION SHALL BE LEFT OPEN OVERNIGHT.
26. EXISTING ASPHALT PAVING TO BE SCARIFIED AND REMOVED AS PART OF THE RIGHT OF WAY PREPARATION.





**HIDALGO COUNTY**

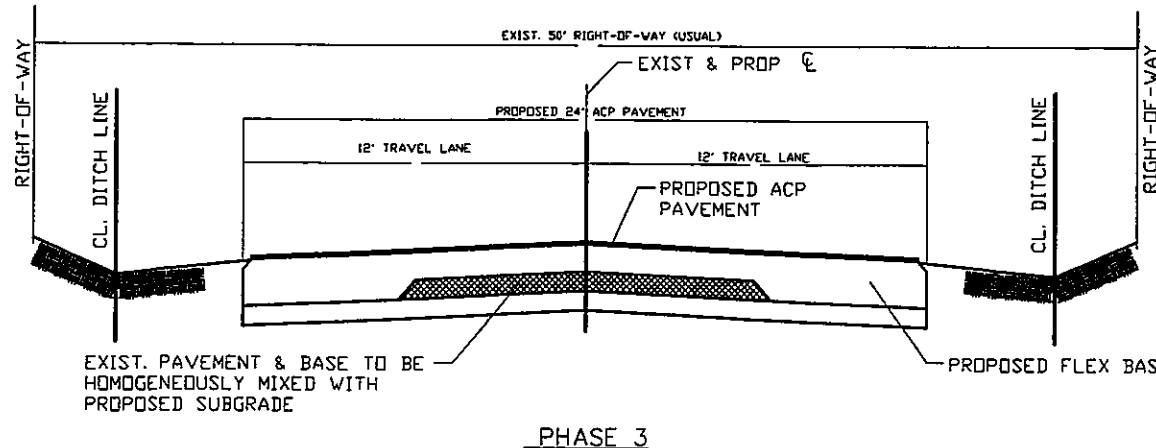
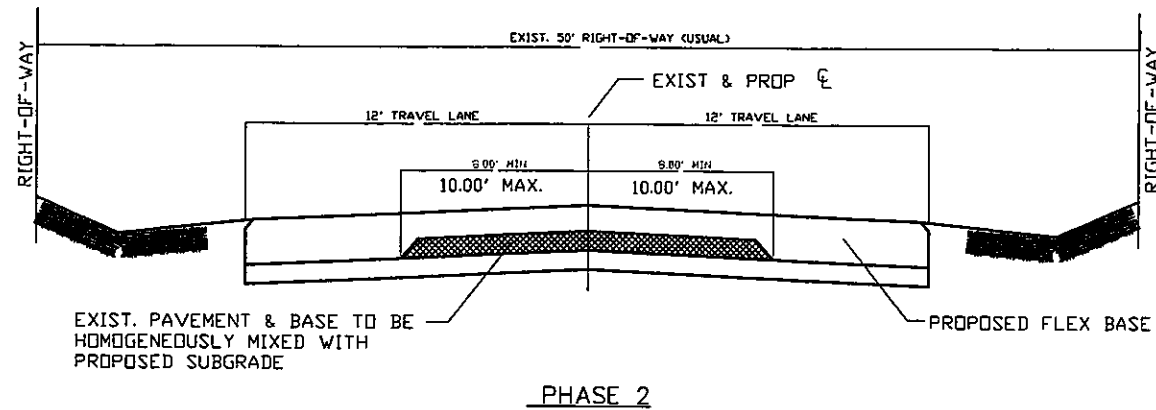
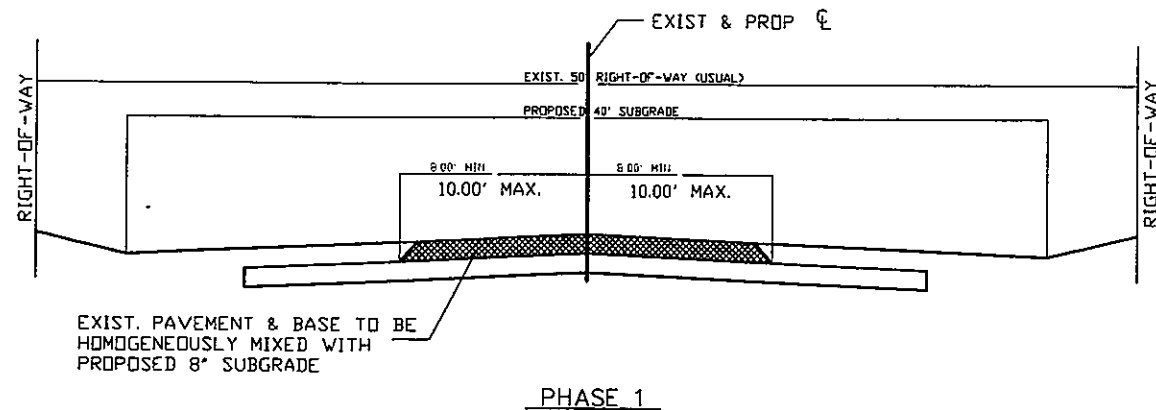
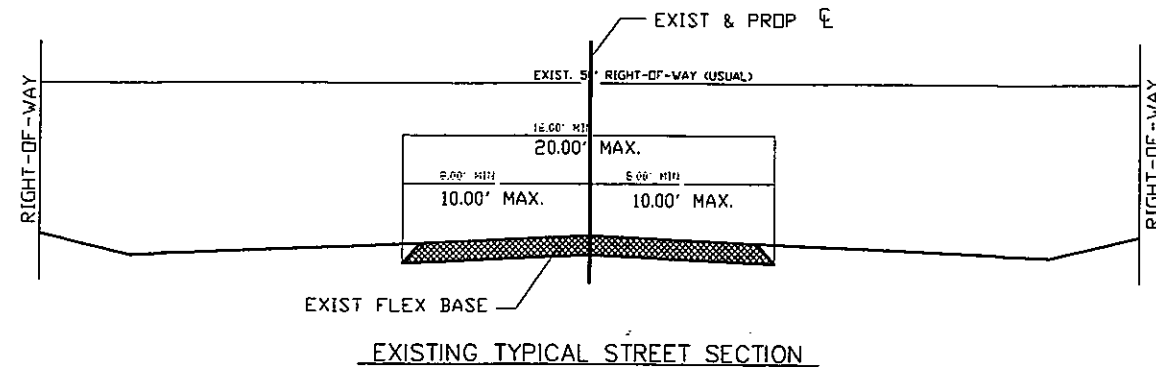


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PHONE (956) 668-1588

**COLONIA ACCESS PROGRAM  
GENERAL NOTES**

**HIDALGO COUNTY TEXAS**

DN:		FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.	HIGHWAY NO.
CK DN:			TEXAS		
DN:					
CK DN:		STATE DIST. NO.	COUNTY	CONTROL NO.	SECT. NO.
TR:			HIDALGO		
CK TR:					7



**SEQUENCE OF WORK**

INSTALL PROJECT LIMIT SIGNS, ADVANCE WARNING SIGNS, AND CROSSROADS BARRICADE SIGNS AS SHOWN ON THE TRAFFIC CONTROL PLAN (TCP) AND OR AS DIRECTED BY THE ENGINEER. ALL SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD, AND SHALL BE IN PLACE PRIOR TO COMMENCING ANY CONSTRUCTION. SIGNS TO REMAIN IN PLACE FOR THE DURATION OF THE PROJECT AND UNTIL COMPLETION AND ACCEPTANCE OF THE PROJECT BY THE HIDALGO COUNTY.

**PHASE I**

INSTALL ALL SW3P DEVICES ACCORDING TO THE SW3P PLAN AND STANDARDS. ADJUST ALL UTILITIES THAT ARE IN CONFLICT WITH THE PROPOSED CONSTRUCTION. INSTALL PROPOSED DRAINAGE ROADWAY CROSS CULVERTS AND DRIVEWAY/COUNTY ROADSIDE DRAINS AS SHOWN IN THE PLANS. CUT ROADWAY DITCHES TO PROPOSED GRADE ELEVATIONS AS SHOWN IN THE PLANS. CONTRACTOR SHALL MAINTAIN 3:1 MAXIMUM SLOP ADJACENT TO THE ROADWAY TRAVEL SURFACE. EXCAVATED MATERIAL SHALL BE SALVAGED AND USED THROUGHOUT THE PROJECT AS DIRECTED BY THE ENGINEER.

**PHASE II**

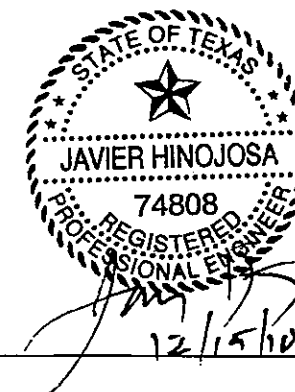
CONSTRUCT PROPOSED ROADWAY IN HALF-SECTIONS, AND ACCORDING TO TCP STANDARD 7/32 TCP (1-2)-98 9/32. THE CONTRACTOR WILL BE REQUIRED TO OPEN UP THE ROADWAY TO TRAFFIC AT THE END OF DAYS WORK. THE CONTRACTOR SHALL ASSURE THAT ALL DROP OFF CONDITIONS ARE SAFE AND IN ACCORDANCE WITH THE MUTCD AND TxDOT TCP STANDARDS. CONTRACTOR SHALL BE ALLOWED TO WORK ON SEVERAL STREETS AT ONE TIME AS LONG AS ACCESS IS MAINTAINED AT THE END OF DAYS WORK.

**PHASE III**

PLACE FINAL OVERLAY IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. COMPLETE ROADWAY DITCH SLOPE GRADES TO MATCH THE TOP EDGE OF THE ACP PAVEMENT.

**FINAL CLEAN UP**

UPON COMPLETION OF THE WORK AND BEFORE THE FINAL ACCEPTANCE IS MADE, THE CONTRACTOR SHALL SHAPE AND FINISH SUCH PORTIONS OF THE RIGHT-OF-WAY AS MAY HAVE BEEN DISTURBED DURING THE CONSTRUCTION AND WILL BE REQUIRED TO LEAVE THE ENTIRE RIGHT-OF-WAY IN A SMOOTH, CLEAN AND NEAT CONDITIONS TO THE SATISFACTION OF THE ENGINEER.



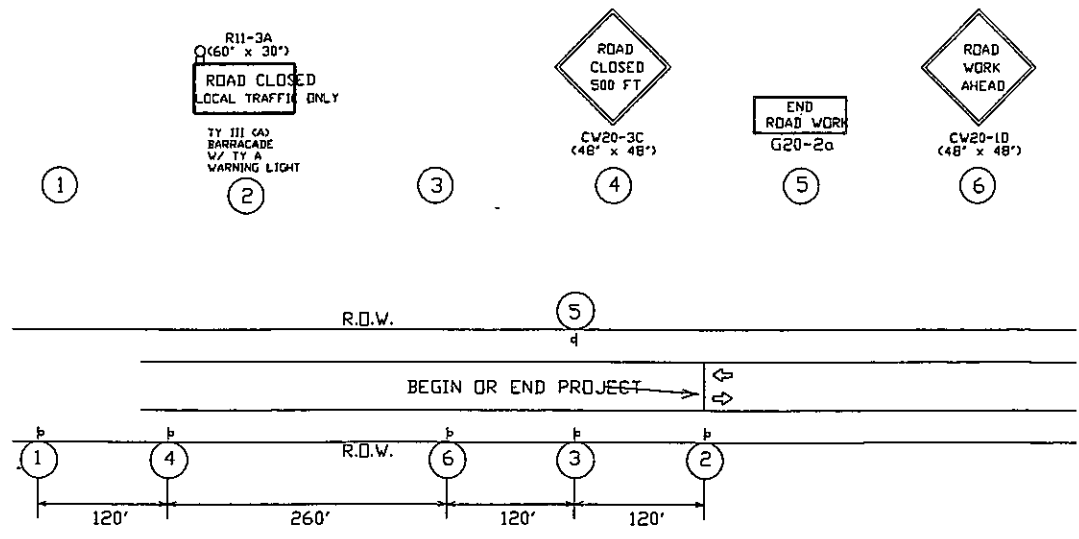
**COLONIA ACCESS PROGRAM  
TRAFFIC CONTROL NARRATIVE**

**HIDALGO COUNTY TEXAS**

DN:		FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.	HIGHWAY NO.
CK DN:			TEXAS		
DN:		STATE DIST. NO.	COUNTY	CONTROL NO.	SECT. NO.
CK DN:			HIDALGO		
TR:				JOB NO.	SHEET NO.
CK TR:					8

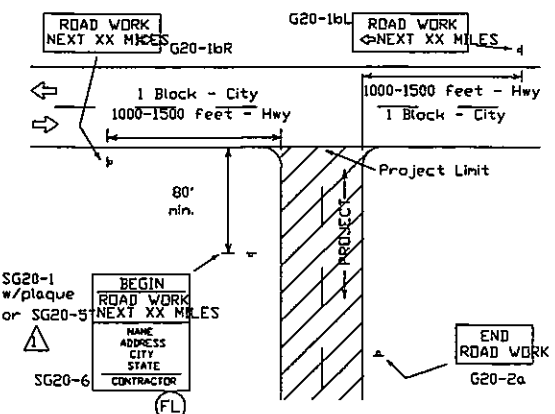
DISCLAIMER  
The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

## PROJECT LIMIT TRAFFIC CONTROL DEVICES



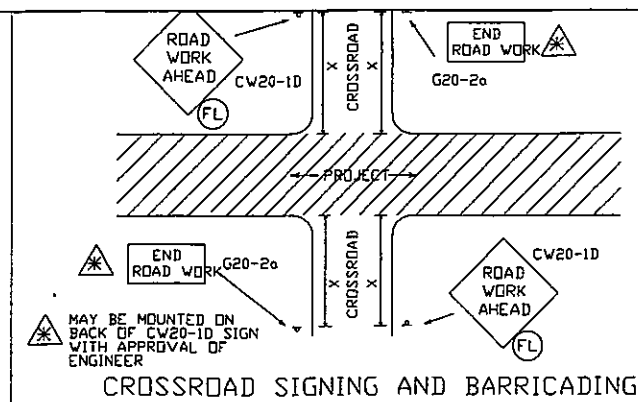
### PROJECT LIMIT GENERAL NOTES

- SIGNS AND WARNING LIGHTS**
- When specified on this sheet or other sheets in the plans, warning lights for a sign shall be installed and maintained by the contractor. Warning lights shall be attached to the sign support using a 1/2" bolt (minimum) of sufficient length for three washers, lock washer and a nut.
  - Warning lights shall be maintained as directed by the Engineer.
  - Appropriate standard traffic control devices shall be used as required by the plans. Any variation in the plans shall be documented by written agreement between the Engineer and the contractor's responsible person.
  - As a general rule, additional traffic control devices in advance of the project limits should only be used in those cases where a work area, a detour, or a potentially hazardous location is less than 2000 feet inside the project limits.
  - The traffic control devices used in the above illustrations are examples only. Field conditions and engineering judgement should dictate the most appropriate traffic control devices to be used. Any variation in the plans shall be documented by written agreement between the Engineer and the contractor's responsible person.
  - As detailed above, the BEGIN ROAD WORK NEXT X MILES, CONTRACTOR and END ROAD WORK signs shall be erected at or near the project limits and the WORK ZONE TRAFFIC FINES DOUBLE sign with plaque shall be erected in advance of the project limits. These signs should be adjusted to provide adequate spacing to other signs. The OBSERVE WARNING SIGNS STATE LAW sign shall be installed when required elsewhere in the plans.
  - With the agreement of an adjacent project Engineer, the Engineer(s) may allow the omission of END ROAD WORK, TRAFFIC FINES DOUBLE, and other advance warning signs if the signing would be redundant and the work areas appear continuous to the motorists. If the adjacent project is completed first, the contractor will erect the necessary warning signs as shown on these sheets, the TCP sheets or as directed by the Engineer. The BEGIN ROAD WORK NEXT X MILES sign shall be revised to show appropriate work zone distance.
  - Duplicate construction warning signs should be erected on the median side of divided highways where median width will permit and traffic volumes justifies the signing.
  - Except for devices required by Note 6, traffic control devices should be in place only while work is actually in progress or a definite need exists.
  - Sign size should be based on the "Texas Manual on Uniform Traffic Control Devices for Streets and Highways" (TMUTCD).
  - The Special Public Information sign (SG20-B) shall be installed at the project limits when required elsewhere in the plans. Refer to SMD Standards for approved mounting details.

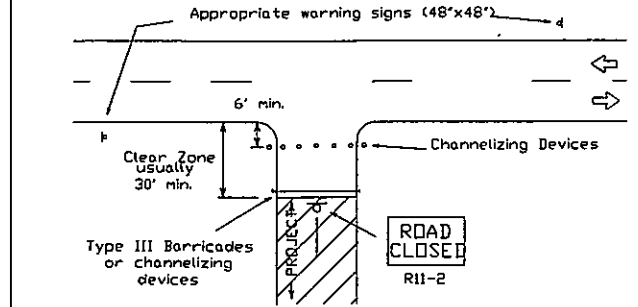


### PROJECT LIMITS AT T-INTERSECTION

- The ROAD WORK NEXT X MILES sign should be erected on the intersected highway as detailed above.
- On the intersected roadway, additional traffic control devices, such as a flagger and accompanying signs or other signs, should be used when work is being performed at or near the intersection.



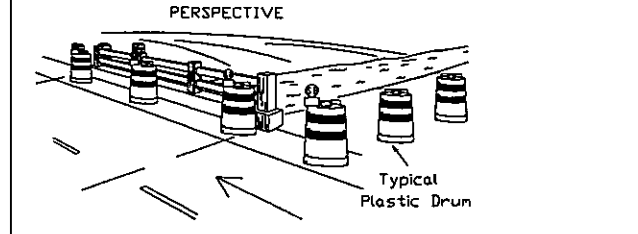
### CROSSROAD SIGNING AND BARRICADING



### PROJECT LIMITS FOR CLOSED ROADWAY

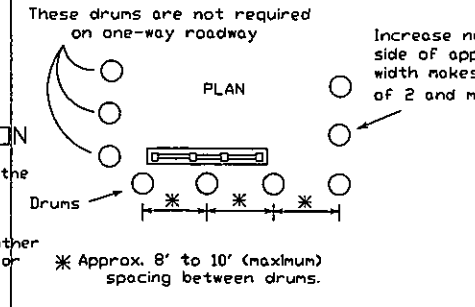
Barricades or channelizing devices shall be erected completely across roadway. Channelizing Devices may be drums, vertical panels or cones as specified in the plans.

### CULVERT WIDENING OR OTHER ISOLATED WORK WITHIN THE PROJECT LIMITS



- Where positive redirection capability is provided, drums may be omitted.
- Plastic construction fencing may be used with drums for safety as required in the plans.
- Vertical Panel on flexible support may be substituted for drums when shoulder width is less than 4'.
- When shoulder width is greater than 12', steady-burn lights may be omitted, if drums are used.

Only pre-qualified products shall be used. A list of compliant products and their sources may be obtained by writing or faxing Standards Engineer, Traffic Operations Division - TE, Texas Department of Transportation, 125 East 11th Street, Austin, Texas 78701-2483, Phone (512) 416-3120, Fax (512) 416-3161, E-mail TRF-STANDARD@nigw.dot.state.tx.us



\* Approx. 8' to 10' (maximum) spacing between drums.

**CROSSROAD SIGNING AND BARRICADING**  
1. Except as noted elsewhere in plans, the usual minimum signing on a crossroad approach should be one CV20-1D ROAD WORK AHEAD sign and G20-2a END ROAD WORK sign. Where speeds and volumes are relatively low, a smaller ROAD WORK AHEAD sign may be used.

When approved by the Engineer, on low volume crossroads, advance warning signs may be the reduced size 36" x 36" ROAD WORK AHEAD (MCV20-1D) sign mounted back to back with the reduced size 36" x 18" END ROAD WORK (SG20-2a) sign. See the "STANDARD HIGHWAY SIGN DESIGNS FOR TEXAS" manual and BC(9) thru BC(9C) for sign design details. On low volume crossroads, advance signing may be omitted if approved by the Engineer.

- Additional signs such as FLAGGER AHEAD, LOOSE GRAVEL, or other appropriate signs may be required. When additional signs are required, such signs will be considered part of the minimum requirements.
- The G20-1a sign shall be required on major crossroads to advise motorists of the length of construction in either direction from the intersection.
- On higher volume crossroads additional traffic control devices may be noted elsewhere in the plans.
- When work occurs in the intersection area, appropriate traffic control devices shall be in place.

**WARNING LIGHTS**  
Warning lights shall meet the requirements of the "Texas Manual on Uniform Traffic Control Devices for Streets and Highways."

Warning lights shall NOT be installed on barricades.  
Type A-Low Intensity Flashing Warning Lights are commonly used with signs. They are intended to warn of an approaching potentially hazardous area. Their use shall be as indicated on this sheet and/or other sheets of the plans by the designation "FL".

Type-C Steady Burn Lights are intended to be used in a series for delineation to supplement other traffic control devices. Their use shall be as indicated on this sheet and/or other sheets of the plans by the designation "SB".

### TYPICAL CONSTRUCTION WARNING SIGN SIZE AND SPACING

Roadway Classification	Posted Speed MPH	Sign Spacing *' (Approx.)	Long-term Or Intermediate-term Stationary Approach Warning Signs		Short-term Or Stationary Short Duration Approach Warning Signs		Other Warning Signs	
			CV20 Series And CV22-1 Sign	CV21 Series	CV21 Series	CV21 Series		
			Standard inches	Minimum inches	Standard inches	Minimum inches	Standard inches	
Conven.	30	120	48 x 48	36 x 36	30 x 30	24 x 24	30 x 30	
	35	160			36 x 36	30 x 30	36 x 36	
	40	240			Use Standard Size	Use Standard Size	48 x 48	48 x 48
	45	320						
	50	400						
	55	500			700	800	48 x 48	48 x 48
	60	600						
65	700							
70	800							
Exp or Frwy	*	*			**	**	**	

\* For typical sign spacings on expressways and freeways, see TMUTCD typical application diagrams or TCP Standard Sheets.  
Δ Minimum distance from work area to 1st Advance Warning sign and/or distance between each additional sign.

\*\* Smaller sign sizes may be used where sign designs have been included in the "Standard Highway Sign Designs for Texas" manual.

- General Notes:**
- Special or larger size signs may be used as may be necessary.
  - Distance between signs should be increased as required to have 1500 feet advance warning.
  - Distance between signs should be increased as required to have 7 mile or more advance warning.
  - For use only on secondary roads or city streets where speeds are low.
  - Only diamond shaped warning sign sizes are indicated.
  - See sign size listing in TMUTCD, Appendix A for complete list of all available sign design sizes.
  - Where two sizes are listed, see sign size listing in TMUTCD, Appendix A for proper size.

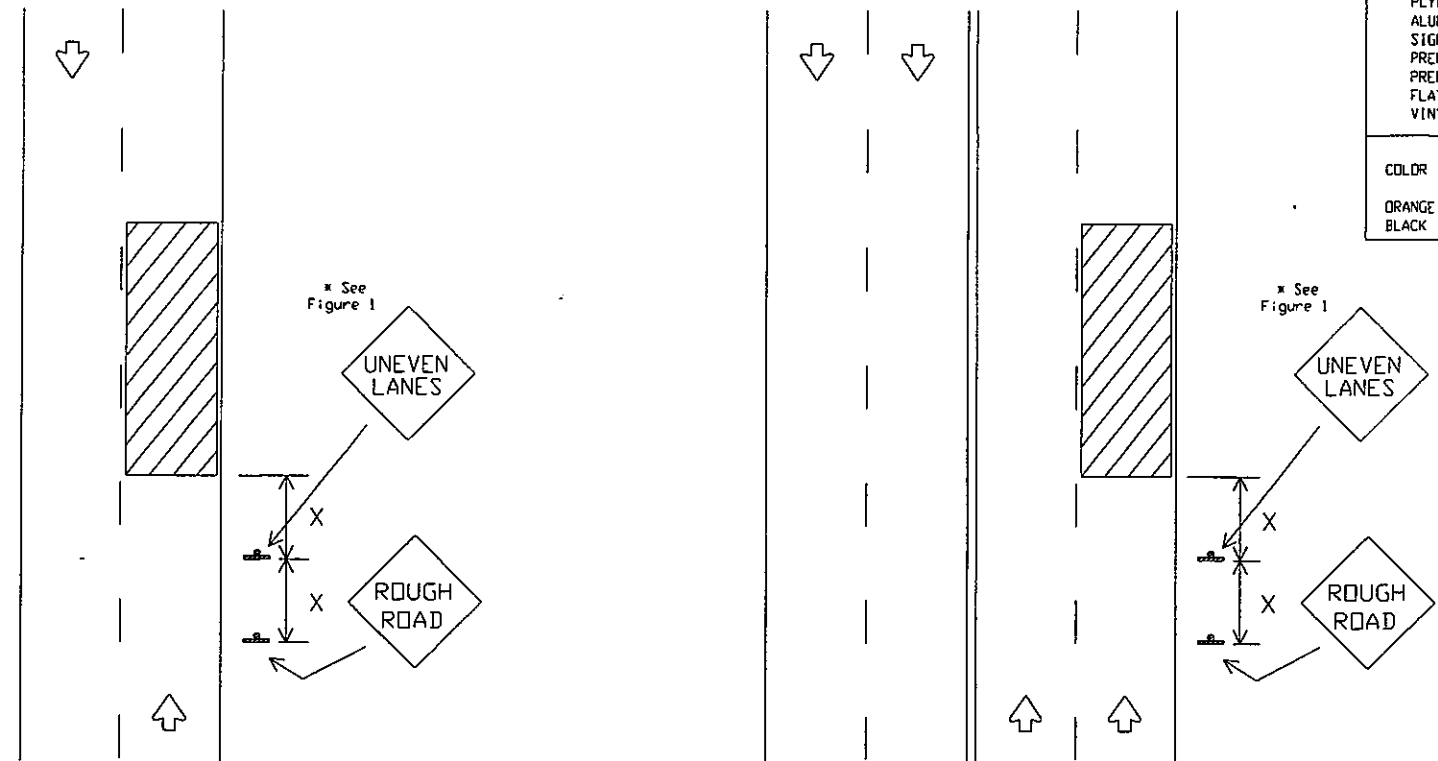


## STANDARD PLANS TEXAS DEPARTMENT OF TRANSPORTATION Traffic Operations Division BARRICADE AND CONSTRUCTION STANDARDS

DN:	FED. RD. DIV. NO.:	STATE:	FEDERAL AID PROJECT NO.:	HIGHWAY NO.:
CK DN:		TEXAS:		
TR:	STATE DIST. NO.:	COUNTY:	CONTR. NO.:	SECT. NO.:
CK TR:	HIDALGO:			JOB NO.:
				SHEET NO.:
				9

DISCLAIMER  
 The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

LEVELS SHOWN  
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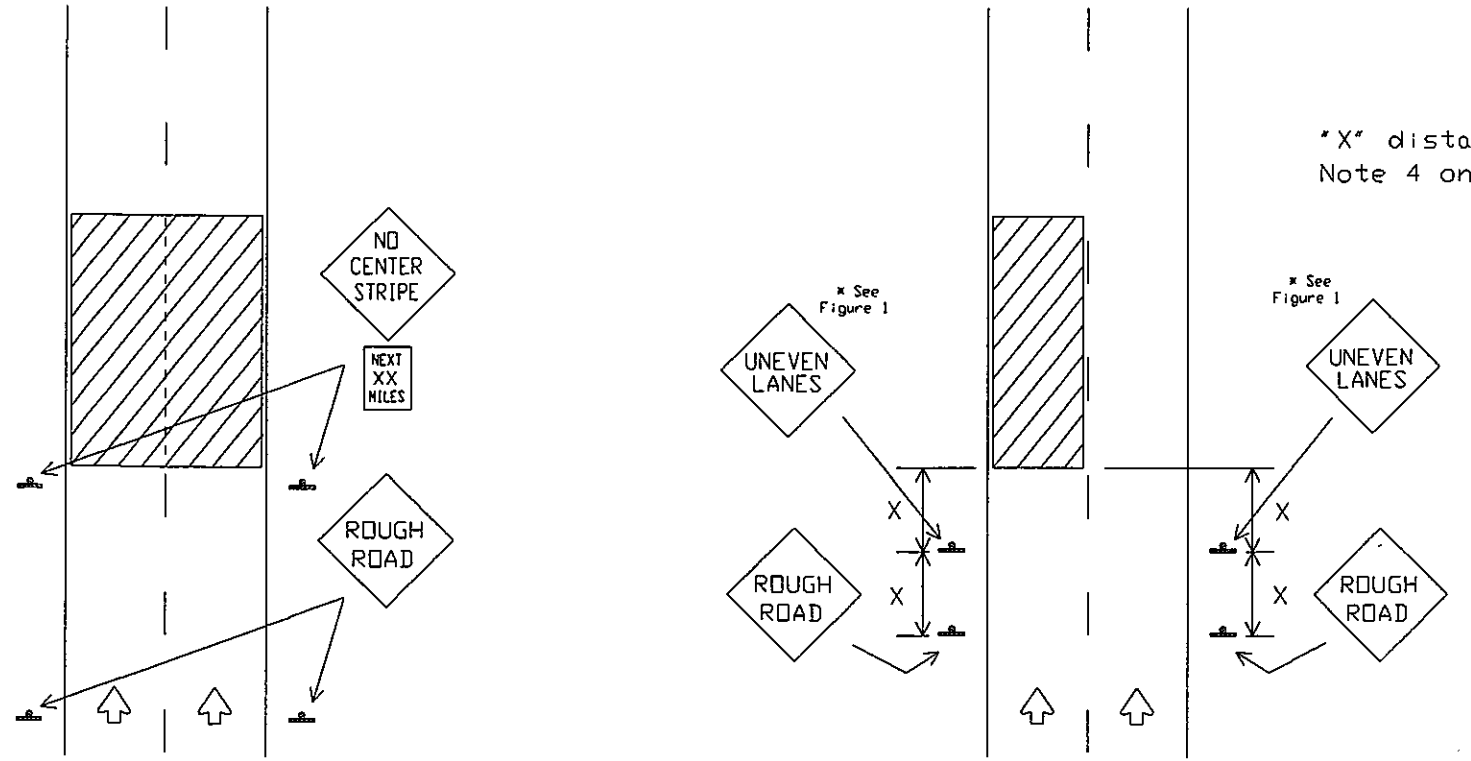
Signing shown for one direction.

DEPARTMENTAL MATERIAL SPECIFICATIONS		
PLYWOOD SIGN BLANKS		DMS-7100
ALUMINUM SIGN BLANKS		DMS-7110
SIGN HARDWARE		DMS-7120
PREFABRICATED PAVEMENT MARKINGS-PERMANENT		DMS-8240
PREFABRICATED PAVEMENT MARKINGS-REMOVABLE		DMS-8241
FLAT SURFACE REFLECTIVE SHEETING		DMS-8300
VINYL NON-REFLECTIVE DECAL SHEETING		DMS-8320
COLOR	USAGE	SHEETING MATERIAL
ORANGE	BACKGROUND	TYPE E (FLUORESCENT PRISMATIC)
BLACK	LEGEND & BORDERS	VINYL NON-REFLECTIVE DECAL SHEETING

- GENERAL NOTES:
1. If spalling or holes occur, ROUGH ROAD signs should be placed in advance of the condition and may be repeated throughout the project.
  2. UNEVEN LANES sign (CW8-11) should be installed in advance of the condition and repeated every mile. Signs installed along the uneven lane condition may be supplemented with the NEXT XX MILES sign (CW21-16) or Advisory Speed sign (CV13-1).
  3. NO CENTER STRIPE signs (CW8-12) should be installed if centerlines or lane lines are obscured or obliterated. The signs should remain in place until permanent pavement markings are installed.
  4. Signs shall be spaced at the distances recommended as per BC standards.
  5. When operations are completed and final surface treatment will not be applied as part of this project, advance signs shall be left in place and become the property of the State. These signs shall be installed on approved permanent sign supports as per TxDOT standards. Additional signs may be required as directed by the Engineer. Minimum mounting height of signs is 7 feet. Signs shall remain in place until final surface is applied. Signs shall be considered subsidiary to the Item "BARRICADES, SIGNS AND TRAFFIC HANDLING."
  6. Pavement markings shall be replaced as operations proceed.
  7. Short term markings shall not be used to simulate edge lines.
  8. All signs shall be constructed in accordance with the details found in the "Standard Highway Sign Designs for Texas," latest edition. Sign details not shown in this manual shall be shown in the plans or the Engineer shall provide a detail to the Contractor before the sign is manufactured.

TRAFFIC CONTROL DURING PLANING, OVERLAY AND LEVELING OPERATIONS ARE SHOWN ELSEWHERE IN THE PLANS.

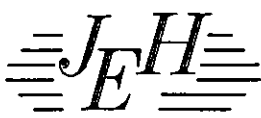
FIGURE 1		
Edge Condition	Edge Height (D)	Warning Devices
	less than or equal to 1"	Signs: ECW8-8
	greater than 1' to: 1 1/4" (maximum-planing) 1 1/2" (typical-overlay)	Signs: CW8-11, ECW8-8
Distance "D" may be a maximum of 1 1/4" for planing operations and 2" for overlay operations if uneven lanes are open to traffic after work operations cease.		



\*X\* distance - See Note 4 on this page.



HIDALGO COUNTY



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SIGNS FOR UNEVEN LANES

HIDALGO COUNTY TEXAS



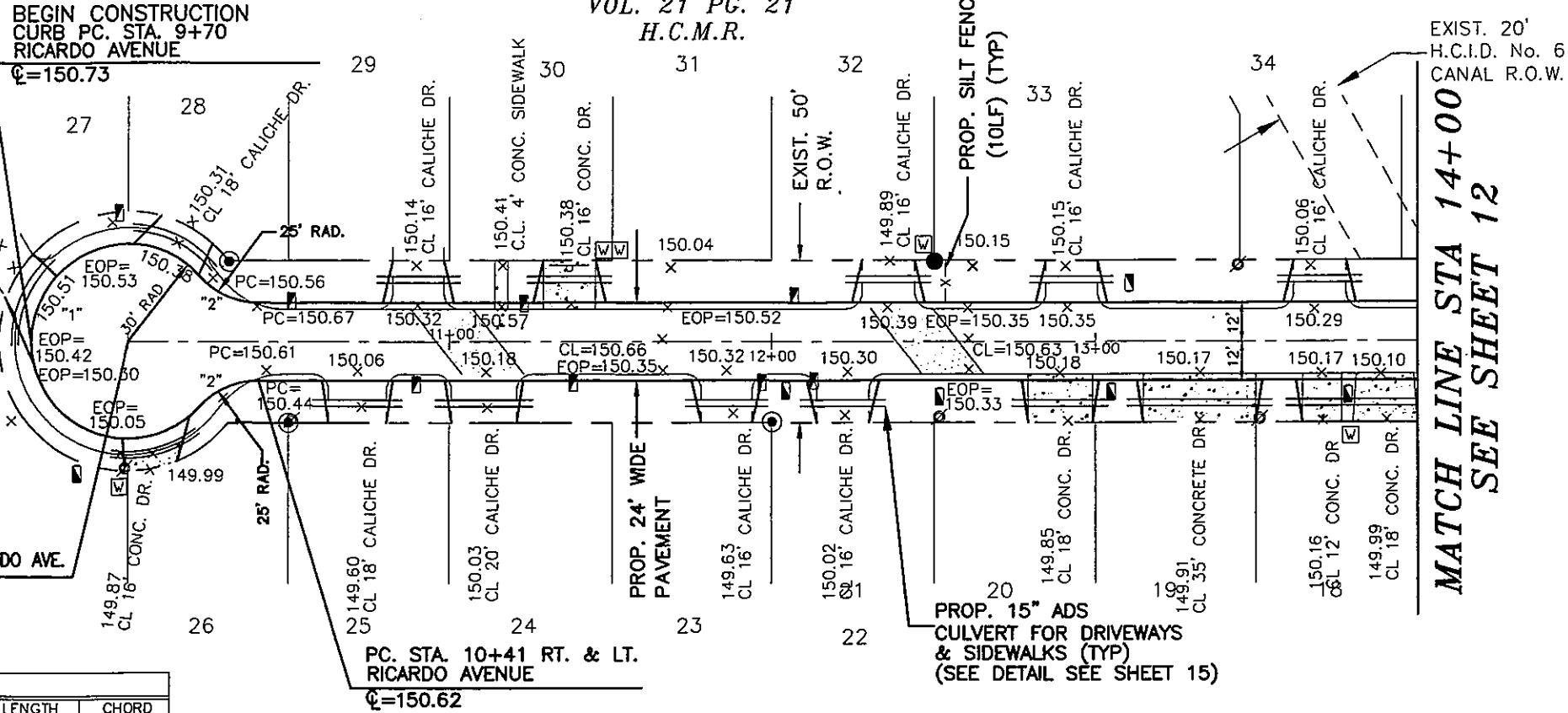
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CK DN:		TEXAS		31
DW:	STATE DIST. NO.	COUNTY	CONTROL NO.	SECT. NO.
CK DW:		HIDALGO		
TR:				JOB NO.
CK TR:				10

**LEGEND**

- EXIST. LAMP POLE
- EXIST. GUY WIRE
- EXIST. POWER POLE
- EXIST. EDGE OF PAVEMENT
- EXIST. CENTER LINE
- EXIST. PALM TREE
- 
- FOUND 1/2 IRON ROD
- FOUND IRON PIPE
- MAILBOX
- BRICK MAILBOX
- TELEPHONE PEDESTAL
- WATERLINE METER
- WATERLINE VALVE
- WATERLINE MARKER
- EXIST. FENCE
- EXIST PAVEMENT
- PAVEMENT
- CONCRETE DRIVEWAY

BENTSEN GROVES SUBDIVISION  
VOL. 7 PG. 13  
H.C.M.R.

**LA HOMA ROAD SUBDIVISION**  
VOL. 21 PG. 21  
H.C.M.R.



SCALE:  
HORIZONTAL: 1" = 50'  
VERTICAL: 1" = 5'

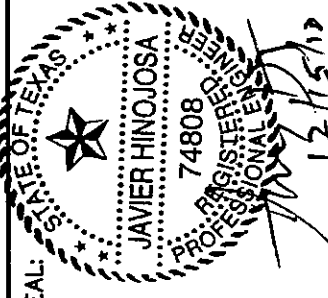
JUNE, 2009  
SCALE: HORIZ: 1"=50'  
VERT: 1"=5'  
REVISIONS:

LA HOMA ROAD SUBDIVISION  
PAVING & DRAINAGE  
IMPROVEMENTS  
RAMON AVENUE  
HIDALGO COUNTY TEXAS

CURB CURVE DATA					
CURVE	DELTA	RADIUS	TANGENT	LENGTH	CHORD
"1"	275°26'39"	30.00'	27.28'	144.22'	40.36'
"2"	47°43'20"	25.00'	11.06'	20.82'	20.23'
"3"	90°00'00"	20.00'	20.00'	31.42'	28.28'

**RICARDO AVENUE**

STATION	ELEVATION	PROF. @ (-) 0.100%		EXIST. CENTER LINE ELEVATION	ROADSIDE DITCH @ (-) 0.100%	MATCH LINE STA 14+00 SEE SHEET 12	ELEVATION
		PROF. @ (-) 0.100%	PROF. @ (-) 0.100%				
150							150
145							145
140							140
	+70 P.C. LT. CL=150.73						
	CL=150.22						
	CL=150.70						
	+71 F.C. RT. & LT. CL=150.62						
	CL=150.30						
	CL=150.60						
	CL=150.64						
	CL=150.50						
	CL=150.63						
	CL=150.40						
	CL=150.44						
	CL=150.30						



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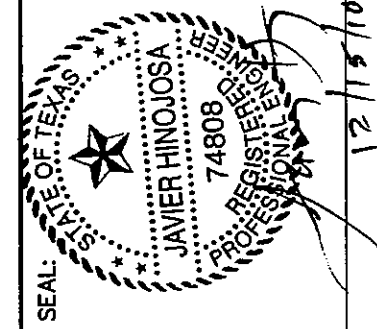
ENGINEER: JAVIER HINOJOSA  
DESIGNER: J.B.G.  
SURVEYOR:  
DRAWN BY: LUIS HERNANDEZ  
JOB NO.: 090602  
BOOK NO.:  
SHEET NO.: 11

JUNE, 2009

SCALE: HORIZ: 1"=50'  
VERT: 1"=5'

REVISIONS:

LA HOMA ROAD SUBDIVISION  
PAVING & DRAINAGE  
IMPROVEMENTS  
RAMON AVENUE  
HIDALGO COUNTY TEXAS



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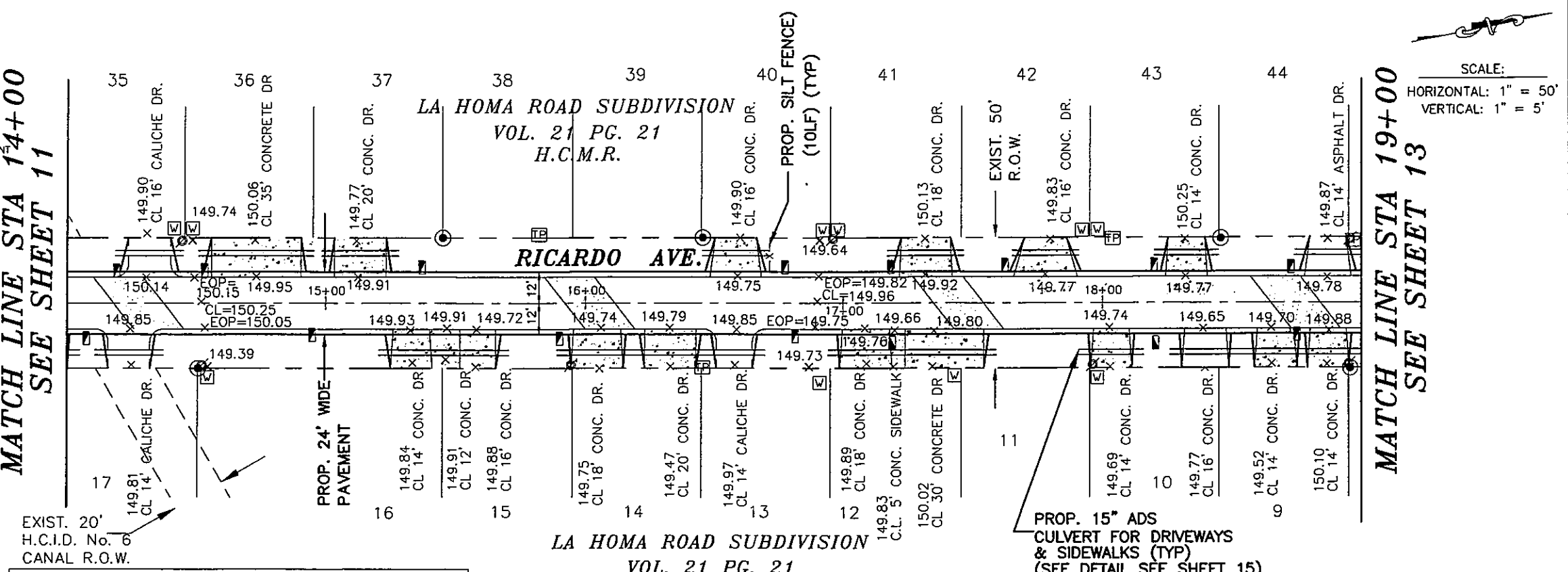
ENGINEER: JAVIER HINOJOSA  
DESIGNER: J.B.G.  
SURVEYOR:  
DRAWN BY: LUIS HERNANDEZ  
JOB NO.: 090602  
BOOK NO.:  
SHEET NO.: 12

SCALE:  
HORIZONTAL: 1" = 50'  
VERTICAL: 1" = 5'

MATCH LINE STA 19+00  
SEE SHEET 13

MATCH LINE STA 14+00  
SEE SHEET 11

- LEGEND**
- EXIST. LAMP POLE
  - EXIST. GUY WIRE
  - EXIST. POWER POLE
  - EXIST. EDGE OF PAVEMENT
  - EXIST. CENTER LINE
  - EXIST. PALM TREE
  - 
  - FOUND 1/2 IRON ROD
  - FOUND IRON PIPE
  - MAILBOX
  - BRICK MAILBOX
  - TELEPHONE PEDESTAL
  - WATERLINE METER
  - WATERLINE VALVE
  - WATERLINE MARKER
  - EXIST. FENCE
  - EXIST PAVEMENT
  - PAVEMENT
  - CONCRETE DRIVEWAY



**CURB CURVE DATA**

CURVE	DELTA	RADIUS	TANGENT	LENGTH	CHORD
"1"	275°26'39"	30.00'	27.28'	144.22'	40.36'
"2"	47°43'20"	25.00'	11.06'	20.82'	20.23'
"3"	90°00'00"	20.00'	20.00'	31.42'	28.28'

**RICARDO AVENUE**

150	MATCH LINE STA 14+00 SEE SHEET 11											MATCH LINE STA 19+00 SEE SHEET 13	150
145	MATCH LINE STA 14+00 SEE SHEET 11											MATCH LINE STA 19+00 SEE SHEET 13	145
140	MATCH LINE STA 14+00 SEE SHEET 11											MATCH LINE STA 19+00 SEE SHEET 13	140
		14+00	15+00	16+00	17+00	18+00	19+00						

EXIST. CENTER LINE ELEVATION

ROADSIDE DITCH @ (-) 0.100%

PROP. @ (-) 0.100%

**LEGEND**

- EXIST. LAMP POLE
- EXIST. GUY WIRE
- EXIST. POWER POLE
- EXIST. EDGE OF PAVEMENT
- EXIST. CENTER LINE
- EXIST. PALM TREE
- 
- FOUND 1/2 IRON ROD
- FOUND IRON PIPE
- MAILBOX
- BRICK MAILBOX
- TELEPHONE PEDESTAL
- WATERLINE METER
- WATERLINE VALVE
- WATERLINE MARKER
- EXIST. FENCE
- EXIST PAVEMENT
- PAVEMENT
- CONCRETE DRIVEWAY

MATCH LINE STA 19+00  
SEE SHEET 12

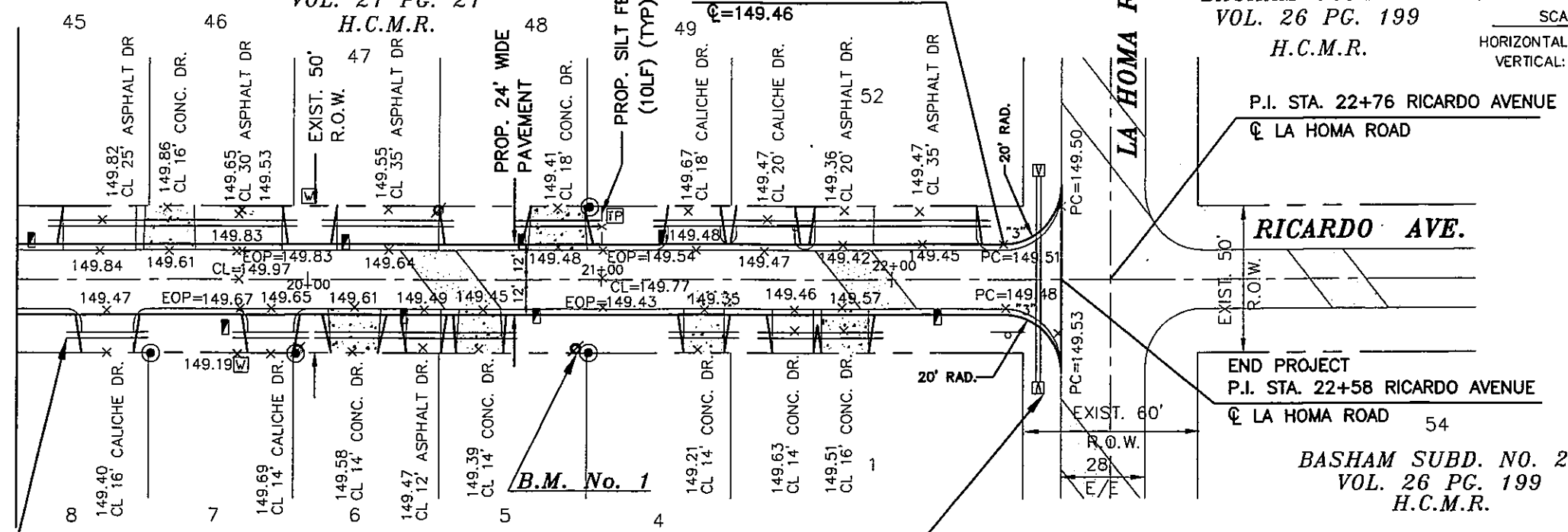
PROP. 15" ADS  
CULVERT FOR DRIVEWAYS  
& SIDEWALKS (TYP)  
(SEE DETAIL SEE SHEET 15)

LA HOMA ROAD SUBDIVISION  
VOL. 21 PG. 21  
H.C.M.R.

PC. STA. 22+38 RT. & LT.  
RICARDO AVENUE  
E=149.46

BASHAM SUBD. NO. 24  
VOL. 26 PG. 199  
H.C.M.R.

SCALE:  
HORIZONTAL: 1" = 50'  
VERTICAL: 1" = 5'



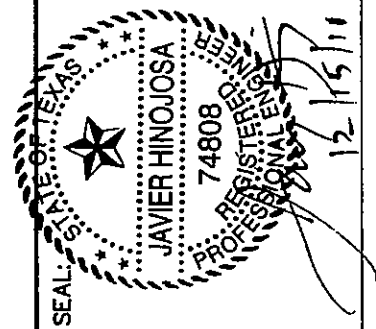
LA HOMA ROAD SUBDIVISION  
VOL. 21 PG. 21  
H.C.M.R.

STREET TURN OUT  
W/70 LF. 18" RC PIPE &  
2 EA. SAFETY END TREATMENTS  
(SEE DETAIL SEE SHEET 14)

CURB CURVE DATA					
CURVE	DELTA	RADIUS	TANGENT	LENGTH	CHORD
"1"	275°26'39"	30.00'	27.28'	144.22'	40.36'
"2"	47°43'20"	25.00'	11.06'	20.82'	20.23'
"3"	90°00'00"	20.00'	20.00'	31.42'	28.28'

**RICARDO AVENUE**

150	MATCH LINE STA 19+00 SEE SHEET 12	PROP. C @ (-) 0.100%	EXIST. CENTER LINE ELEVATION	150		
		ROADSIDE DITCH @ (-) 0.100%				
145	MATCH LINE STA 19+00 SEE SHEET 12			145		
140	MATCH LINE STA 19+00 SEE SHEET 12			140		
		<p>CL=149.98 E=149.80</p> <p>CL=149.97 E=149.70</p> <p>CL=149.77 E=149.60</p> <p>CL=150.05 E=149.50</p> <p>+38 P.C. RT. &amp; LT. E=149.46</p>				
		19+00	20+00	21+00	22+00	23+00



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DESIGNER: J.B.G.  
SURVEYOR:  
DRAWN BY: LUIS HERNANDEZ  
JOB NO.: 090602  
BOOK NO.:  
SHEET NO.: 13

LA HOMA ROAD SUBDIVISION

RICARDO AVENUE	Exist. Drwy Width	EXIST. R.C.P. 16" (CL III)	Prop. Width @ Edge of Rdwy.	Prop. Width @ R.O.W. Line	Item 530 ACP Drwy Area (SY)			Item 464 15" ADS PIPE	PROP. FL ADS PIPE	
					P1	PB-1	PRB-1		UP STREAM	DOWN STREAM
Station	(ft.)	(ft.)	(ft.)	(ft.)			(ft.)	(ft.)	(ft.)	
9+70 (LT.)	14	---	20	14			29	25	149.02	148.22
10+13 (LT.)	18	---	24	18			35	25	148.20	148.17
10+13 (RT.)	16	---	22	16			32	25	148.20	148.17
10+72 (RT.)	18	---	24	18			35	25	148.15	148.11
10+90 (LT.)	16	---	22	16			32	25	148.15	148.07
11+11 (RT.)	20	---	26	20			33	25	148.03	147.95
11+37 (LT.)	16	---	22	16			32	25	148.00	147.92
11+86 (RT.)	16	---	22	16			32	25	147.95	147.87
12+21 (RT.)	16	---	22	16			32	25	147.82	147.74
12+36 (LT.)	16	---	22	16			32	25	147.80	147.72
12+88 (RT.)	18	---	24	18			35	25	147.75	147.67
12+92 (LT.)	16	---	22	16			32	25	147.75	147.67
13+34 (RT.)	35	---	41	35			59	25	147.61	147.53
13+71 (RT.)	12	---	22	16			32	25	147.57	147.49
13+70 (LT.)	16	---	22	16			32	25	147.57	147.49
13+90 (RT.)	18	---	24	18			35	25	147.55	147.47
14+24 (RT.)	14	---	20	14			29	25	147.42	147.34
14+31 (LT.)	16	---	22	16			32	25	147.41	147.33
14+72 (LT.)	35	---	41	35			59	25	147.37	147.29
15+20 (LT.)	20	---	26	20			33	25	147.22	147.14
15+35 (RT.)	14	---	20	14			29	25	145.71	145.63
15+47 (RT.)	12	---	18	12			26	25	147.19	147.11
15+59 (RT.)	16	---	22	16			32	25	147.18	147.10
16+06 (RT.)	18	---	24	18			35	25	147.03	146.95
16+33 (RT.)	20	---	26	20			33	25	147.00	146.93
16+58 (LT.)	16	---	22	16			32	25	146.98	146.90
16+58 (RT.)	14	---	20	14			29	25	146.98	146.90
17+09 (RT.)	18	---	24	18			35	25	146.83	146.75
17+30 (LT.)	18	---	24	18			35	25	146.81	146.73
17+38 (RT.)	30	---	36	30			52	25	146.80	146.72
17+77 (LT.)	16	---	22	16			32	25	146.76	146.68
18+04 (RT.)	14	---	20	14			29	25	146.64	146.56
18+32 (LT.)	14	---	20	14			29	25	146.60	146.52
18+40 (RT.)	16	---	22	16			32	25	146.60	146.52
18+66 (RT.)	14	---	20	14			29	25	146.57	146.49
18+88 (RT.)	14	---	20	14			29	25	146.55	146.47
18+86 (LT.)	14	---	20	14			29	25	146.55	146.47
19+30 (LT.)	25	---	31	25			45	25	146.51	146.43
19+30 (RT.)	16	---	22	16			32	25	146.51	146.43
19+53 (LT.)	16	---	22	16			32	25	146.39	146.31
19+88 (RT.)	14	---	20	14			29	25	146.35	146.27
20+16 (RT.)	14	---	20	14			29	25	146.29	146.21
20+28 (LT.)	35	---	41	35			29	25	146.21	146.13
20+40 (RT.)	12	---	18	12			26	25	146.20	146.12
20+60 (RT.)	14	---	20	14			29	25	146.18	146.10
20+86 (LT.)	18	---	24	18			35	25	146.15	146.08
21+34 (LT.)	18	---	24	18			35	25	146.00	145.93
21+36 (RT.)	14	---	20	14			29	25	145.98	145.90
21+57 (LT.)	18	---	24	18			35	25	145.98	145.90
21+68 (RT.)	14	---	20	14			29	25	145.97	145.89
21+82 (RT.)	16	---	22	16			32	25	144.46	144.38
21+82 (LT.)	20	---	26	20			33	25	145.96	145.88
22+11 (LT.)	35	---	41	35			59	25	145.83	145.75
TOTAL					947	840	1325			

\* NOTE: ALL EXISTING CONCRETE DRIVEWAYS TO BE PAVED WITH CONCRETE FROM R.O.W. LINE TO PROPOSED EDGE OF PAVEMENT (SEE SHEET ("DRIVEWAY DETAILS"))



HIDALGO COUNTY



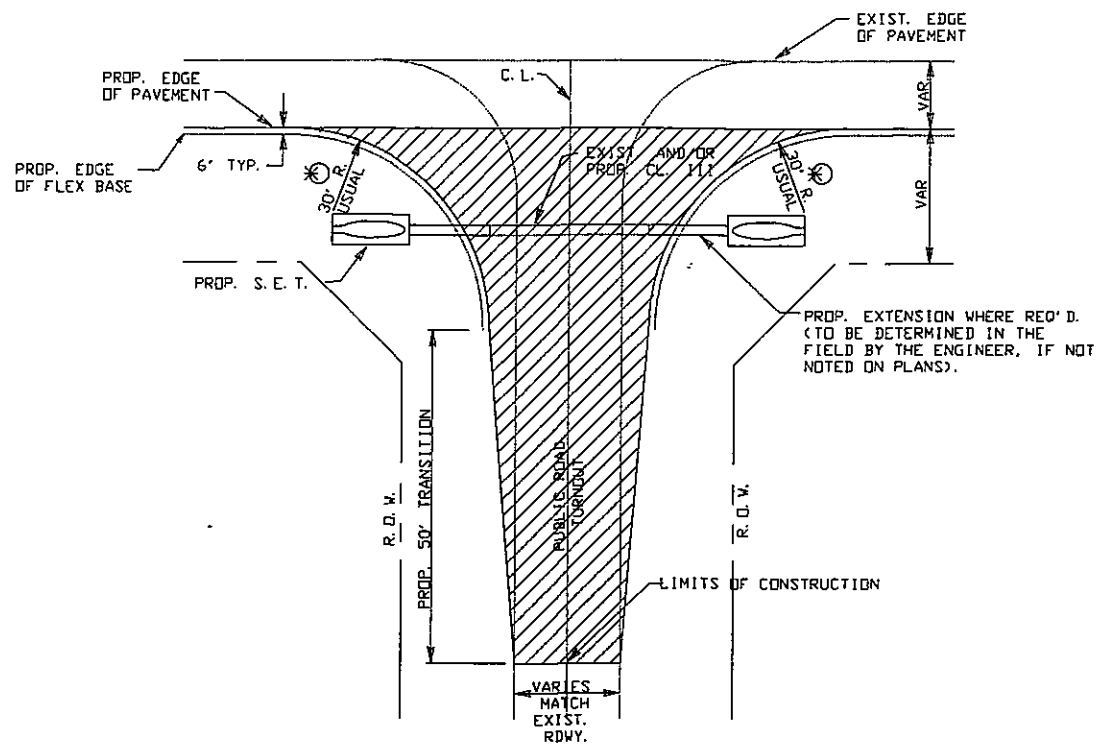
JAVIER HINOJOSA ENGINEERING CONSULTING ENGINEERS  
416 E. DOVE AVENUE McALLEN, TEXAS 78504  
PHONE (956) 668-1588

DRIVEWAY SUMMARY TABLE

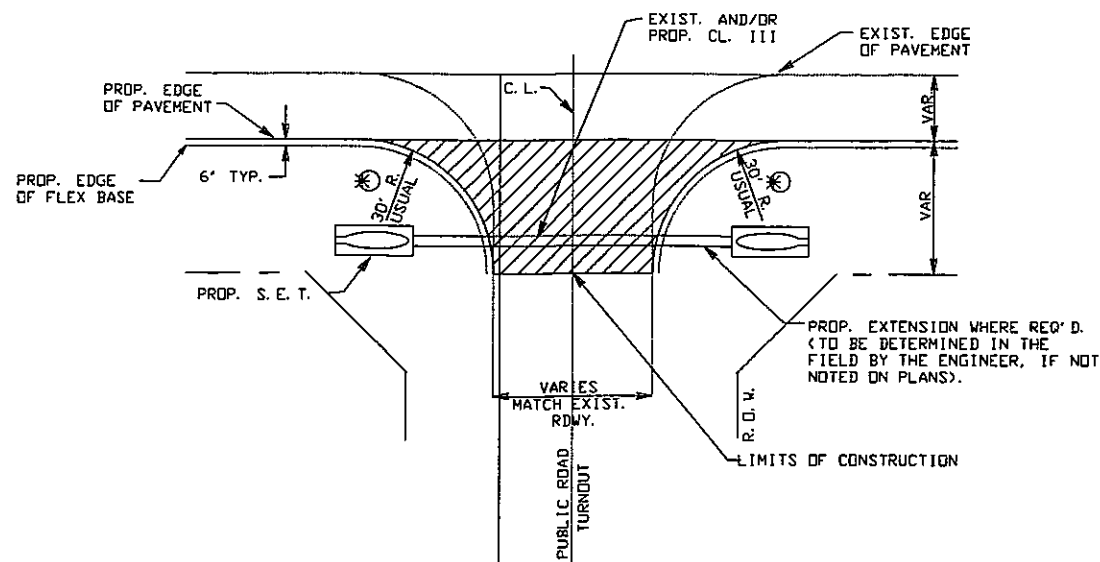
HIDALGO COUNTY TEXAS

DN:		FED. RD. DIV. NO.:	STATE:	FEDERAL AID PROJECT NO.:	HIGHWAY NO.:
CK DN:			TEXAS		31
DN:					
CK DN:		STATE DIST. NO.:	COUNTY:	CONTROL NO.:	SECT. NO.:
TR:			HIDALGO		
CK TR:					14

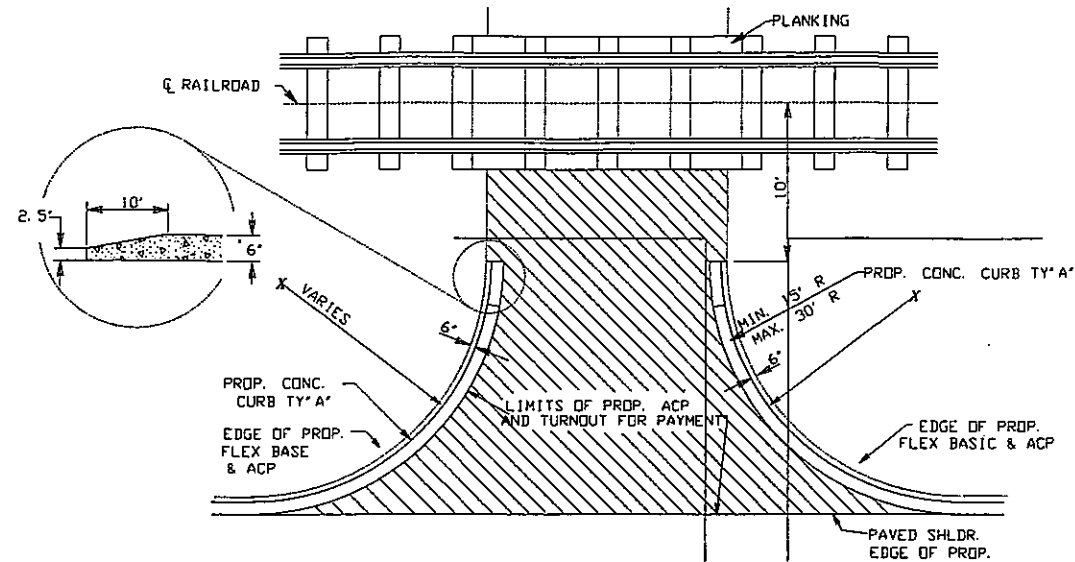




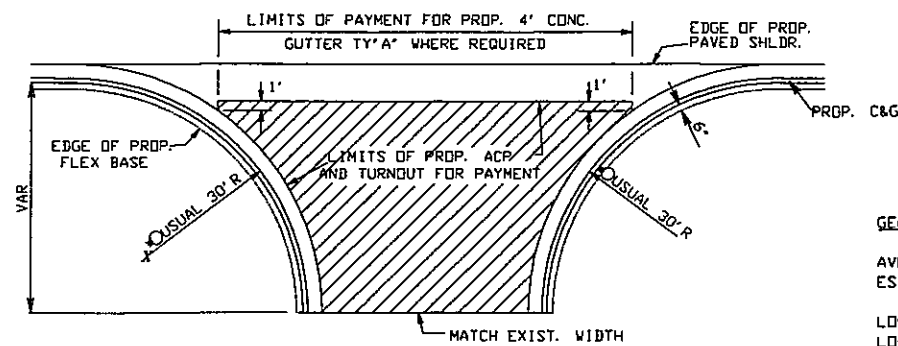
**TYPICAL DETAIL**  
(WHEN EXIST. ROADWAY WIDTH LESS THAN 24'.)



**TYPICAL DETAIL**  
(WHEN EXIST. ROADWAY WIDTH EQUAL TO OR GREATER THAN 24'.)



**PLAN OF PUBLIC TURNOUT ADJACENT TO R. R. CROSSING**



**PLAN OF PUBLIC TURNOUT**

**GENERAL NOTES:**

AVERAGE DIMENSIONS SHOWN ON TABLE OF TURNOUTS ARE FOR ESTIMATING PURPOSES ONLY.

LOCATIONS LISTED ON THE TABLE ARE APPROXIMATE, EXACT LOCATIONS, DIMENSIONS, AND TYPE TO BE ESTABLISHED DURING CONSTRUCTION BY THE ENGINEER AS REQUIRED.

SEE DRIVEWAY & TURNOUT TABLE TURNING RADIUS MAY BE REDUCED AS APPROVED BY THE ENGINEER.

**TY P**

EXIST. PAVED TURNOUTS TO BE SURFACED W/171#/SY ACP.

**TY PRB1**

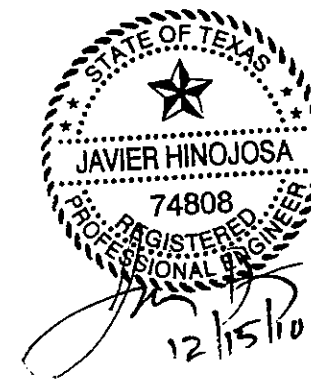
EXIST. PAVED, CALICHE AND/OR GRAVEL TURNOUTS TO BE SCARIFIED AND RECONSTRUCTED WITH 4\"/>

**TY PBS1**

EXIST. UNPAVED PUBLIC TURNOUTS TO BE CONSTRUCTED AS SHOWN WITH 12\"/>

**TY PBS2**

EXIST. TURNOUT TO BE CONSTRUCTED SAME AS ROADWAY.



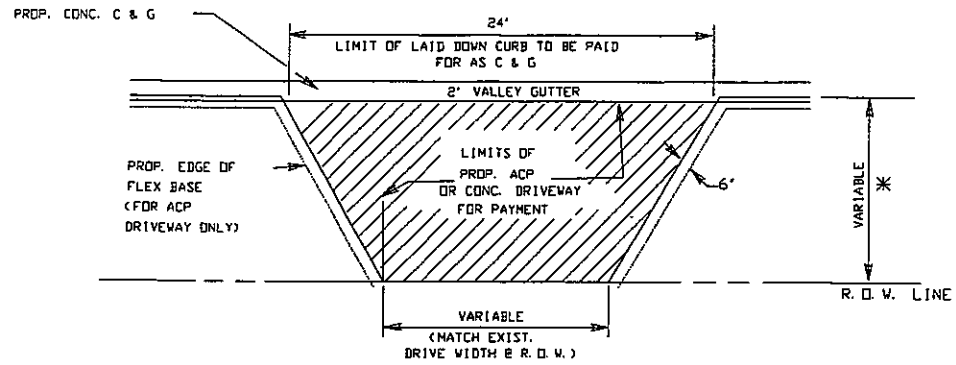
**STANDARD PLANS**  
TEXAS DEPARTMENT OF TRANSPORTATION  
Traffic Operations Division

**TURNOUT DETAILS**

HIDALGO COUNTY TEXAS

DN:	FED. RD. DIV. NO.	STATE:	FEDERAL AID PROJECT NO.	HIGHWAY NO.
CK DN:		TEXAS		
DA:	STATE DIST. NO.	COUNTY:	CONTROL NO.	SECT. NO.
CK DA:		HIDALGO		
TR:			JOB NO.	SHEET NO.
CK TR:				15

PRIVATE AND COMMERCIAL DRIVES WITH CURB & GUTTER

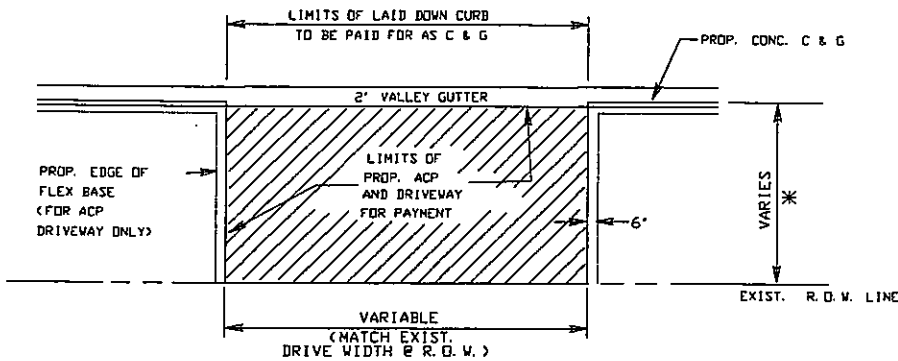


PLAN OF PRIVATE AND COMMERCIAL DRIVES

(W/DRIVEWAY WIDTH LESS THAN 24')

⊗ SEE NOTE BELOW

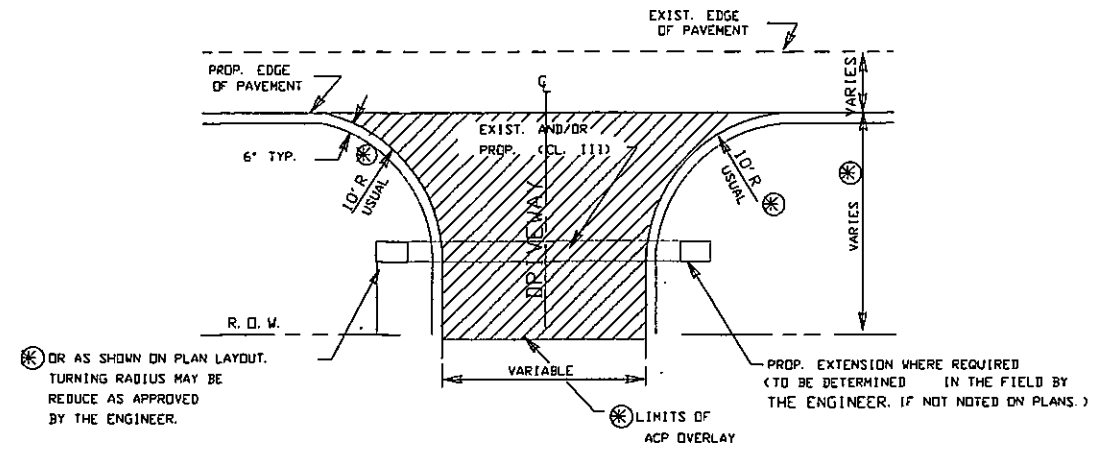
⊗ SEE P&P SHEETS



PLAN OF PRIVATE AND COMMERCIAL DRIVES

(W/DRIVEWAY WIDTH EQUAL TO OR GREATER THAN 24' @ R.O.V. LINE)

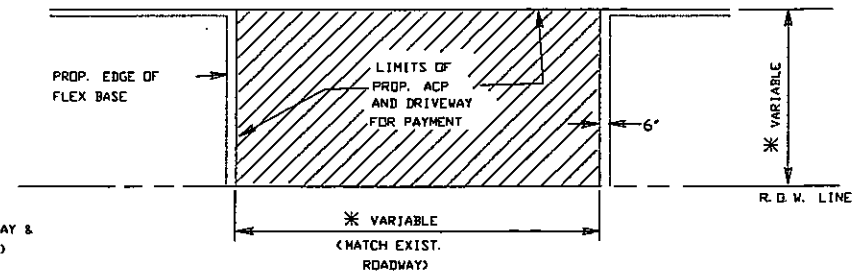
PRIVATE AND COMMERCIAL DRIVES WITHOUT CURB & GUTTER



PLAN OF PRIVATE AND COMMERCIAL DRIVES

(W/DRIVEWAY WIDTH LESS THAN 24')

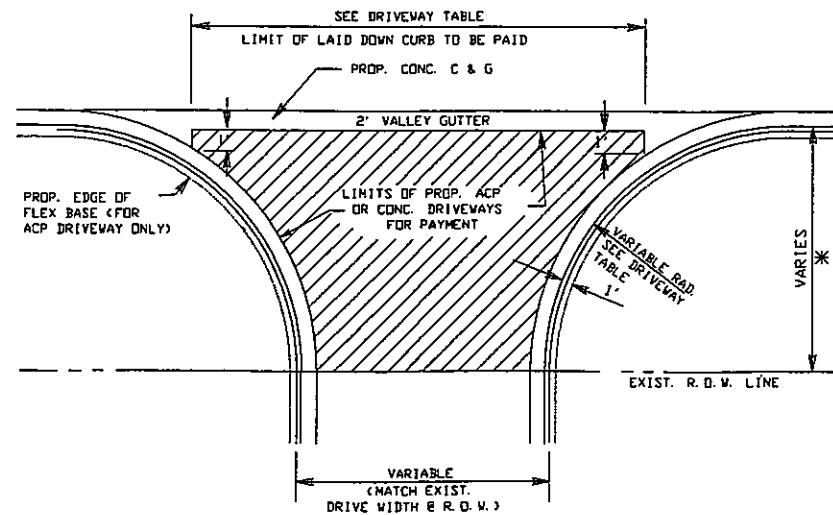
⊗ FOR DETAILS SEE DRIVEWAY & TURNOUT DETAILS (TABLE)



PLAN OF PRIVATE AND COMMERCIAL DRIVES

(W/DRIVEWAY WIDTH EQUAL TO OR GREATER THAN 24' @ R.O.V. LINE)

PRIVATE AND COMMERCIAL DRIVES WITH CURB & GUTTER



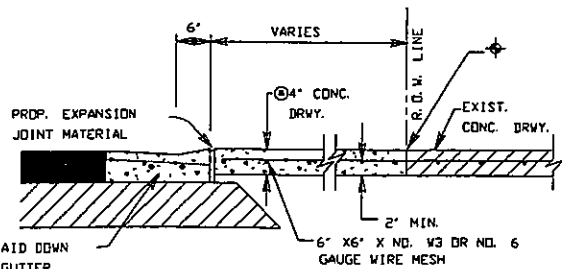
PLAN OF PRIVATE AND COMMERCIAL DRIVES

SEE P&P SHEETS FOR LOCATIONS OF DRIVES

DRIVEWAY TYPES

⊗ NOTE:

- TY PRB-1  
EXIST. PAVED CALICHE AND /OR GRAVEL DRIVEWAYS TO BE SCARIFIED AND RECONSTRUCTED WITH 3" NEW AND/OR SALVAGE FLEX. BASE TO MATCH THE PROPOSED WIDENED SECTION. THEN PRIMED AND SURFACED WITH 114#/SY ACP (TY 'D')
- TY PB-1  
EXIST. UNPAVED PRIVATE OR COMMERCIAL DRIVEWAYS TO BE CONSTRUCTED AS SHOWN WITH 4" NEW AND/OR SALVAGE FLEX. BASE, PRIMED AND SURFACED WITH 114#/SY ACP.
- TY P1  
EXIST. PAVED DRIVEWAYS TO BE PAVED WITH 114#/SY ACP TY 'D'.

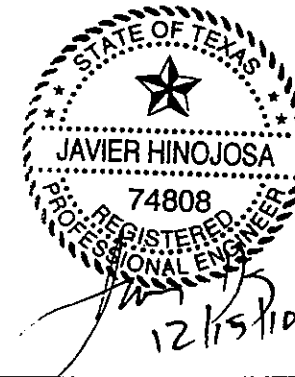


TYPICAL CONCRETE DRIVEWAY SECTION

⊕ CONC. SHALL BE SAW CUT TO THE LIMITS OF REMOVAL WHERE APPLICABLE.

⊗ 6" FOR COMMERCIAL DRIVES

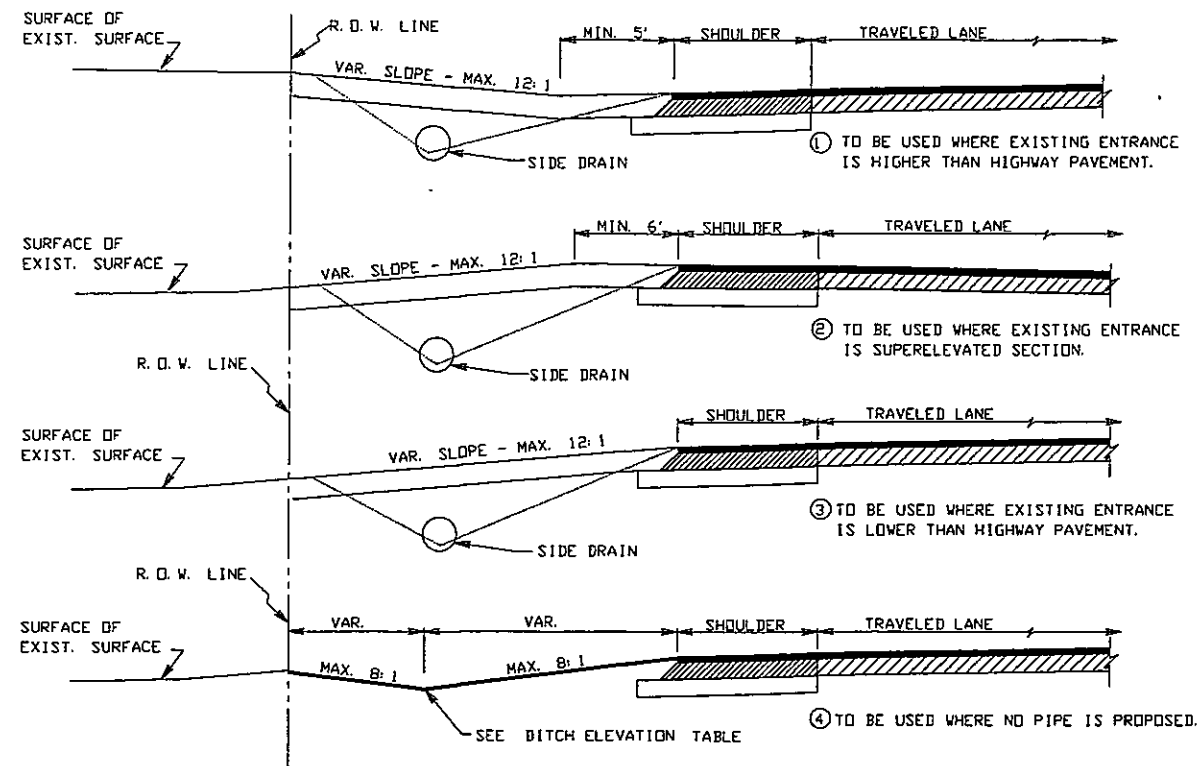
AD-76-0



TEXAS DEPARTMENT OF TRANSPORTATION

### DRIVEWAY DETAILS

DN:	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.	HIGHWAY NO.
DN:		TEXAS		
DW:				
CK DW:	STATE DIST. NO.	COUNTY	CONTROL NO.	SECT. NO.
TR:		HIDALGO		
CK TR:				JOB NO. SHEET NO.
				16



TYPICAL ENTRANCE PROFILE FOR DRIVEWAYS W/OUT C&G

NOTES:

ALL ENTRANCES CONSTRUCTED ON THIS PROJECT ARE SUBJECT TO CONCURRENCE WITH EXISTING GOVERNING REGULATIONS AS SET OUT BY THE STATE HIGHWAY COMMISSION.

BASE AND SURFACING MAY BE EXTENDED BEYOND R. O. W. LINE AS REQUIRED TO MEET EXISTING GRADE IN A SATISFACTORY MANNER.

ALL FLEXIBLE BASE USED FOR PRIVATE DRIVES & COMMERCIAL DRIVES WILL NOT REQUIRE LIME TREATMENT.

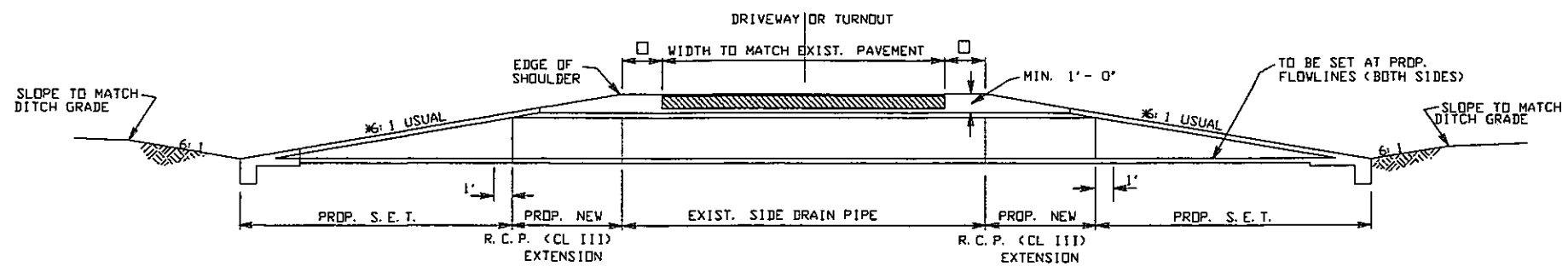
EXACT LOCATIONS, DIMENSIONS, AND TYPE TO BE ESTABLISHED DURING CONSTRUCTION BY THE ENGINEER.

PROP. WIDTH OF DRIVEWAYS AND TURNOUTS TO MATCH EXISTING WIDTH AT R. O. W. LINE.

114 #/SY ACP (COMPACTED) IS EQUAL TO 1 IN. DEPTH  
171 #/SY ACP (COMPACTED) IS EQUAL TO 1 1/2 IN. DEPTH.

SIDE DRAINS TO BE INSTALLED WHERE ROADWAY DITCH DRAINAGE IS NECESSARY AS INDICATED ON PLANS AND/OR AS DIRECTED BY THE ENGINEER.

AVERAGE DIMENSIONS SHOWN ON TABLE OF DRIVEWAYS AND TURNOUTS ARE FOR ESTIMAING PURPOSES ONLY.



- - 1' MIN. ON DRIVEWAYS  
2' MIN. ON TURNOUTS
- \* - 6:1 SLOPE USUAL  
UNLESS OTHERWISE NOTED ON PLANS



**TEXAS DEPARTMENT OF TRANSPORTATION**

**DRIVEWAYS & TURNOUTS  
PROFILE DETAILS**

DN:	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.	HIGHWAY NO.
CK DN:		TEXAS		
DN:	STATE DIST. NO.	COUNTY	CONTROL NO.	SECT. NO.
CK DN:				
TR:				JOB NO.
CK TR:		HIDALGO		17

**SITE DESCRIPTION**

PROJECT LIMITS: LA HOMA ROAD SUBDIVISION

CSJ: 2C-1083-8421 RICARDO AVENUE

PROJECT DESCRIPTION: Construction of a non-freeway facility consisting of grading, lime treated sub grade, flex-base, asphaltic concrete pavement road side ditches, signing, striping and storm water pollution control devices.

MAJOR SOIL DISTURBING ACTIVITIES: preparing the right-of-way roadway embankment roadway excavation grading clearing and grubbing erosion & sediment controls storm drain, culvert & Irrigation structure installations

TOTAL PROJECT AREA: 14.65 acres

TOTAL AREA TO BE DISTURBED: 1.56 acres

WEIGHTED RUNOFF COEFFICIENT (AFTER CONSTRUCTION): 80%

EXISTING CONDITION OF SOIL & VEGETATIVE COVER AND % OF EXISTING VEGETATIVE COVER: Existing soil consist of two different soil types. These soils consist of Hidalgo fine sandy loam and Hidalgo sandy clay loam. However portion within the right-of-way is covered with the existing paved roadway. The remaining is covered with various grasses which are in fair condition.

NAME OF RECEIVING WATERS: Drainage from offsite and onsite will be drained to roadside ditches. Drainage to be maintained as per existing conditions.

**EROSION AND SEDIMENT CONTROLS**

SOIL STABILIZATION PRACTICES:

- TEMPORARY SEEDING
- PERMANENT PLANTING, SODDING, OR SEEDING
- MULCHING
- SOIL RETENTION BLANKET
- BUFFER ZONES
- PRESERVATION OF NATURAL RESOURCES

OTHER: Disturbed areas on which construction activity has ceased (temporarily or permanently) shall be stabilized within 14 days unless activities are scheduled to resume within 21 days.

STRUCTURAL PRACTICES:

- SILT FENCES
- HAY BALES
- ROCK BERMS
- DIVERSION, INTERCEPTOR, OR PERIMETER DIKES
- DIVERSION, INTERCEPTOR, OR PERIMETER SWALES
- DIVERSION DIKE AND SWALE COMBINATIONS
- PIPE SLOPE DRAINS
- PAVED FLUMES
- ROCK BEDDING AT CONSTRUCTION EXIT
- TIMBER MATTING AT CONSTRUCTION EXIT
- CHANNEL LINERS
- SEDIMENT TRAPS
- SEDIMENT BASINS
- STORM INLET SEDIMENT TRAP
- STONE OUTLET STRUCTURES
- CURBS AND GUTTERS
- STORM SEWERS
- VELOCITY CONTROL DEVICES

OTHER:

NARRATIVE - SEQUENCE OF CONSTRUCTION (STORM WATER MANAGEMENT) ACTIVITIES:

- The order of activities will be as follows:
1. Install controls for ingress and egress into the project site.
  2. Install sediment control fences at locations as shown on the plans or as directed by the engineer.
  3. Seed entire remaining disturbed area between proposed roadway pavements and the project's right of way limits.
  4. When all construction activity is complete and the site is stabilized and approved by the Project Engineer, remove all temporary erosion controls and stabilize any areas disturbed by their removal.

STORM WATER MANAGEMENT: Storm water drainage will be provided by open road side ditches. This system will carry drainage within and outside the R.O.W. to lows in the roadway where drainage occurs and ultimately will drain as per existing conditions.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for known violations."

OTHER EROSION AND SEDIMENT CONTROLS:

MAINTENANCE: All erosion and sediment controls will be maintained in good working order. If a repair is necessary, it will be done at the earliest date possible, but no later than 7 calendar days after the surrounding exposed ground has dried sufficiently to prevent further damage from heavy equipment. The areas adjacent to creeks and drainageways shall have priority followed by devices protecting storm drain inlets.

INSPECTION: An inspection will be performed by an authorized inspector every week as well as after every half inch or more of rain (as recorded on a non-freezing rain gauge to be located at the Project Site). An inspection and Maintenance Report will be made per each inspection. Based on the inspection results, the controls shall be revised per the inspection report.

WASTE MATERIALS: All waste materials will be collected and stored in a securely lidded dumpster meeting all state and local city solid waste management regulations, or as required by local regulations. All trash and construction debris from the site will be deposited as necessary at a local dump. No construction waste material will be buried on site.

HAZARDOUS WASTE (INCLUDING SPILL REPORTING): At a minimum, any products in the following categories to be hazardous: Paints, Acids for cleaning masonry surfaces, Cleaning Solvents, Asphalt products, Chemical additives for soil stabilization, or Concrete curing compounds and additives. In the event of a spill which may be hazardous, the spill Coordinator should be contacted immediately. Emptying of excess concrete should not be allowed onsite. Likewise, washout of concrete trucks should not be performed onsite. These discharges are considered non-allowable non-storm water discharges. Concrete trucks should never be allowed to dump into storm drains or sanitary sewers.

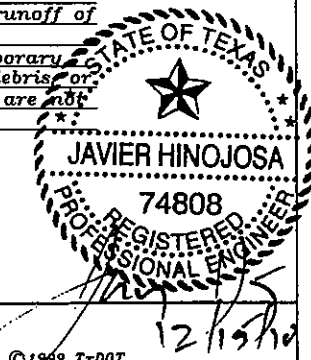
SANITARY WASTE: All sanitary waste will be collected from the portable units as necessary or as required by local regulation by a licensed sanitary waste management contractor.

OFFSITE VEHICLE TRACKING:

- HAUL ROADS DAMPENED FOR DUST CONTROL
- LOADED HAUL TRUCKS TO BE COVERED WITH TARPULIN
- EXCESS DIRT ON ROAD REMOVED DAILY
- STABILIZED CONSTRUCTION ENTRANCE

OTHER:

REMARKS: Disposal areas, stockpiles, and haul roads shall be constructed in a manner that will minimize and control the amount of sediment that may enter receiving waters. Disposal areas shall not be located in any wetland, waterbody or streambed. Construction staging areas and vehicle maintenance areas shall be constructed by the contractor in a manner to minimize the runoff of pollutants. All waterways shall be cleared as soon as practicable of temporary embankment, temporary bridges, matting, falsework, piling, debris, or other obstructions placed during construction operations that are not a part of the finished work.



**BORDER ACCESS COLONIA PROJECT  
VARIOUS SUBDIVISIONS  
TxDOT STORM WATER POLLUTION  
PREVENTION PLAN (SW3P)**

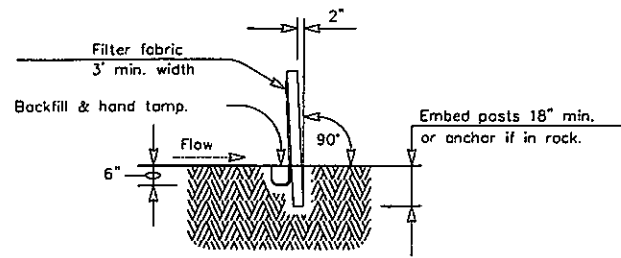
HIDALGO COUNTY, TEXAS

**JFH**  
JAVIER HINOJOSA ENGINEERING  
CONSULTING ENGINEERS  
418 E. DOVE AVENUE McALLEN, TEXAS 78504  
PHONE (354) 888-1888

© 1999 TxDOT		FEDERAL AG PROJECT NO.	SHEET NO.
6			18
STATE	STATE DISTRICT	COUNTY	
TEXAS	PHR	HIDALGO	
CONTRACT	SECTION	JOB	HIGHWAY NO.
			COLONIAS

DISCLAIMER: This standard is governed by the Texas Engineering Practice Act. No warranty of any kind is made by TxDOT for the use of this standard in any other format or for incorrect results or damages resulting from its use.

FILE: E:\Civil-02\00-204 Trenton Rd\SW3P\SW3P.DWG



SECTION A-A

**SEDIMENT CONTROL FENCE USAGE GUIDELINES**

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

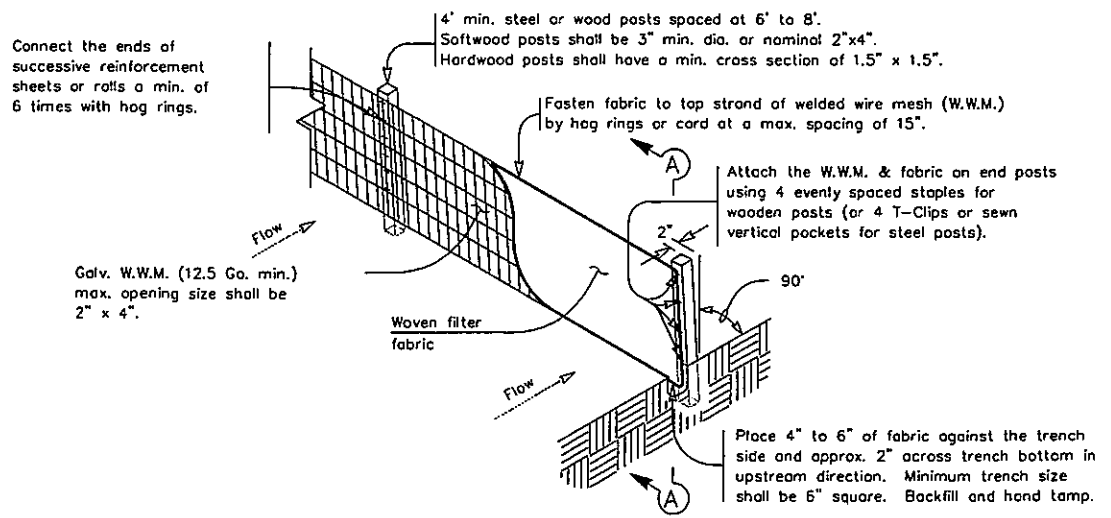
Sediment control fence should be sized to filter a max. flow through rate of 100 GPM/FT. Sediment control fence is not recommended to control erosion from a drainage area larger than 2 acres.

**PLAN SHEET LEGEND**

Sediment Control Fence — SCF

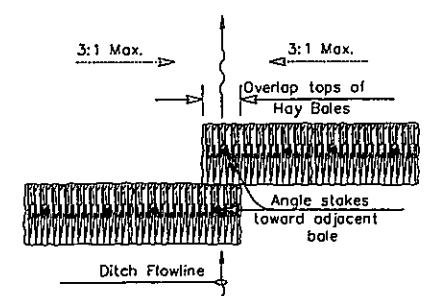
**GENERAL NOTES**

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

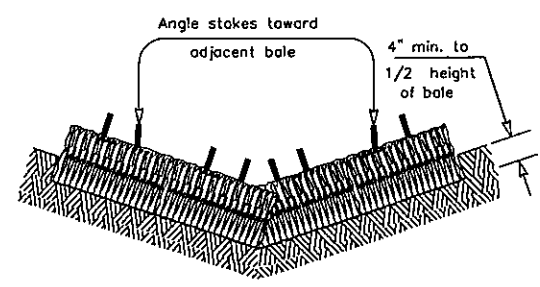


TEMPORARY SEDIMENT CONTROL FENCE

SCF



PLAN VIEW



PROFILE VIEW

**PLANS SHEET LEGEND**

Baled Hay — BH

**BALED HAY USAGE GUIDELINES**

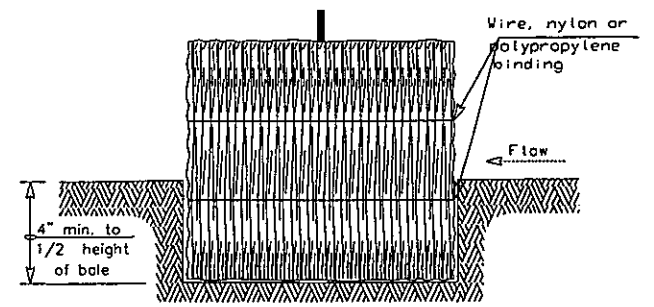
A Baled Hay installation may be constructed near the downstream perimeter of a disturbed area along a contour to intercept sediment from overland runoff. A two year storm frequency may be used to calculate the flow rate to be filtered. The installation should be sized to filter a maximum flow thru rate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

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

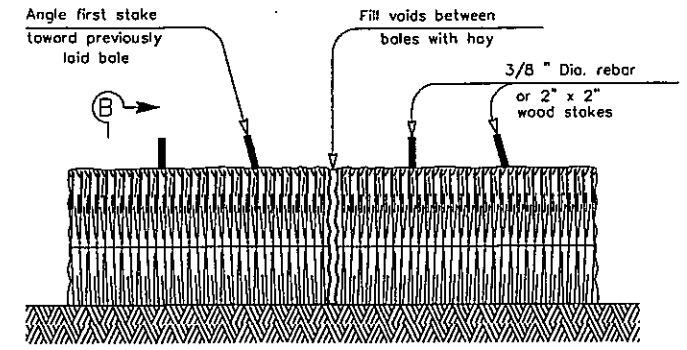
For Baled Hay installations in small ditches, the additional following considerations apply:

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

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



SECTION B-B

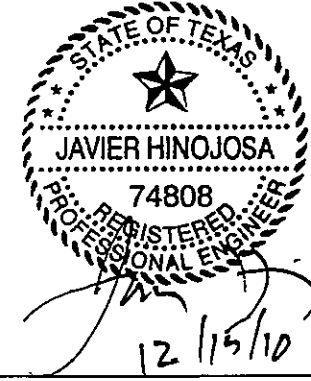


BALED HAY FOR EROSION CONTROL

BH

**GENERAL NOTES**

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



**STANDARD PLANS**  
**TEXAS DEPARTMENT OF TRANSPORTATION**  
*Traffic Operations Division*  
**EROSION AND SEDIMENT CONTROL DETAILS**

DN:	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.	HIGHWAY NO.
CK DN:		TEXAS		
DN:				
CK DN:	STATE DIST. NO.	COUNTY	CONTROL NO.	SECT. NO.
TR:		HIDALGO		
CK TR:				19

12/15/10