



# HIDALGO COUNTY PLANNING DEPARTMENT

T.J. Arredondo, CFM  
Director of Planning

1304 SOUTH 25<sup>TH</sup> STREET  
EDINBURG TEXAS 78539  
Tel. 956-318-2840 Fax. 956-318-2844

## HIDALGO COUNTY COMMISSIONERS COURT MEETING

DATE: 10-23-2018

PROPOSED LAS PALMAS DEL NORTE SUBDIVISION NO. 3 PHASE II, PRECINCT No. 3.

ENGINEER: JAVIER HINOJOSA ENGINEERING DEVELOPER: OSCAR GARZA & NORALINDA G. GARZA

☒ PRELIMINARY APPROVAL ☐ FINAL APPROVAL ☐ FINAL APPROVAL WITH FINANCIAL GUARANTEE ☐ WITH VARIANCE

NUMBER OF LOTS: 43 ☒ \*SINGLE FAMILY ☐ \*MULTI-FAMILY ☐ COMMERCIAL ☐ INSTITUTIONAL

LOCATION DESCRIPTION: SOUTH OF MILE 5 NORTH ROAD APPROXIMATELY ¼ MILE WEST OF LA HOMA ROAD.

SUBDIVISION LIES WITHIN THE: ☒ ETJ OF MISSION AND WAS APPROVED BY THE P & Z AND CITY COMMISSION OF SAID CITY

DRAINAGE REPORT WAS APPROVED BY HCDD#1: ON 8-17-2018 PROPERTY LIES WITHIN FLOOD ZONE: "X" AS PER FEMA.

DRAINAGE DESIGN: DRAINAGE WILL BE PROVIDED BY STORM DRAINAGE PIPE SYSTEM AND DETENTION WILL BE PROVIDED BY WIDENING THE EXISTING DRAIN DITCH.

ROAD R.O.W. DEDICATION: NO R.O.W. DEDICATION IS REQUIRED.

H.C.R.O.W. PRELIMINARY APPROVAL DATE: 4-06-2018 BY, VICTOR GALLARDO, PCT. 3 R.O.W. AGENT

H.C.H.D. PRELIMINARY APPROVAL DATE: 5-15-2018 BY, ENVIRONMENTAL HEALTH DIVISION

SEWER SYSTEM: ☒ OSSF

WATER SERVICE PROVIDER: S.W.S.C. LINE SIZE: 8" LOCATION: CENTENARIO DRIVE, CAMERON DRIVE, MARISSA DRIVE.

H.C.E.O.C. PRELIMINARY APPROVAL DATE: 3-28-2018 : BY MARTIN RAMIREZ ENVIRONMENTAL COMPLIANCE COORDINATOR

☒ **LARGE CONSTRUCTION**

THE APPLICANT HAS SUBMITTED THE REQUIRED NOI AS PER PART II, SECTION E OF THE TPDES GENERAL PERMIT FOR CONSTRUCTION ACTIVITIES (TXR150000) ALONG WITH A COPY OF THE EROSION CONTROL PLAN FOR THE PROPOSED PROJECT.

PRELIMINARY APPROVAL FROM THE  
HIDALGO COUNTY COMMISSIONERS COURT ON: \_\_\_\_\_, \_\_

STAFF RECOMMENDS: ☒ **Preliminary Approval** subject to comments and future recommendations by planning, other departments and the approval of the City of MISSION.

☐ **Final Approval** subject to recommendations other departments

☐ **Final Approval** with financial guarantee.

*This subdivision plat has been reviewed and complies with the Hidalgo County Subdivision Rules, Texas Water Development Board Model Subdivision Rules and The Texas Local Government Code.*

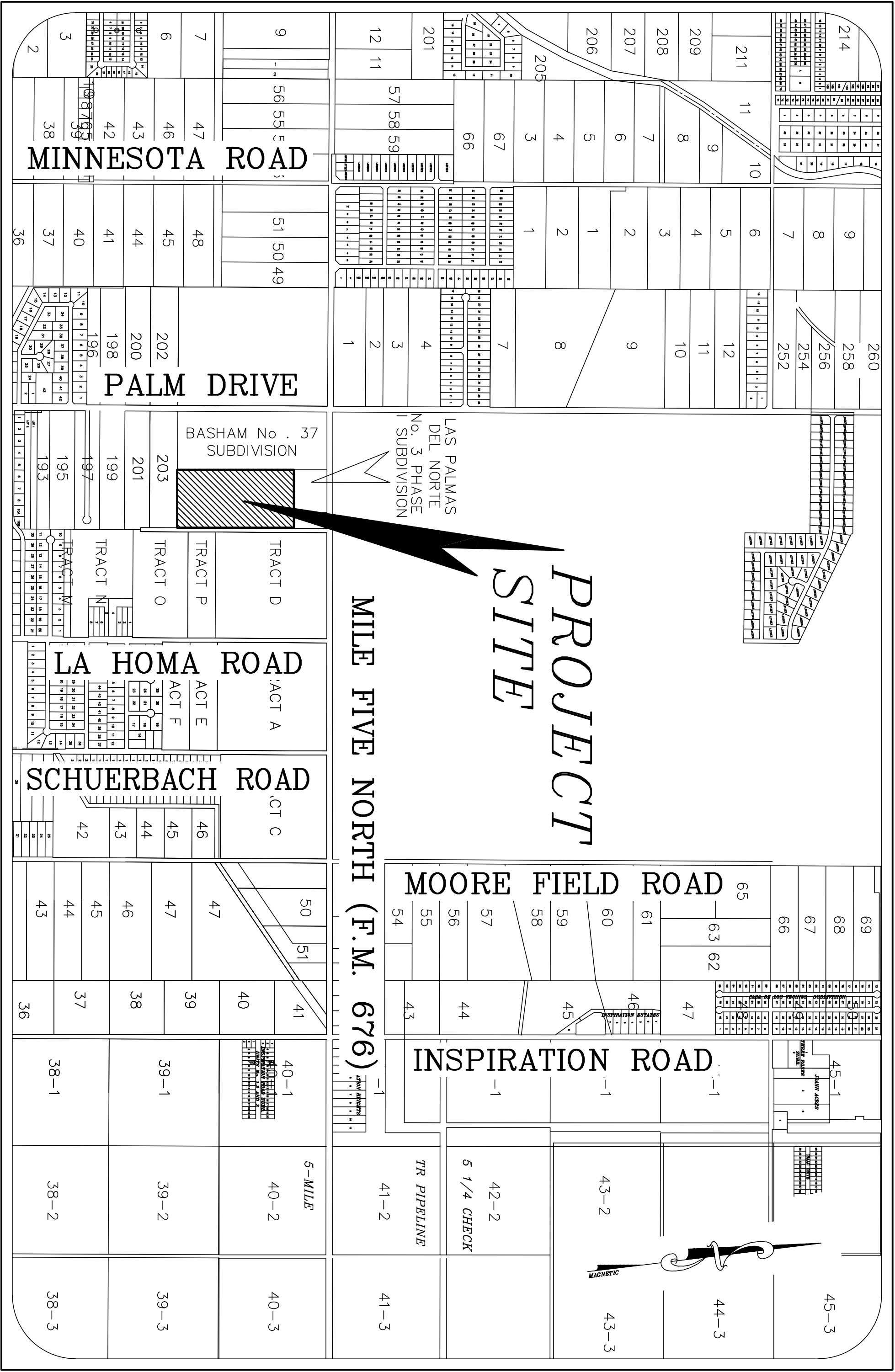


CONSTRUCTION PLANS FOR

# LAS PALMAS DEL NORTE

## SUBDIVISION No. 3 PHASE II

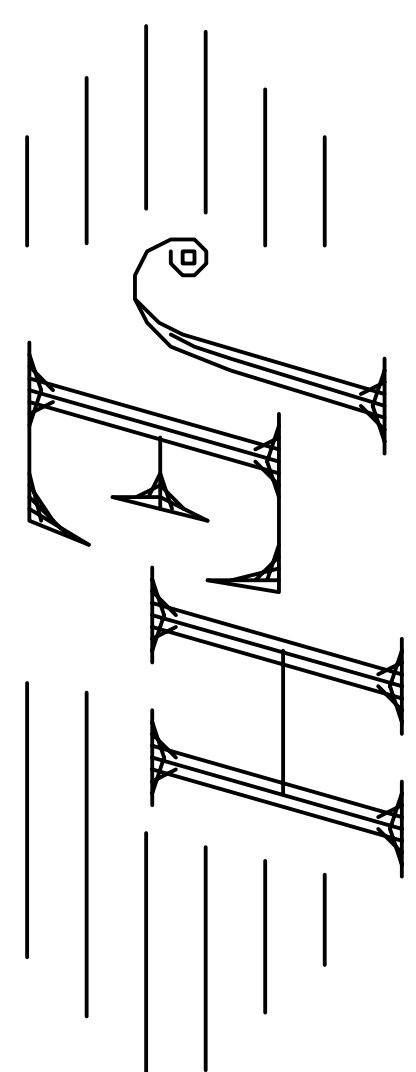
HIDALGO COUNTY, TEXAS



LOCATION MAP  
N.T.S.

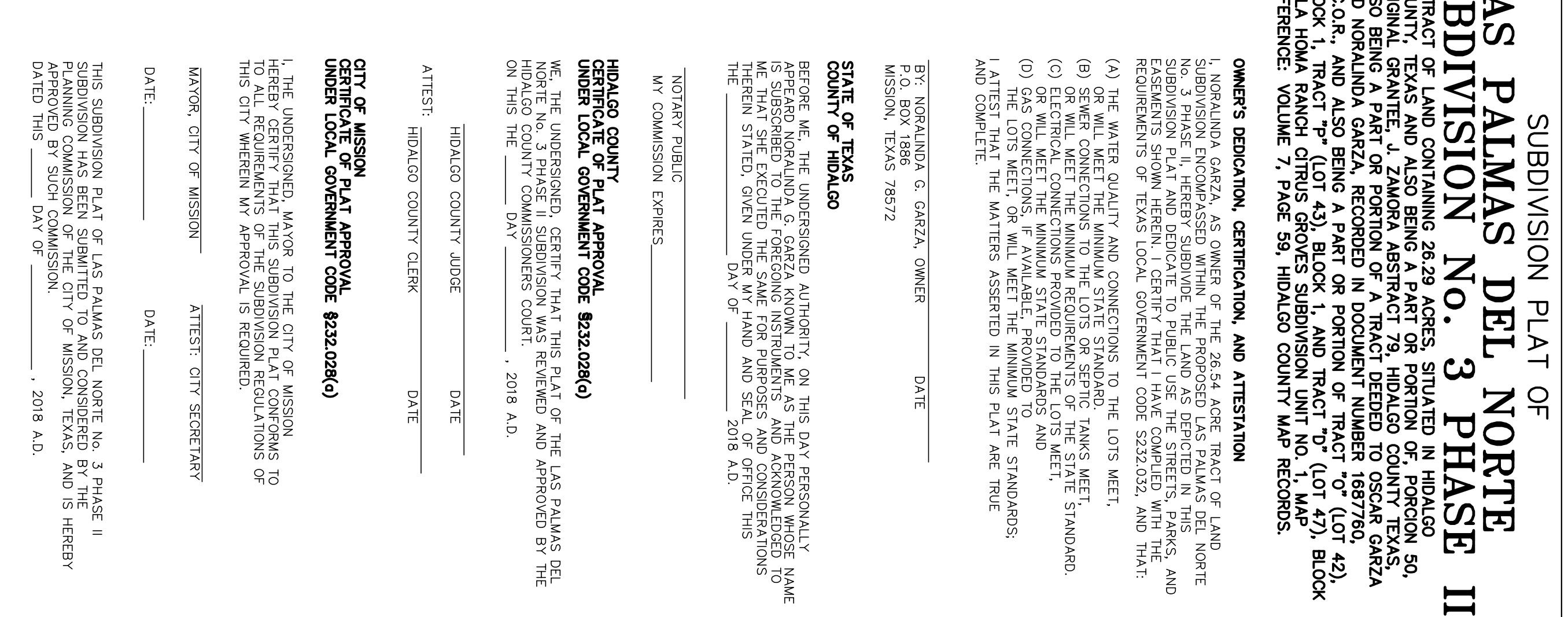
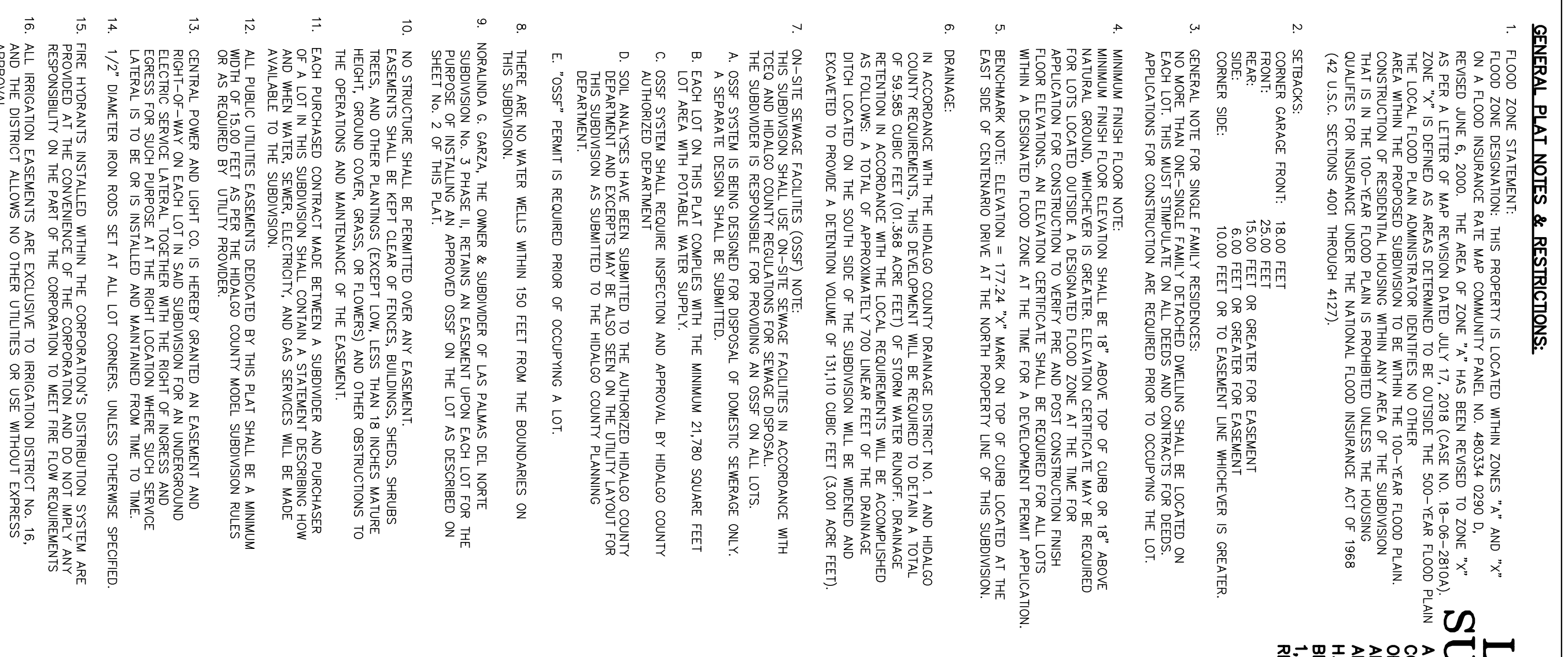
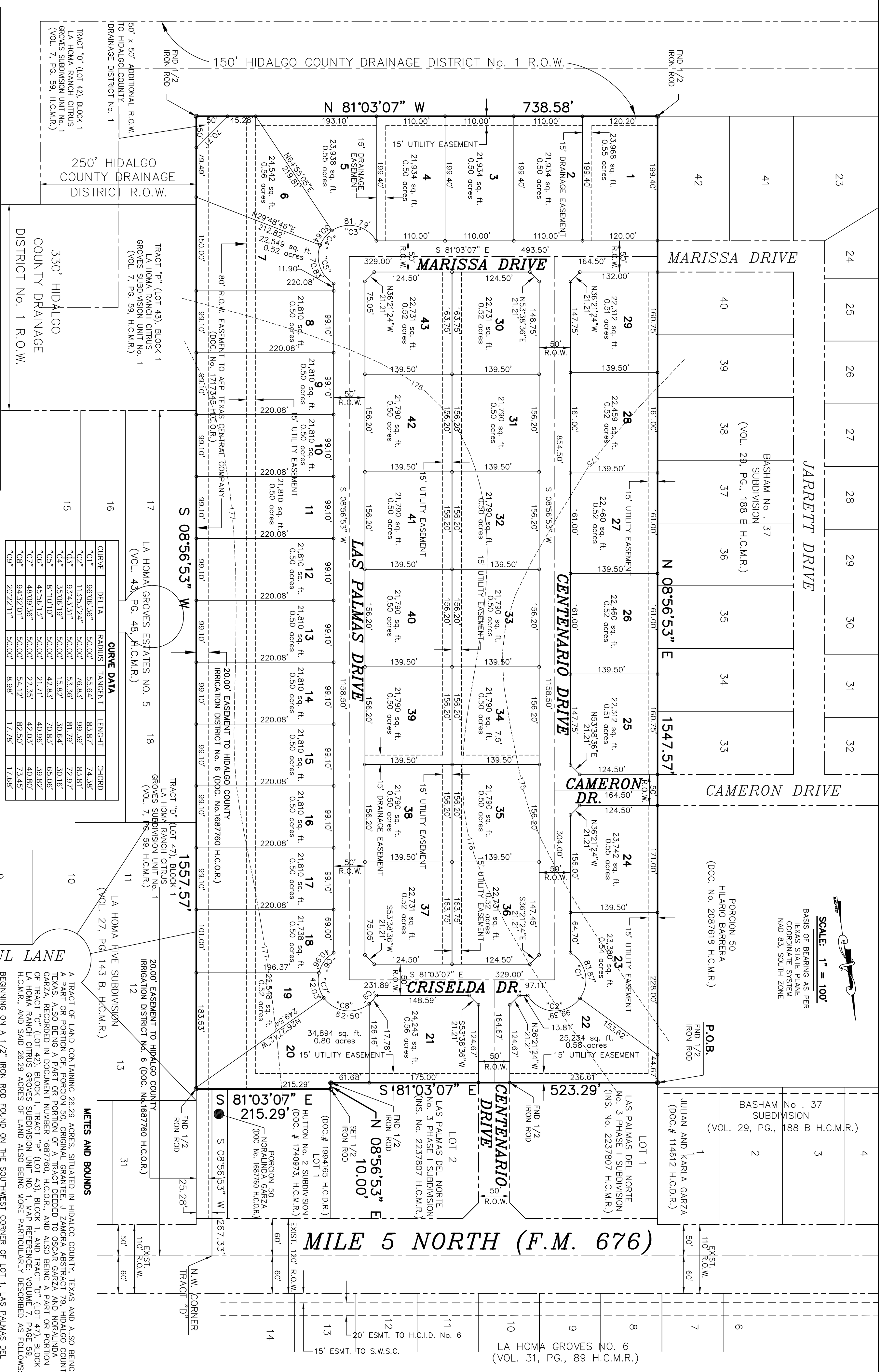
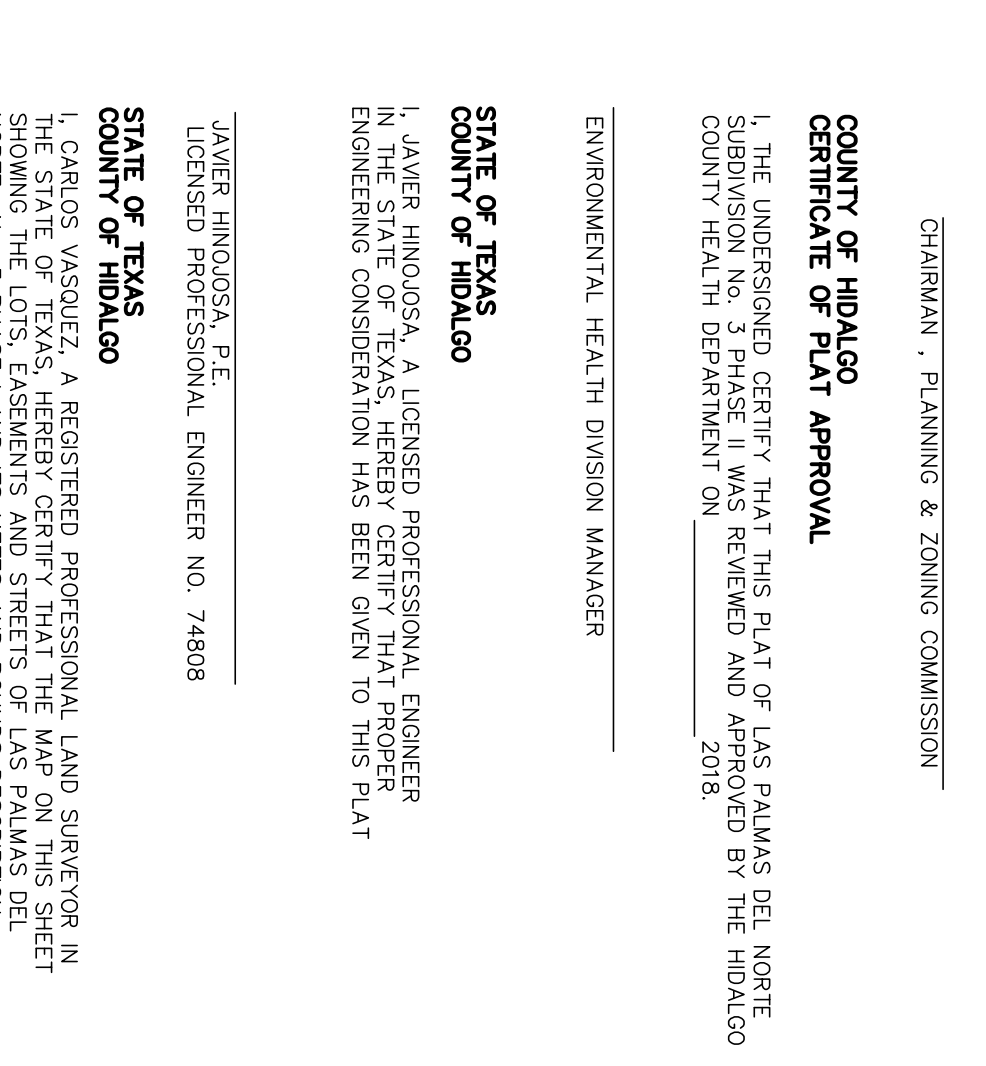
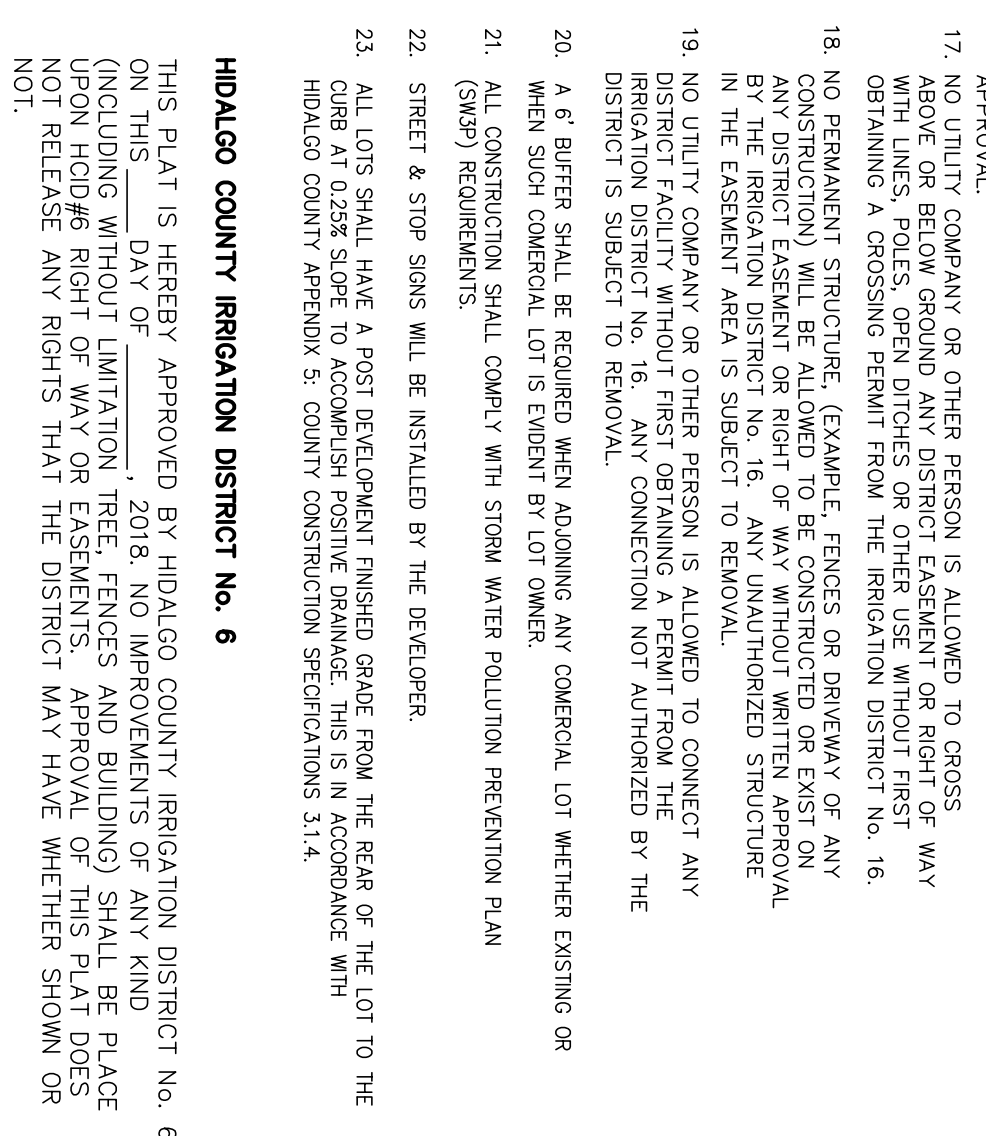
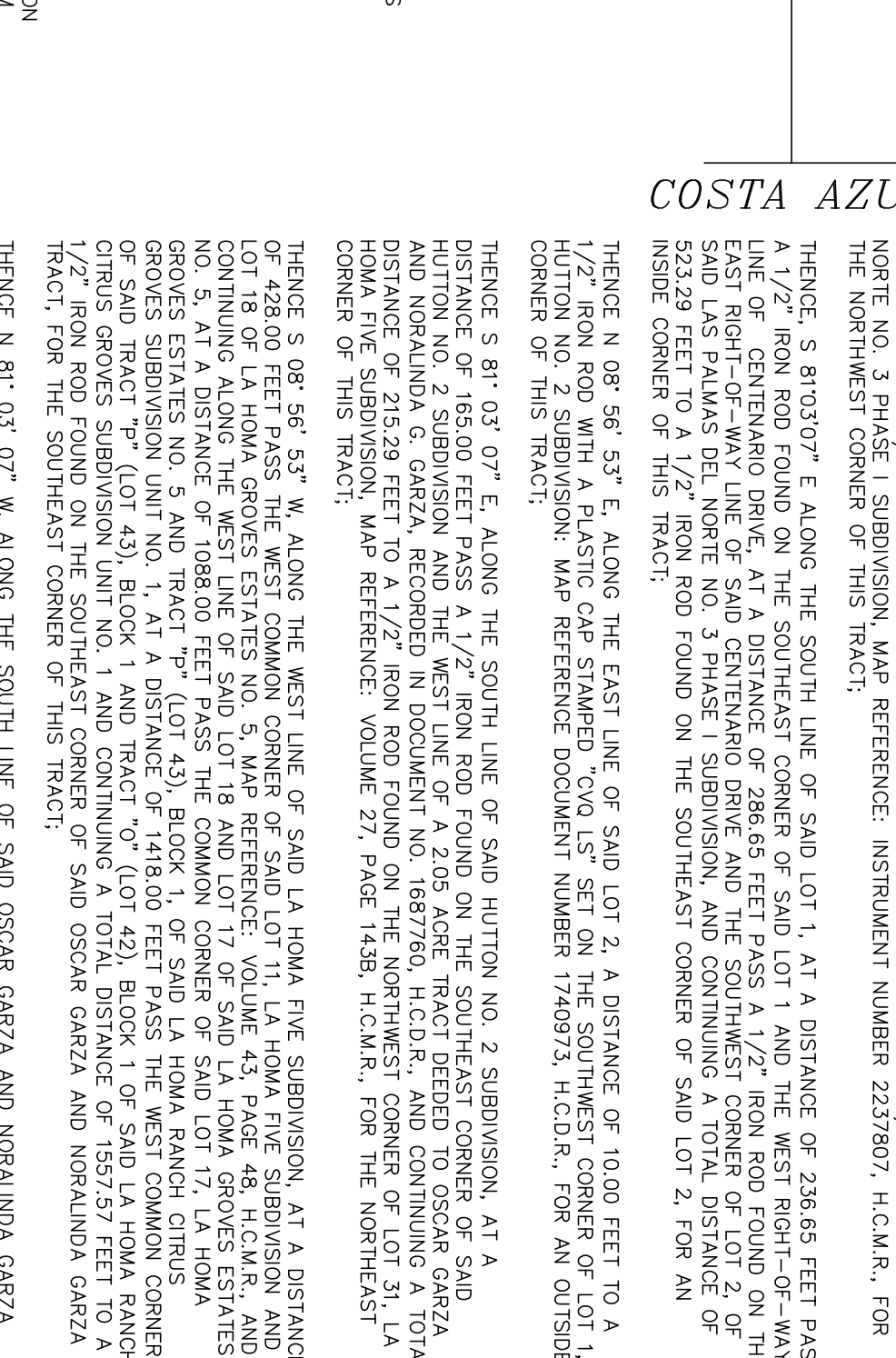
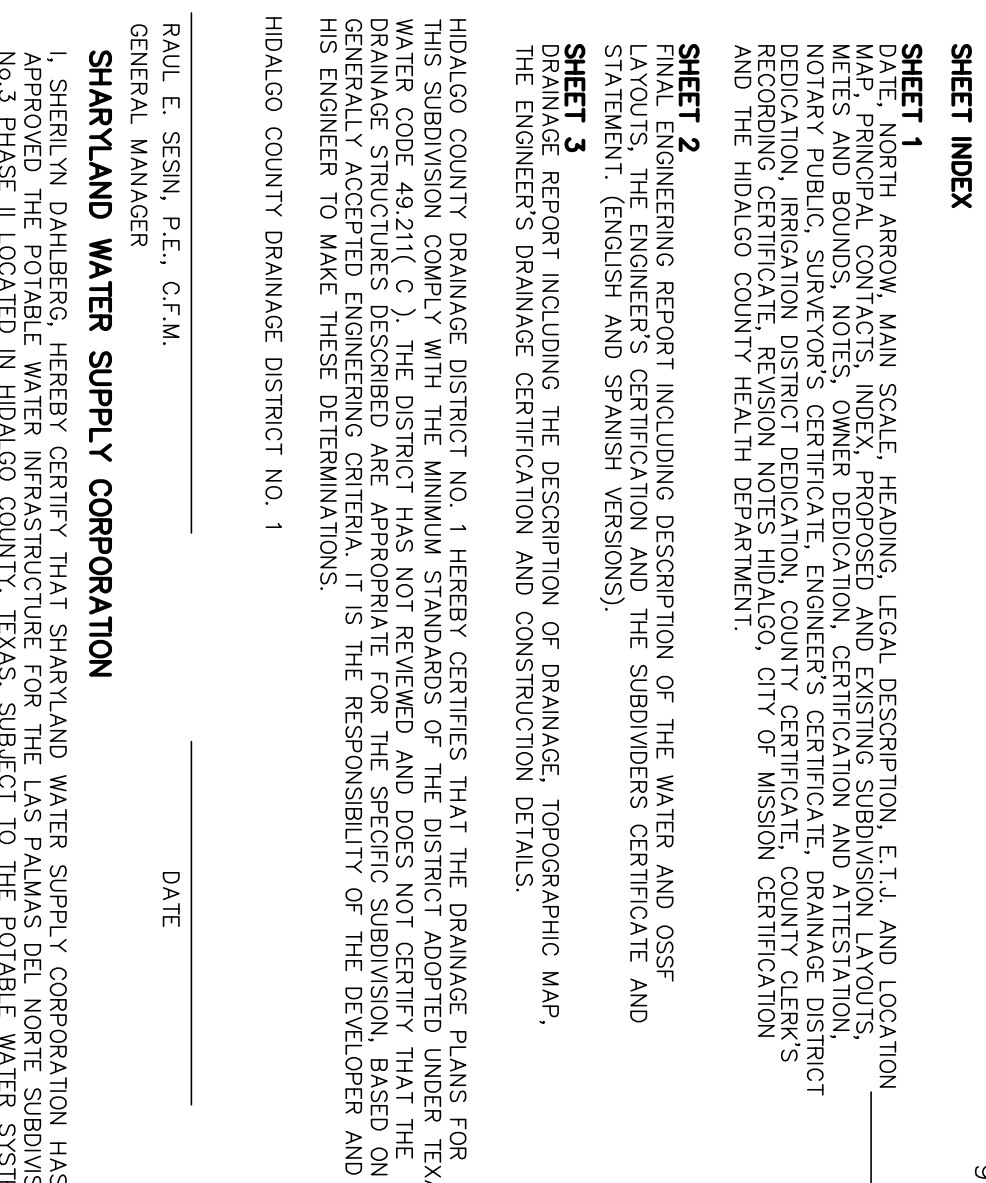
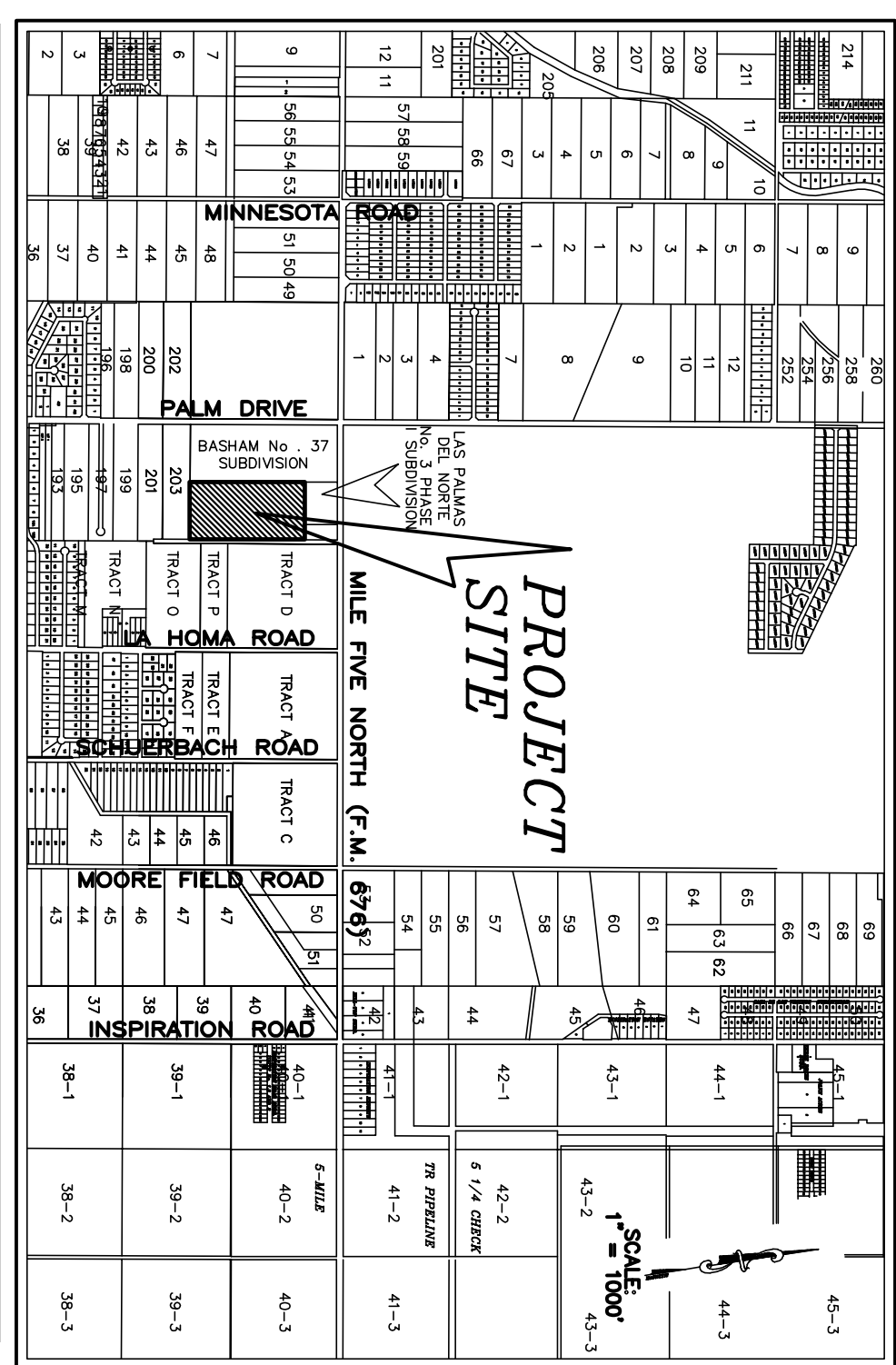
### INDEX OF SHEETS

| SHEET # | DESCRIPTION                      |
|---------|----------------------------------|
| 1       | UTILITY AND TOPOGRAPHICAL LAYOUT |
| 2       | STORM DRAINAGE PLAN & PROFILE    |
| 3       | STORM DRAINAGE PLAN & PROFILE    |
| 4       | WATER DISTRIBUTION LAYOUT        |
| 5       | STREET PLAN & PROFILE            |
| 6       | STREET PLAN & PROFILE            |
| 7       | SUGGESTED EROSION CONTROL PLAN   |
| 8       | STANDARD STORM DRAINAGE DETAILS  |
| 9       | STANDARD WATER DETAILS           |
| 10      | STANDARD PAVING DETAILS          |



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416 E. DOVE AVENUE McALLEN, TEXAS 78504  
PHONE (956) 668-1588  
javin@rgv.rr.com  
TBPE FIRM NUMBER F-1295

APRIL, 2018





## INTRODUCTION

FLOOD PLAIN

## SOIL CONDITIONS

### PROPOSED CONDITIONS

**CERTIFICATION:**

JAVIER HINOJOSA, P.E. #74808

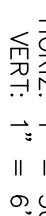
DATE \_\_\_\_\_



DEPUTY

4444

MAP OF TOPOGRAPHY AND DRAINAGE  
MAPA DE TOPOGRAFIA Y DESAGUE

CURB CURVE DATA

ALL LOTS SHALL HAVE A POST DEVELOPMENT FINISHED GRADE FROM THE REAR OF THE LOT TO THE CURB AT 0.25% SLOPE TO ACCOMPLISH POSITIVE DRAINAGE. THIS IS IN ACCORDANCE WITH HIDALGO COUNTY APPENDIX 5: COUNTY CONSTRUCTION SPECIFICATIONS 3.1.4.



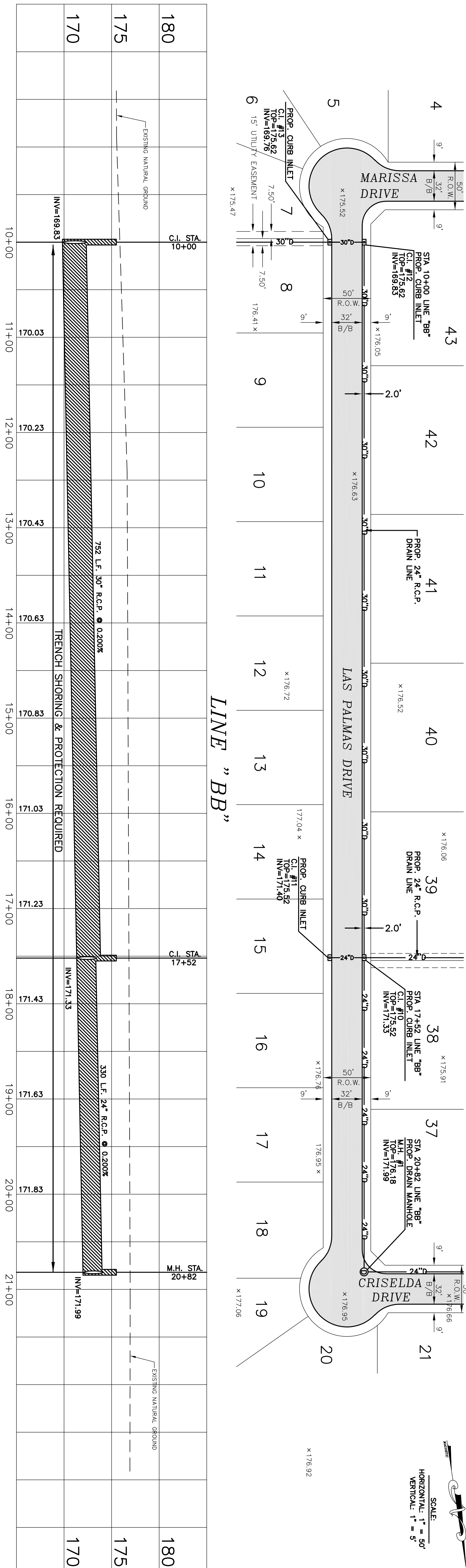
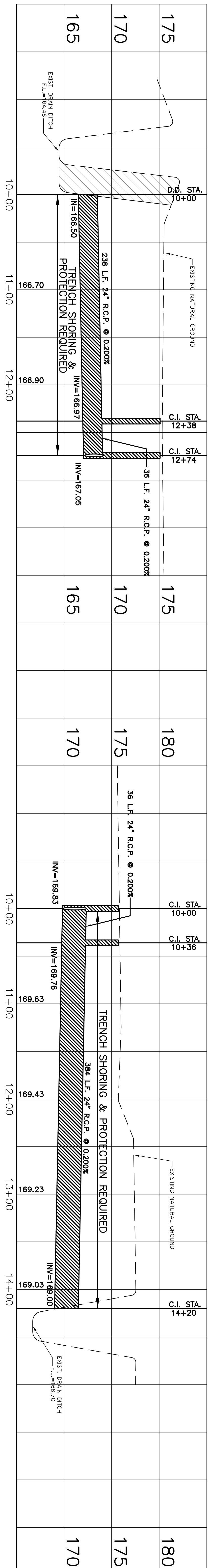
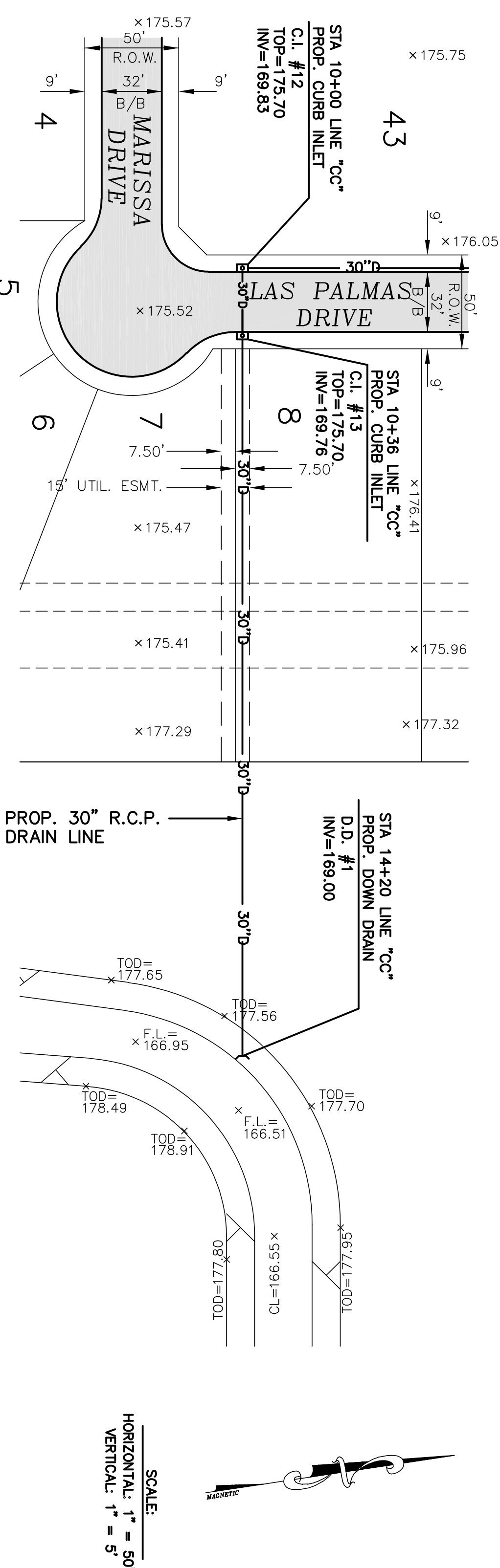
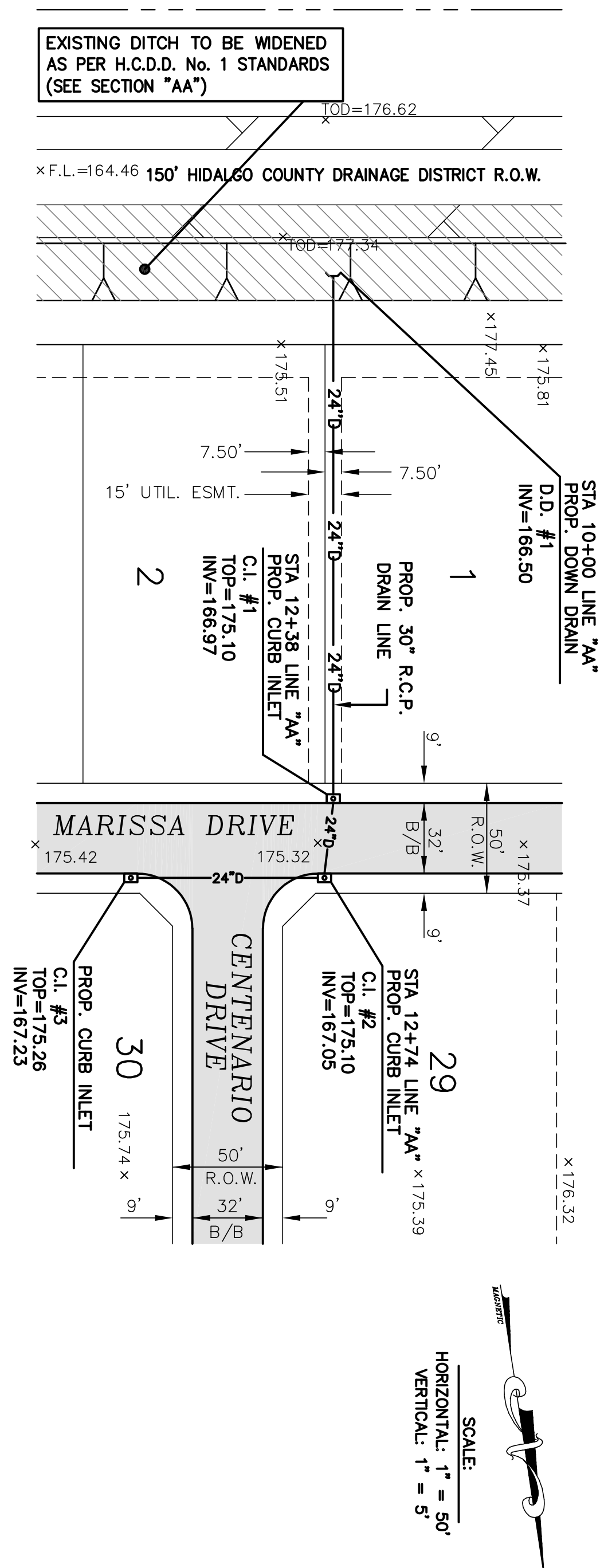
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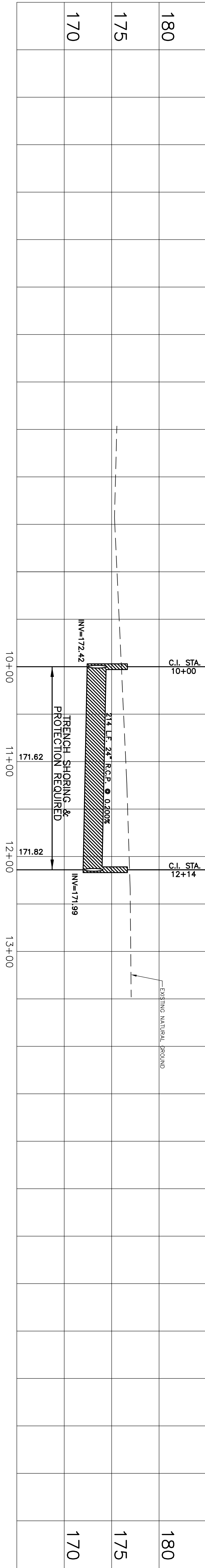
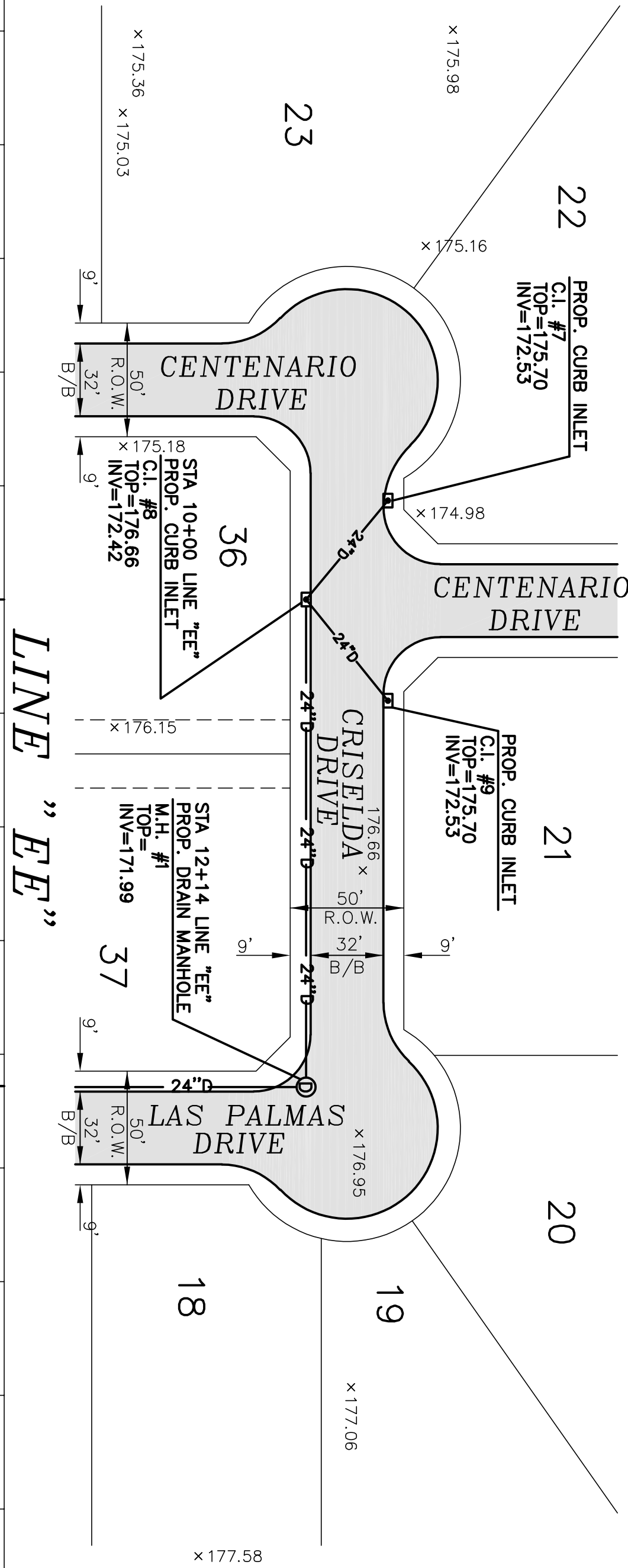
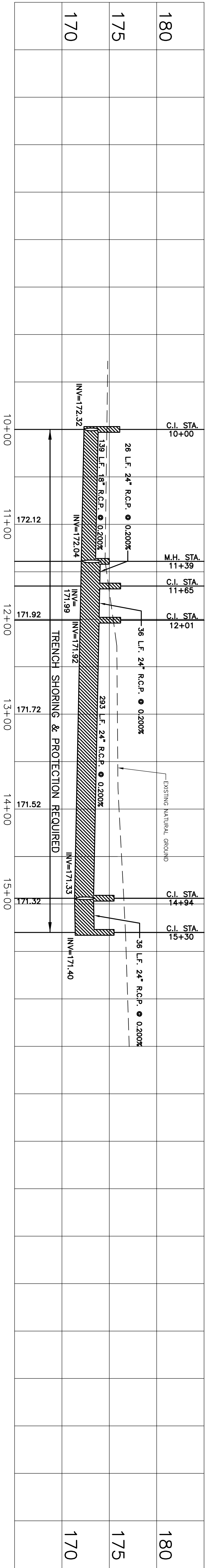
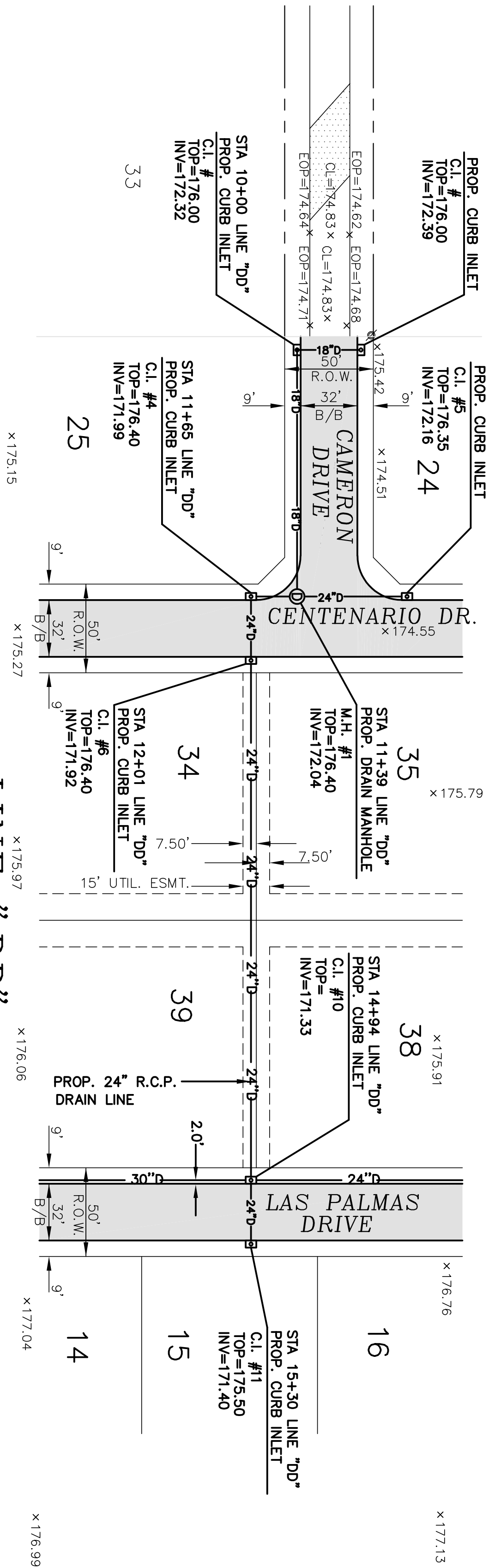
**TBPE FIRM No. F-1295**

SHEET NO. 3 OF 3 SHEETS

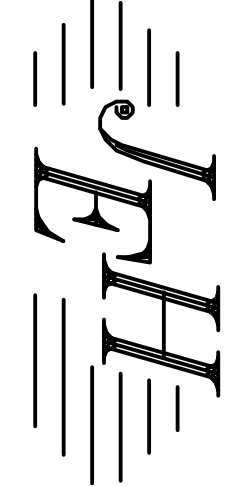




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|-----------------------------------------------------------------------------------|-------------|-----------|
| REVISIONS                                                                         |             | 180102    |
| PROJECT No.                                                                       | APRIL, 2018 |           |
| DATE                                                                              | A. GAUNA    |           |
| DRAWN BY                                                                          | J.B.G.      |           |
| CHECK BY                                                                          |             |           |
|  |             |           |
| <b>JAVIER HINOJOSA ENGINEERING</b>                                                |             |           |
| CONSULTING ENGINEERS                                                              |             |           |
| 416 E. DOWE AVENUE, McALLEN, TEXAS 78504                                          |             |           |
| PHONE (356) 686-1368                                                              |             |           |
| jvhino@jvengr.com                                                                 |             |           |
| TBE FIRM NUMBER F-1295                                                            |             |           |
| STORM DRAINAGE PLAN & PROFILE                                                     |             |           |
| LINES "AA", "BB" AND "CC"                                                         |             |           |
| LAS PALMAS DEL NORTE SUBDIVISION No. 3 PHASE II                                   |             |           |
| HIDALGO COUNTY, TEXAS                                                             |             |           |
| SHEET                                                                             |             | 2         |
| OF                                                                                |             | 10 SHEETS |



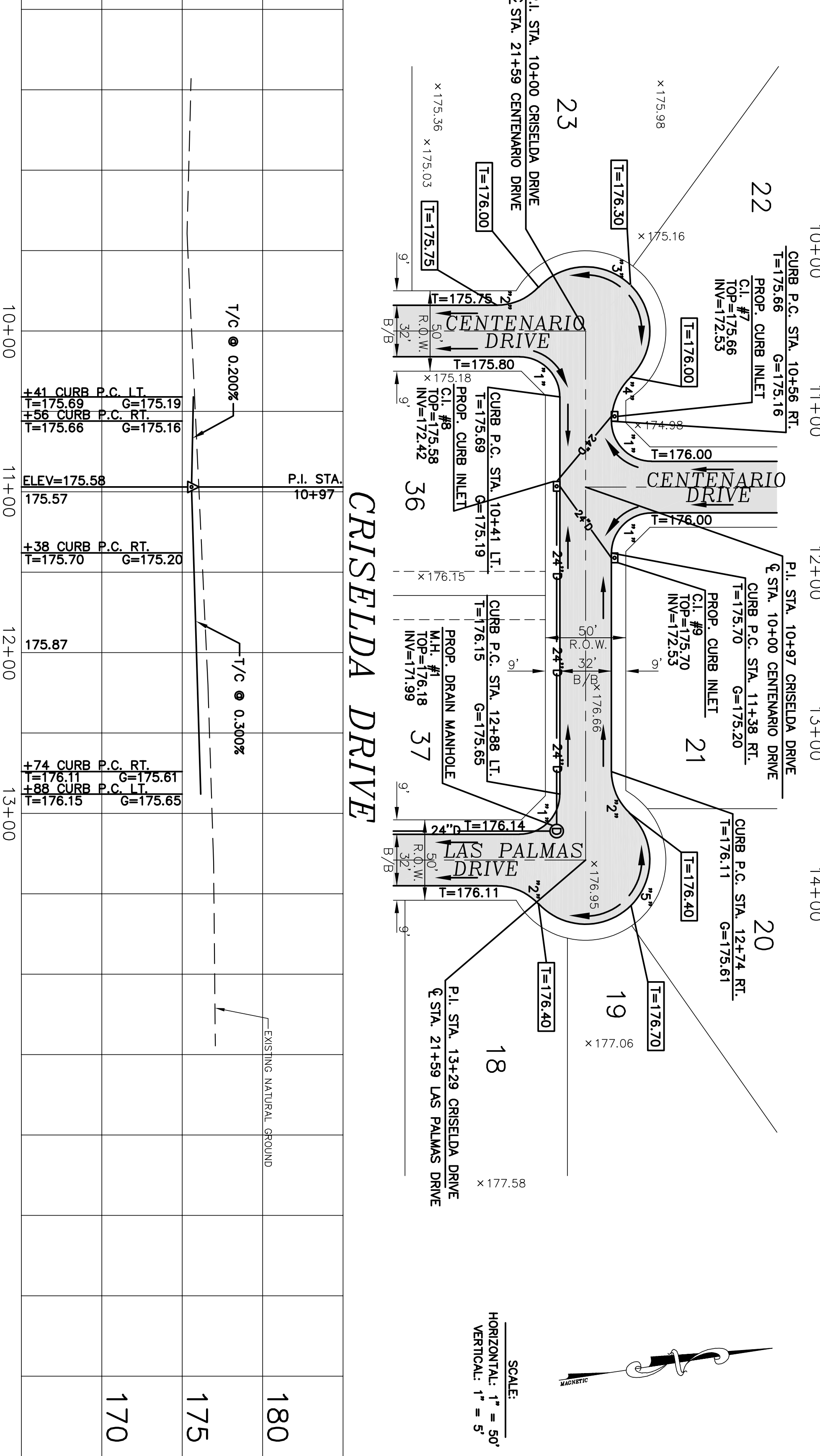
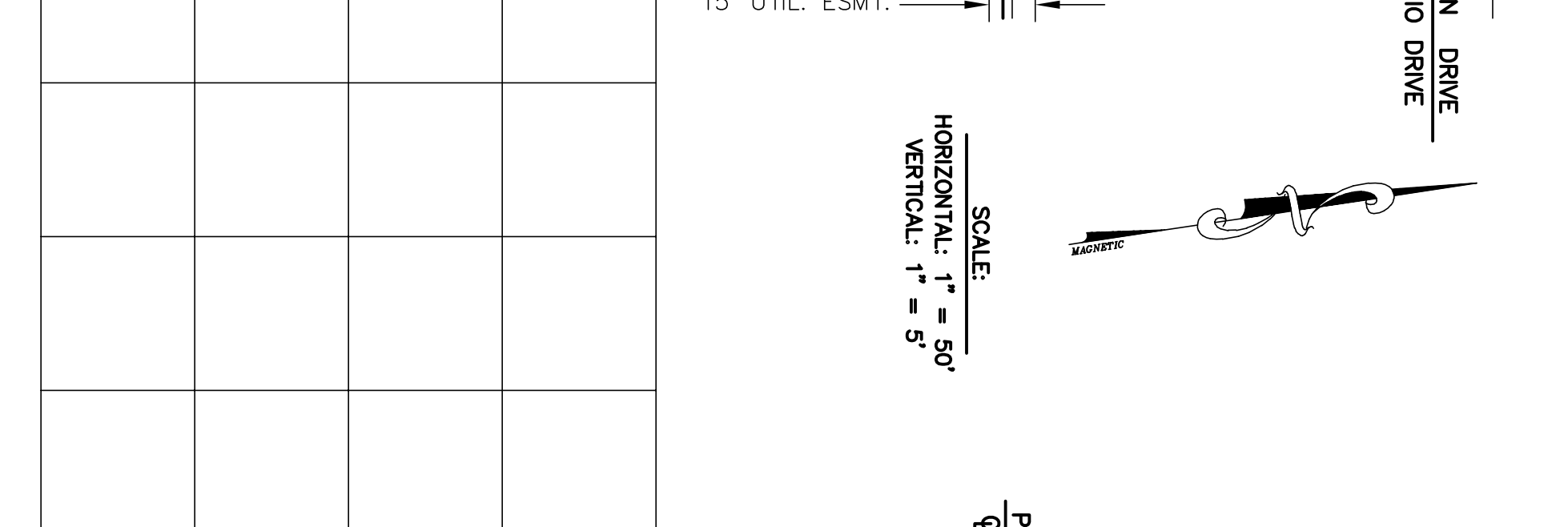
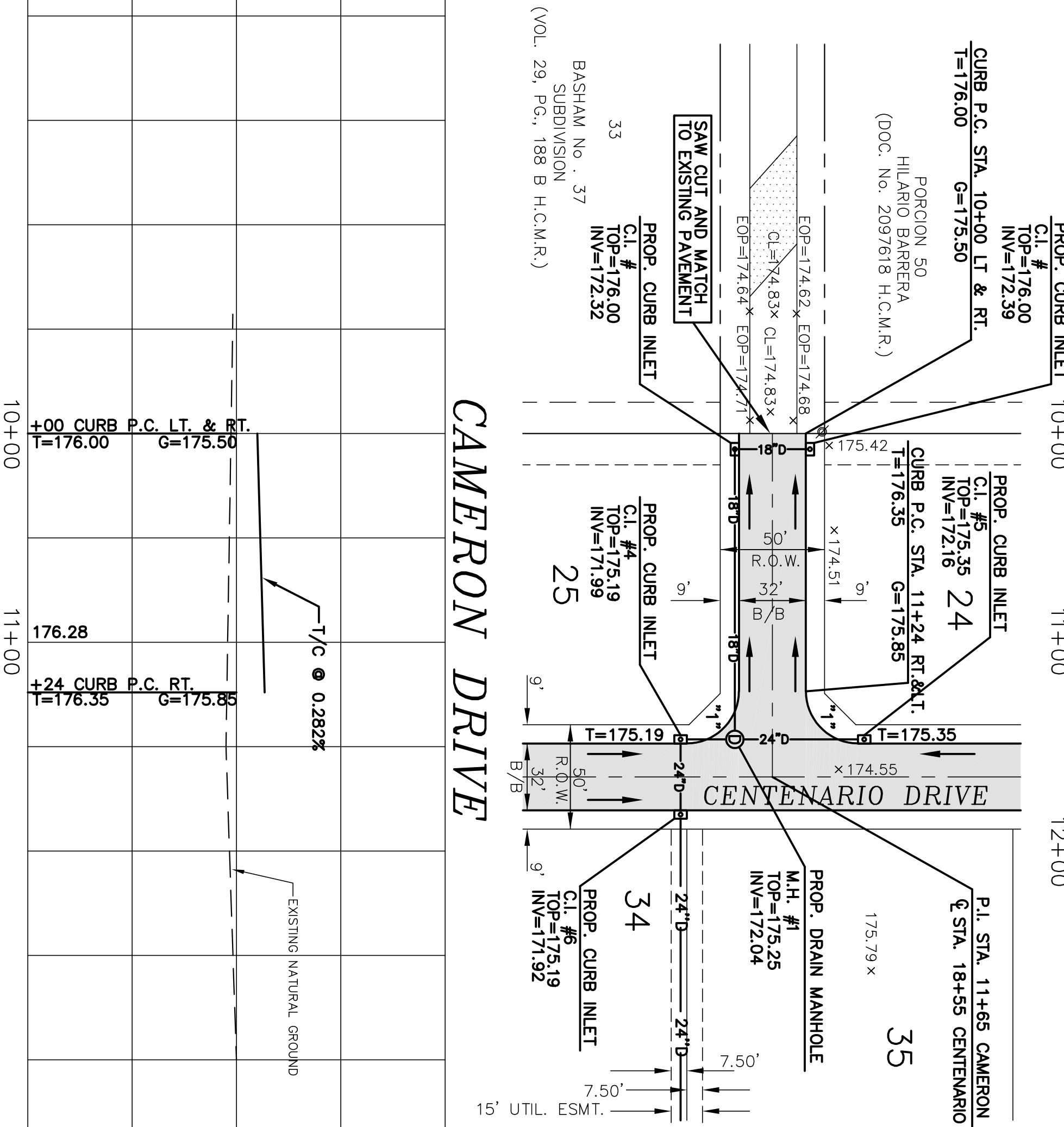
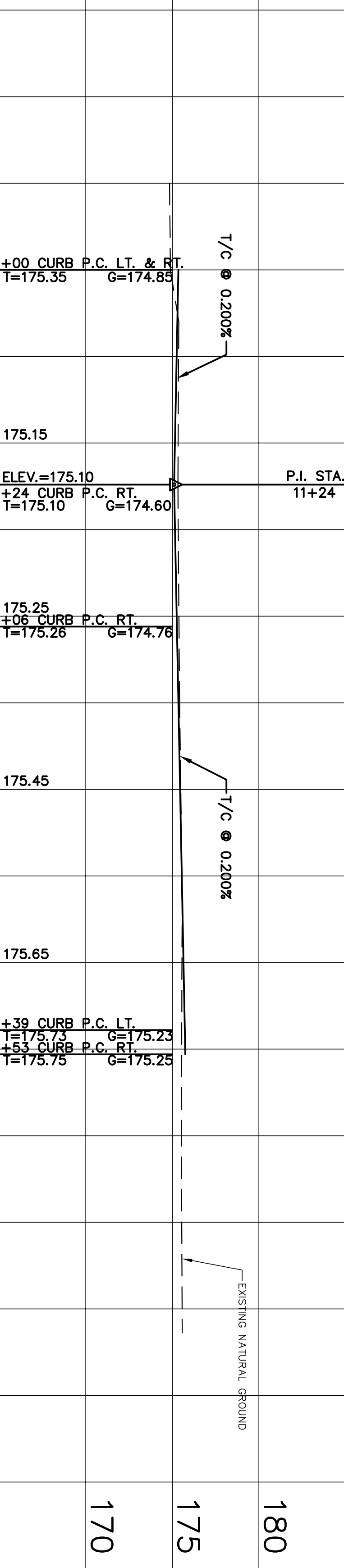
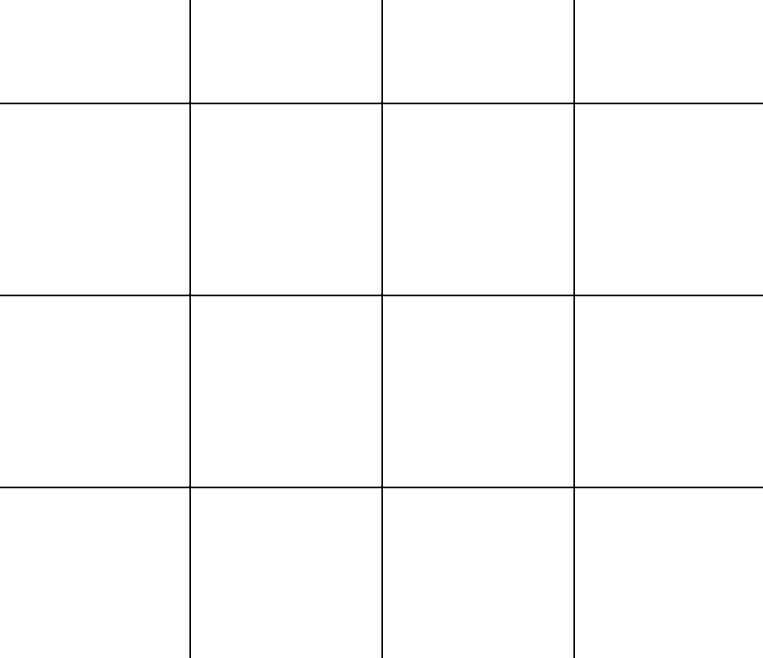
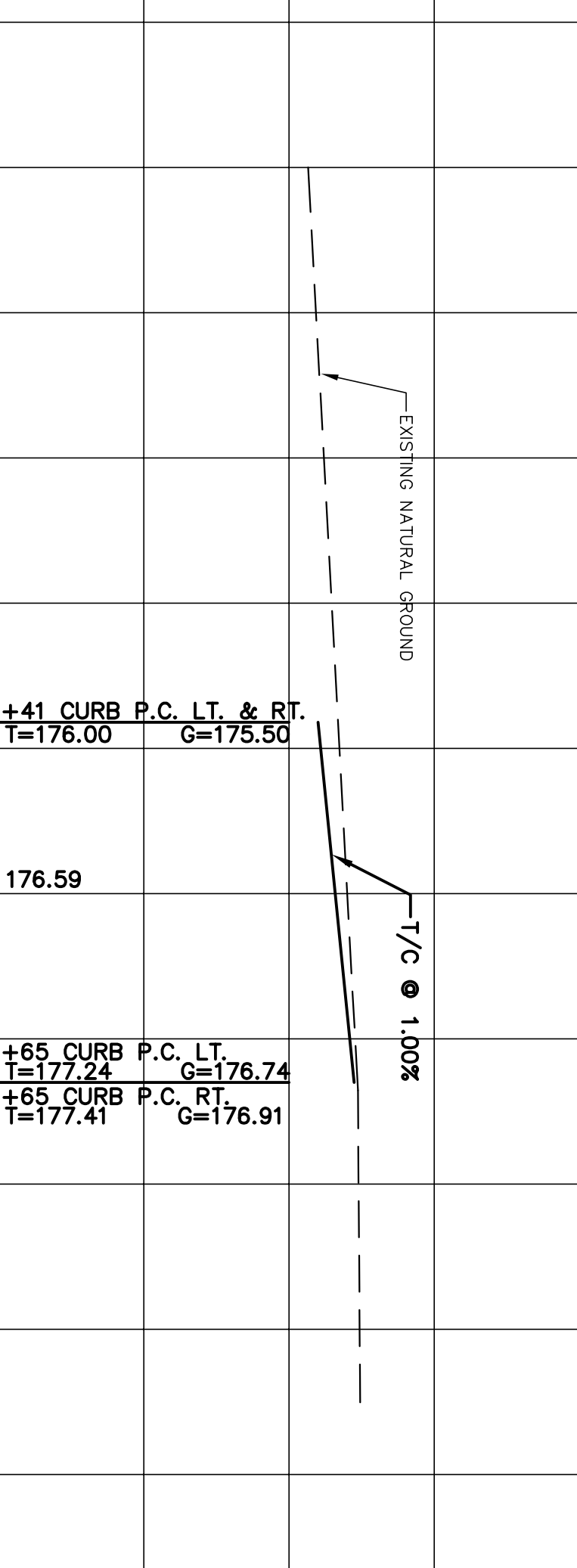
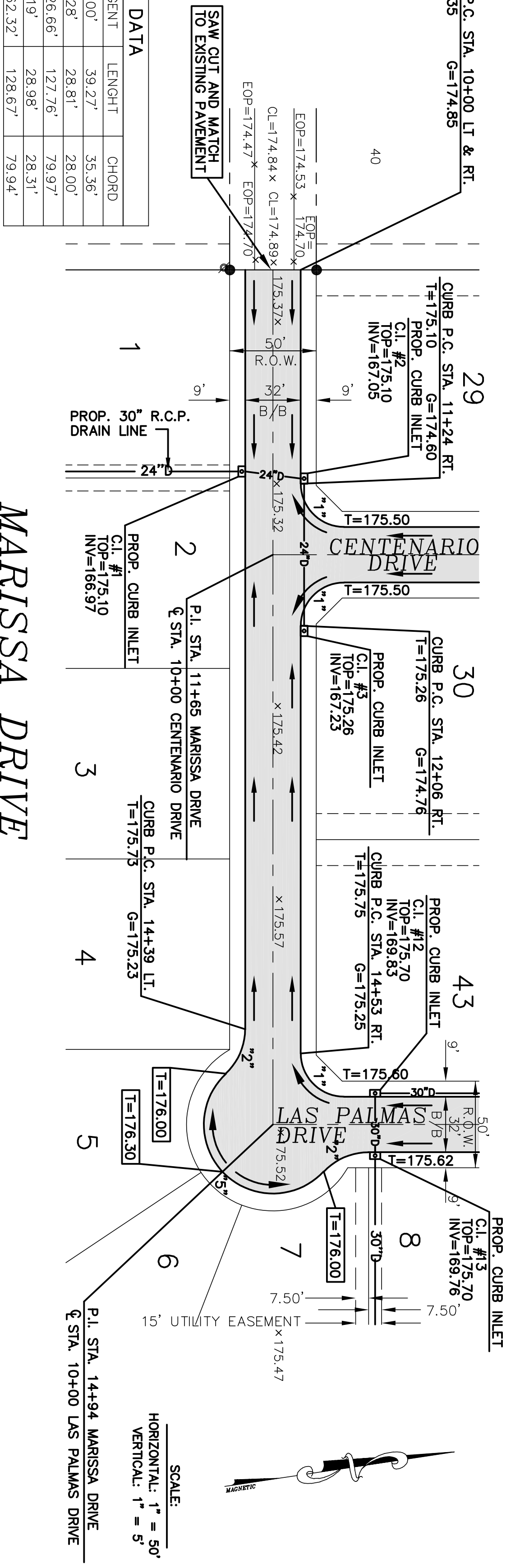
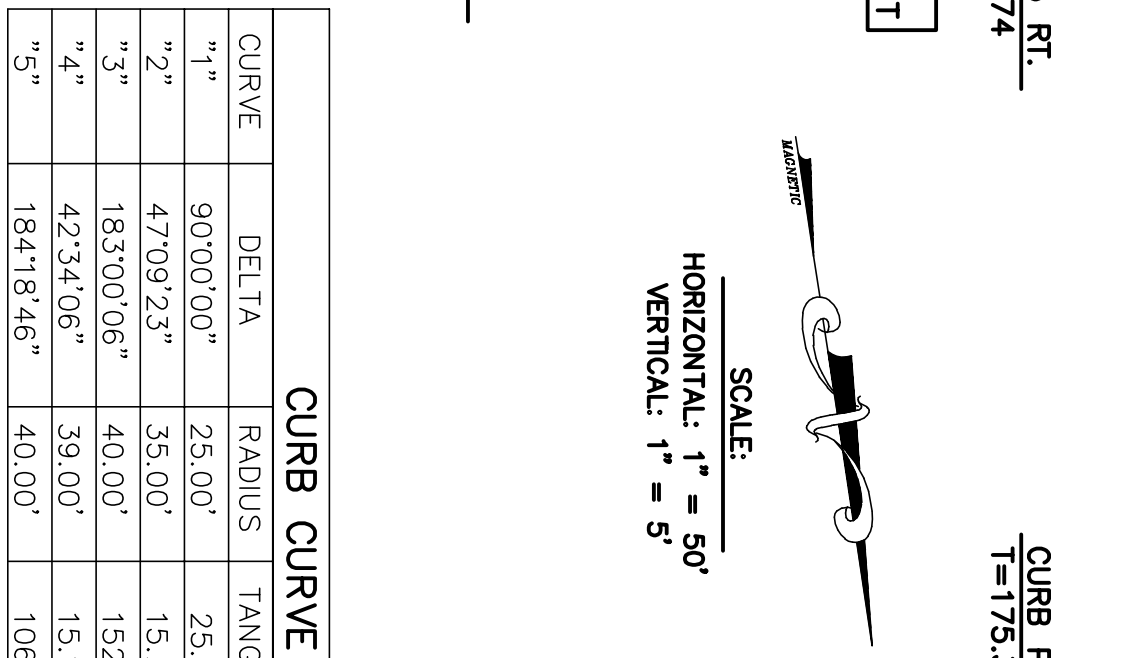
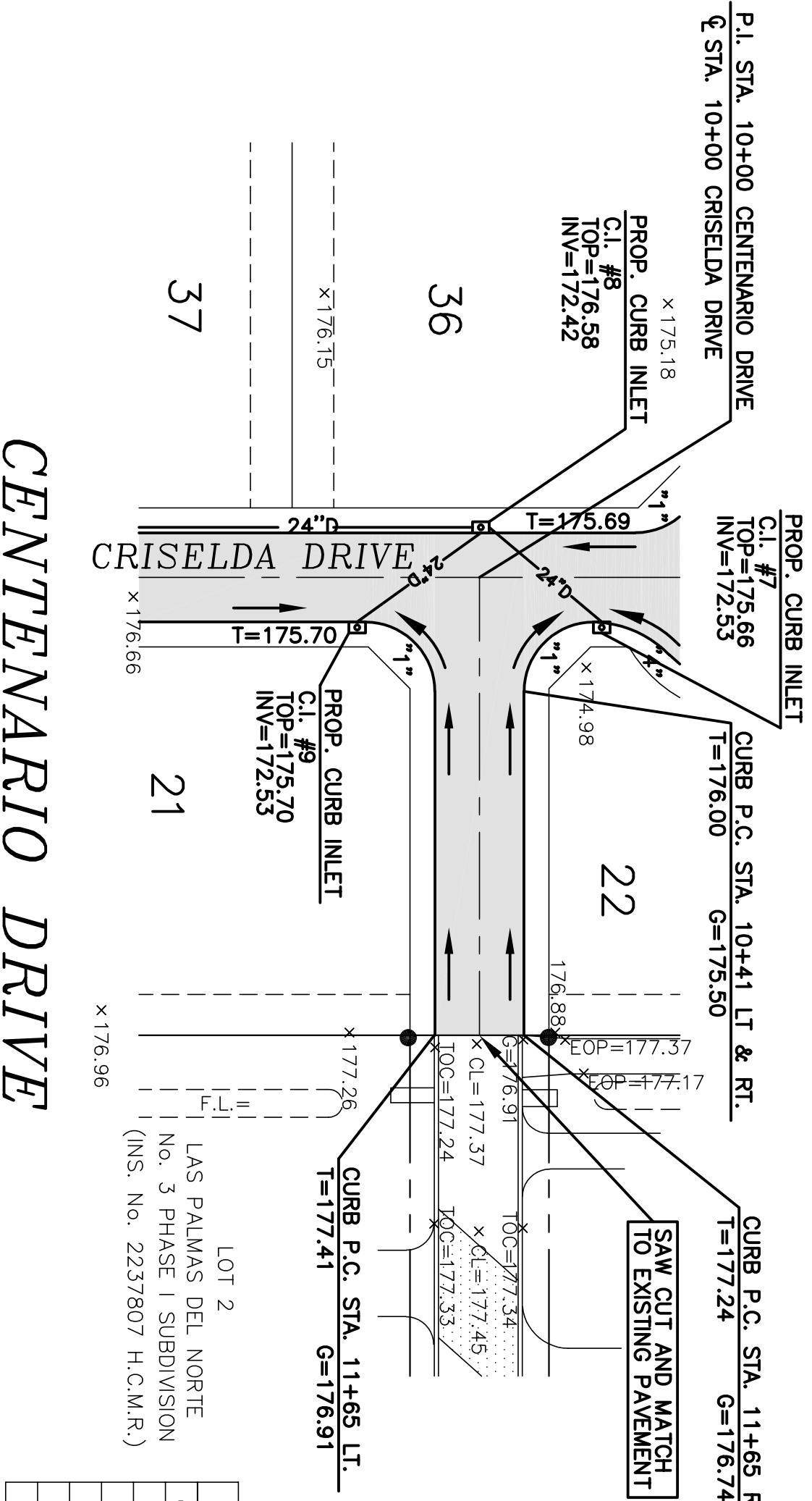
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|--------------------------------------------------|--|-----------------------------------------|--|------------------------|--|
|                                                  |  | DRAWN BY: A. GAUNA                      |  | CHECK BY: J.B.G.       |  |
| JAVIER HINOJOSA ENGINEERING CONSULTING ENGINEERS |  | 416 E. DOVE AVENUE MCALLEN, TEXAS 78504 |  | PHONE (956) 688-1568   |  |
| LAS PALMAS DEL NORTE SUBDIVISION NO. 3 PHASE II  |  | HIDALGO COUNTY, TEXAS                   |  | TBE FIRM NUMBER F-1295 |  |
| STORM DRAINAGE PLAN & PROFILE                    |  | LINES "DD" AND "EE"                     |  | SHEET 3                |  |
| OF 10 SHEETS                                     |  |                                         |  |                        |  |



DISTRIBUTION LAYOUT  
NORTE SUBDIVISION No. 3 PHASE II  
HIDALGO COUNTY, TEXAS

SHEET 4 OF 10 SHEETS





REVISIONS

|        |             |             |
|--------|-------------|-------------|
| 180102 | PROJECT No. | APRIL, 2018 |
|        | DATE:       | A. GAUNA    |
|        | DRAWN BY:   | J.B.G.      |
|        | CHECK BY:   |             |

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THE FIRM NUMBER F-1295

STREET PLAN & PROFILE

CENTENARIO DRIVE, MARISSA DRIVE, CAMERON DRIVE AND STREET "C"  
LAS PALMAS DEL NORTE SUBDIVISION NO. 3 PHASE II  
HIDALGO COUNTY, TEXAS

SHEET

6

OF 10 SHEETS

NOTES: —

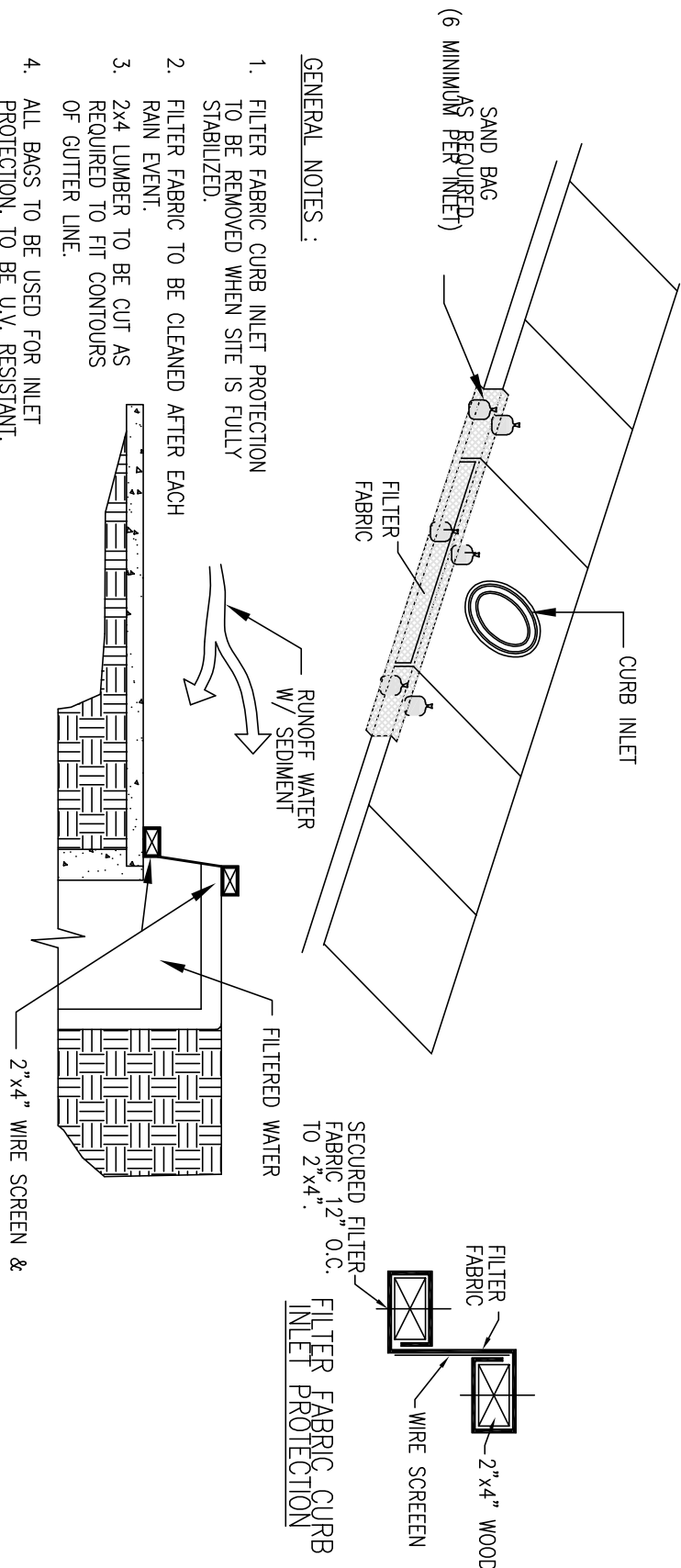
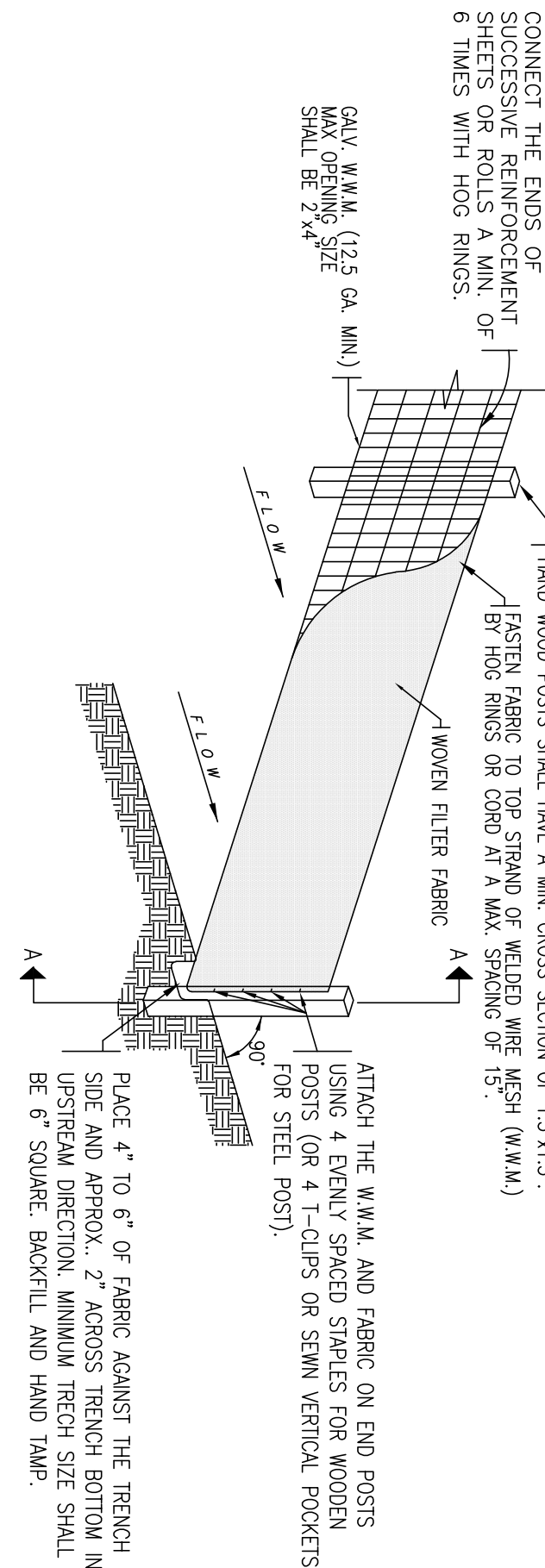
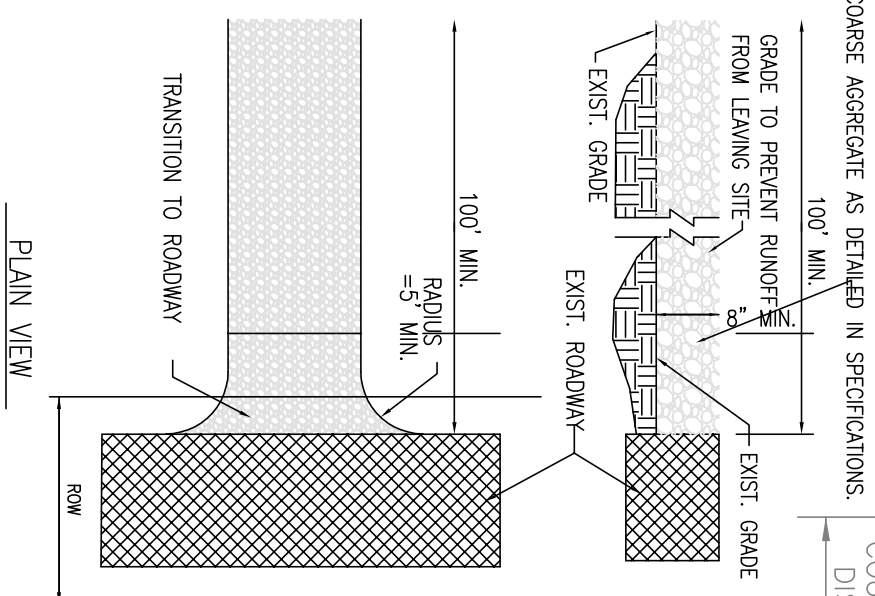
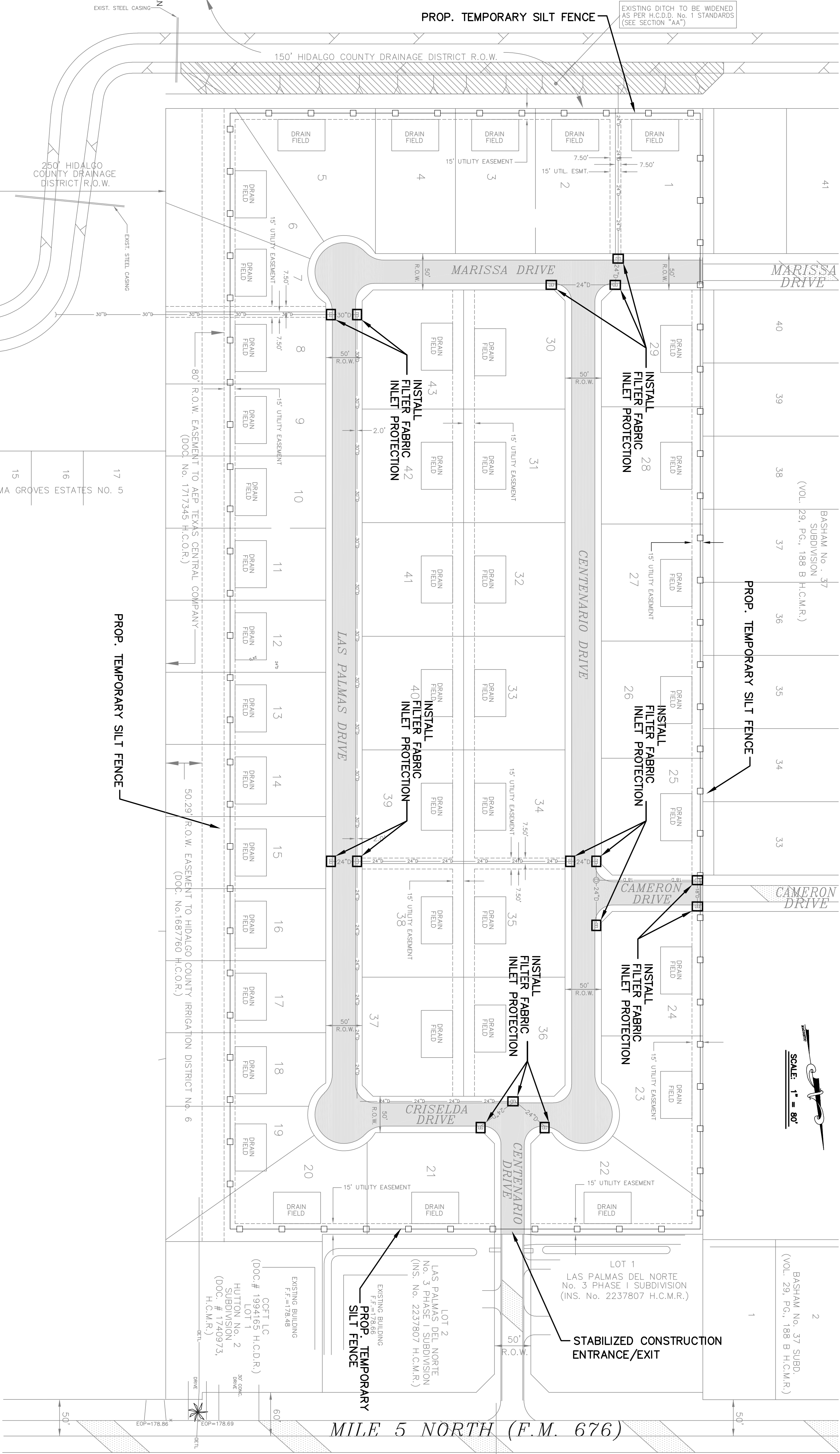
1. STONE SHALL BE 3 TO 5 INCH DIA. CRUSHED ROCK OR ACCEPTABLE CRUSHED CEMENT CONCRETE.
  2. WHEN NECESSARY, VEHICLES SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, A PUBLIC ROADWAY SHALL BE WASHED WITH CRUSHED STONE WITH DRAINAGE FLOWING AWAY FROM BOTH THE STREET AND THE STABILIZED ENTRANCE. ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
  3. THE ENTRANCE SHALL BE PROPERLY GRADED OR IMPROVED DRAINAGE SHALL BE INSTALLED PRIOR TO LEAVING THE CONSTRUCTION SITE.
  4. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR SPREADING OF SEDIMENT ONTO THE PUBLIC ROADWAY. THIS MAY REQUIRE PERIODIC TRIPPING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED IMMEDIATELY.
- GENERAL NOTES:**
1. STEEL POSTS WHICH SUPPORT SILT FENCE SHALL BE INSTALLED WITH A SLIGHT ANGLE TOWARD THE ANTIPODIED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 18".
  2. THE TOP OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR TRENCHER TO A MINIMUM OF 6" DEEP. THE TRENCH SHALL BE FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHEN FENCE CANNOT BE TRENCHED IN, WEIGHT FABRIC FLAP WITH WASHED GRAVEL ON OPPOSITE SIDE, AS NECESSARY, TO PREVENT FLOW UNDER FENCE.
  3. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FRAME TO BE LAIN IN THE GROUND AND BACKFILLED.
  4. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST WITH 1/2" DIA. GALV. WIRE. WHEN THE FENCE IS REMOVED, THE GALV. WIRE SHALL BE REMOVED. FABRIC SHALL OVERLAP AT BUTTLINE ENDS A MINIMUM OF 3 FEET AND SHALL BE JOINED SUCH THAT NO GAPS OR LEAKAGE OCCURS.
  5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
  6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED.
  7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6 INCHES. THE SILT SHALL BE DISPOSED OF IN AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL POLLUTION.

**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 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 TWO ACRES.

**EROSION GENERAL NOTES:**

1. IT IS THE INTENT OF THE INFORMATION PROVIDED ON THIS SHEET AND WITHIN THE SPECIFICATIONS TO BE USED AS THE GENERAL GUIDELINES OF THE STORM WATER OF COMPLIANCE WITH FEDERAL REGULATIONS. THE CONTRACTOR SHALL PREPARE THE STORM WATER POLLUTION PREVENTION PLAN AND BE SOLELY RESPONSIBLE FOR ITS IMPLEMENTATION. THE STORM WATER POLLUTION PREVENTION PLAN SHALL MEET THE REQUIREMENTS SET FORTH BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TPDES) PERMIT NO. XRT150000 TO DISCHARGE WASTE FROM CONSTRUCTION SITES ISSUED AND EFFECTIVE MARCH 5, 2003.
2. THE STORM WATER POLLUTION PLAN SHOULD ADDRESS THREE GOALS: A) DIVERSION OF UPSLOPE WATER AROUND DISTURBED AREAS OF THE SITE; B) LIMITS THE EXPOSURE OF DISTURBED AREAS TO THE SHORTEST DURATION POSSIBLE; AND C) REMOVAL OF SEDIMENT FROM STORM WATER BEFORE IT LEAVES THE SITE.
3. THE CONTRACTOR SHALL MAKE THE STORM WATER POLLUTION PREVENTION PLAN AVAILABLE, UPON REQUEST, TO (EPA).
4. THE CONTRACTOR MUST AMEND PLANS WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE OF THE PLAN, OR WHEN THE EFFECTIVE PLAN PROVES INEFFECTIVE. MODIFICATIONS INCLUDING DESIGN AND ALL ADDITIONAL MATERIALS AND WORK SHALL BE ACCOMPLISHED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE BY THE OWNER.
5. STABILIZATION MEASURES ARE TO BE INSPECTED AT A MINIMUM OF ONCE EVERY 14 DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCHES. REPAIRS AND INADEQUACIES REVEALED BY THE INSPECTION MUST BE IMPLEMENTED WITHIN 7 CALENDAR DAYS FOLLOWING THE INSPECTION.
6. AN INSPECTION REPORT THAT SUMMARIZES INSPECTION ACTIVITIES AND IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE RETAINED AND MADE PART OF THE PLAN.
7. ALL CONTRACTORS AND SUBCONTRACTORS IDENTIFIED IN THE PLAN MUST CERTIFY AS TO AN UNDERSTANDING OF THE PLAN AND THE GENERAL PERMIT BEFORE CONDUCTING ANY ACTIVITY IDENTIFIED IN THE POLLUTION PREVENTION PLAN.
8. THE CONTRACTOR SHALL ADOPT APPROPRIATE CONSTRUCTION SITE MANAGEMENT PRACTICES TO PREVENT THE DISCHARGE OF OILS, GREASE, PAINTS, GASOLINE, AND OTHER POLLUTANTS TO STORM DRAINAGE SYSTEMS. THIS INCLUDES DESIGNATING AREAS FOR EQUIPMENT MAINTENANCE AND REPAIR, PROHIBITION OF FUEL OR OIL STORAGE, PROHIBITION OF WASTEWATER DISCHARGE, AND DESIGNATING AND CONTROLLING EQUIPMENT WASHDOWN.
9. THE CONTRACTOR SHALL AMEND OR MODIFY THIS PLAN AS REQUIRED BY CONSTRUCTION MEANS, METHODS AND SEQUENCE. MODIFICATIONS SHALL NOT BE BASIS FOR ADDITIONAL COST TO THE OWNER. LAY AND THIS PLAN. MODIFICATIONS SHALL NOT BE BASIS FOR ADDITIONAL COST TO THE OWNER.
10. AREAS OF CONSTRUCTION ELSEWHERE ON THE JOB SITE SHALL CONFORM TO THE DETAILS SHOWN ON THE PLANS.
11. BORROW AREAS, IF EXCAVATED, SHALL BE PROTECTED AND STABILIZED UTILIZING THE PLAN OF THE PROJECT. THE CONTRACTOR SHALL MAINTAIN THE STABILIZED AREAS ACCORDING TO THE PLAN OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPP). THE WORK SHALL BE DONE BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
12. ALL NON-PAVED AREAS SHALL BE MULCHED AND SEEDED WITH EROSION PROTECTION IMMEDIATELY UPON COMPLETION OF FINAL GRADING. THIS INCLUDES ALL DITCHED AND EMBANKMENTS, ESTABLISHED AND ACCEPTED BY THE OWNER.
13. THE CONTRACTOR SHALL CONSTRUCT A STABILIZED CONSTRUCTION EXIT AT ALL TRAFFIC EXIT POINTS PRIOR TO EXITING ONTO ANY PAVED ROADWAY.

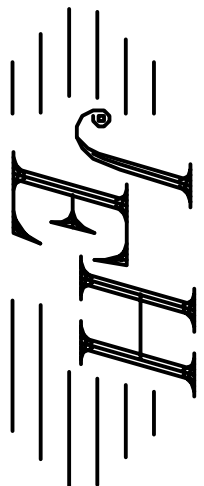


**STABILIZED CONSTRUCTION ENTRANCE/EXIT**

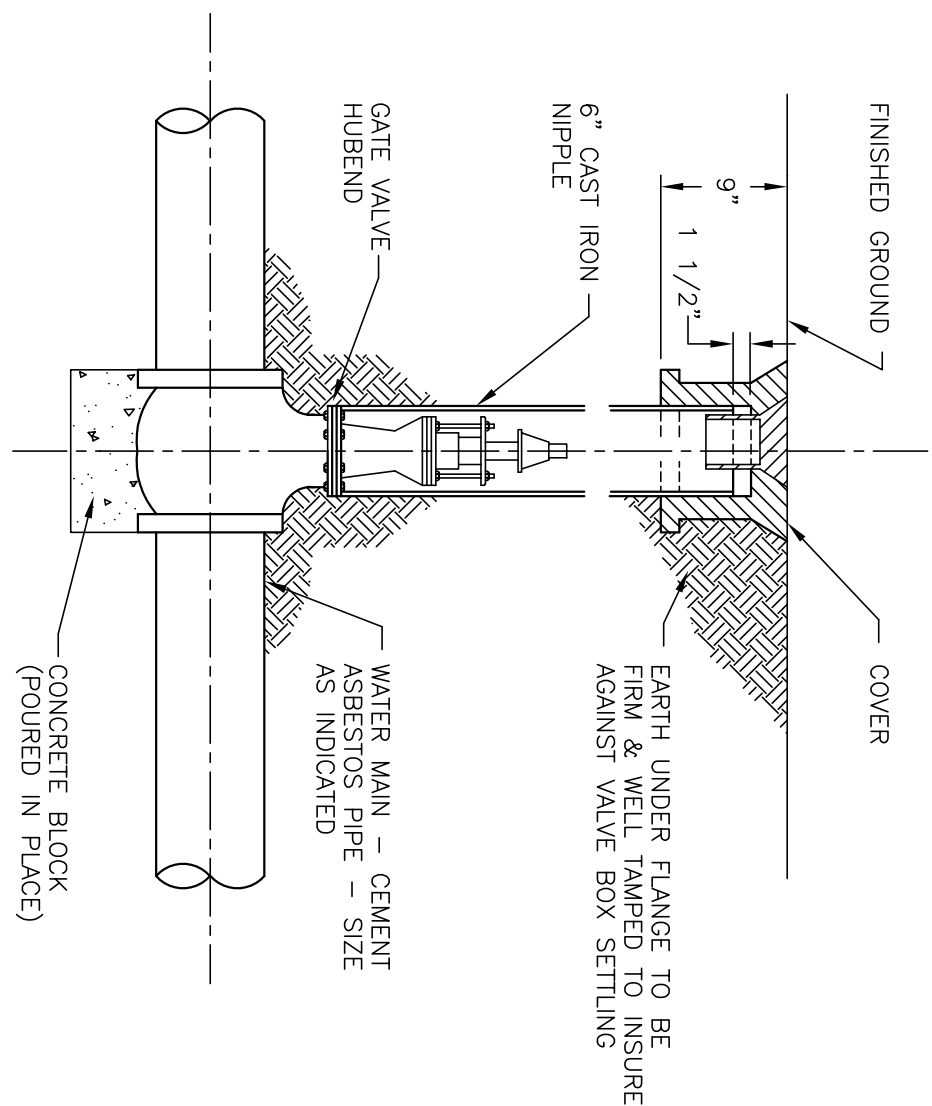
**TEMPORARY SEDIMENT CONTROL FENCE**

**FILTER FABRIC CURB INLET PROTECTION**

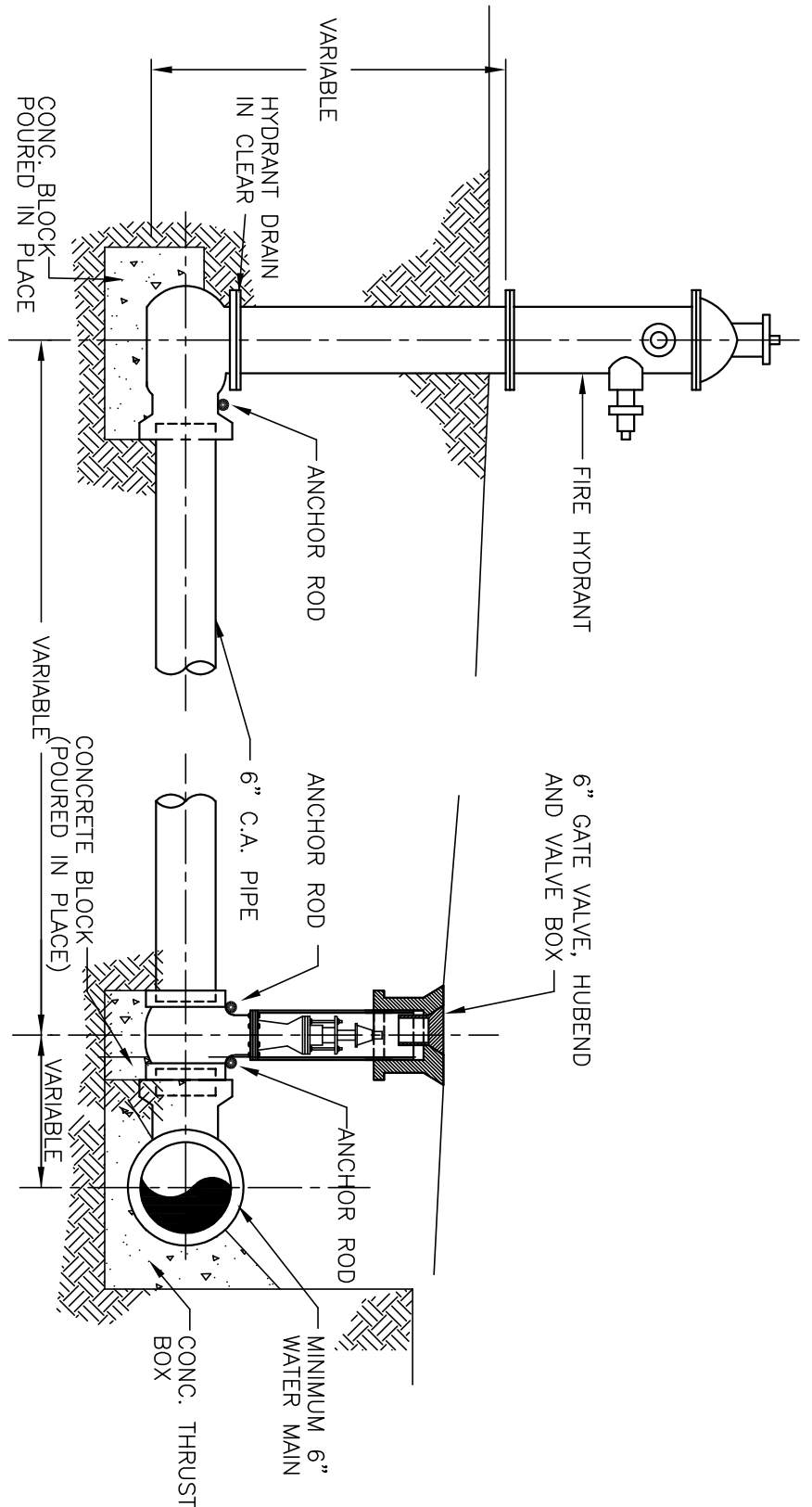
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| REVISIONS                                                                         |  | 180102                                                                                                                                                                                   |  |
| PROJECT NO.                                                                       |  | MARCH, 2018                                                                                                                                                                              |  |
| DATE                                                                              |  | A. GAUNA                                                                                                                                                                                 |  |
| DRAWN BY                                                                          |  | J.B.G.                                                                                                                                                                                   |  |
| CHK. BY                                                                           |  |                                                                                                                                                                                          |  |
|  |  | <p><b>JAVIER HINOJOSA ENGINEERING</b><br/>CONSULTING ENGINEERS<br/>416 E. DOVE AVENUE McALLEN, TEXAS 78504<br/>PHONE (956) 668-1588<br/>jhinojosa@jre.com<br/>TPE FIRM NUMBER F-1295</p> |  |
|                                                                                   |  | <p>SUGGESTED EROSION CONTROL LAYOUT<br/>LAS PALMAS DEL NORTE SUBDIVISION No. 3 PHASE II<br/>HIDALGO COUNTY, TEXAS</p>                                                                    |  |
|                                                                                   |  | SHEET<br>7<br>OF 10 SHEETS                                                                                                                                                               |  |



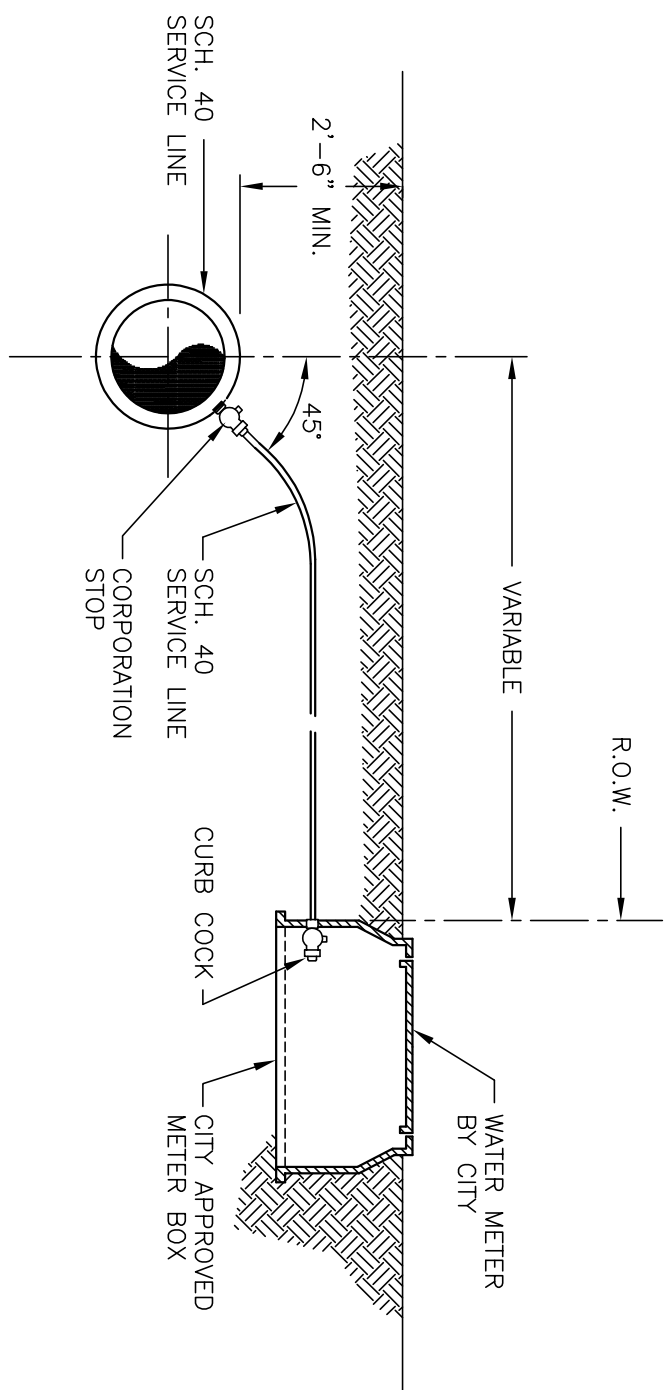




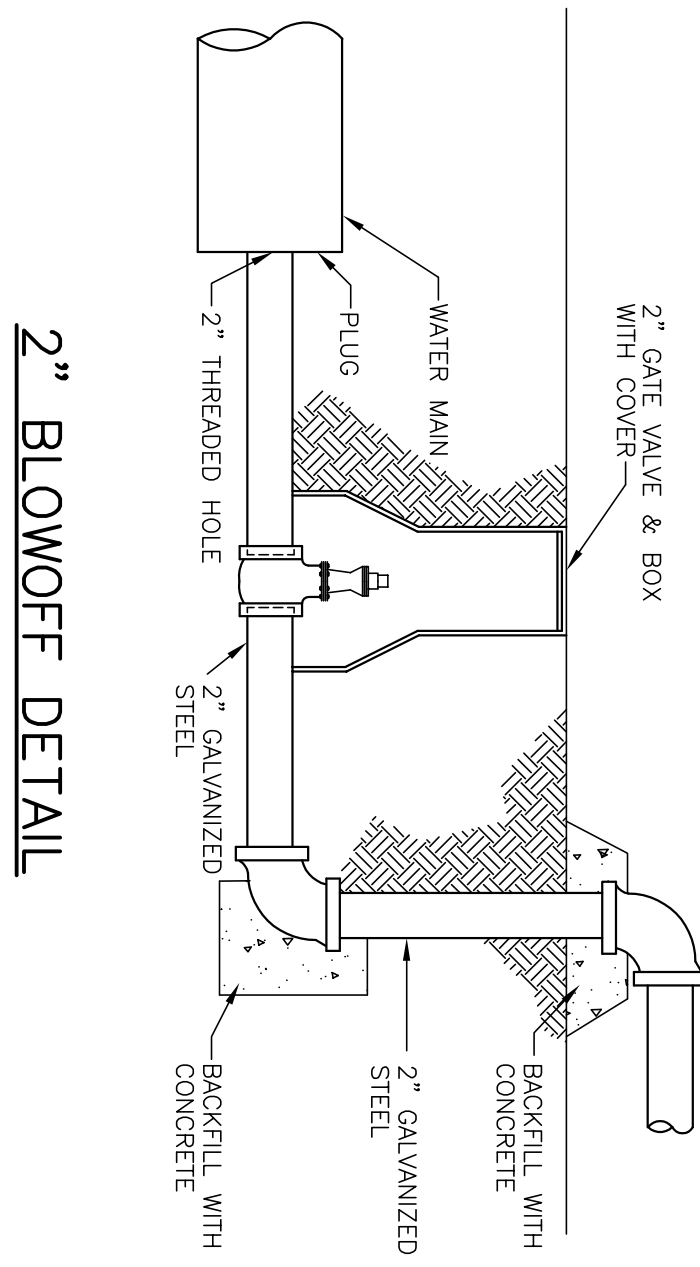
VALVE & BOX INSTALLATION



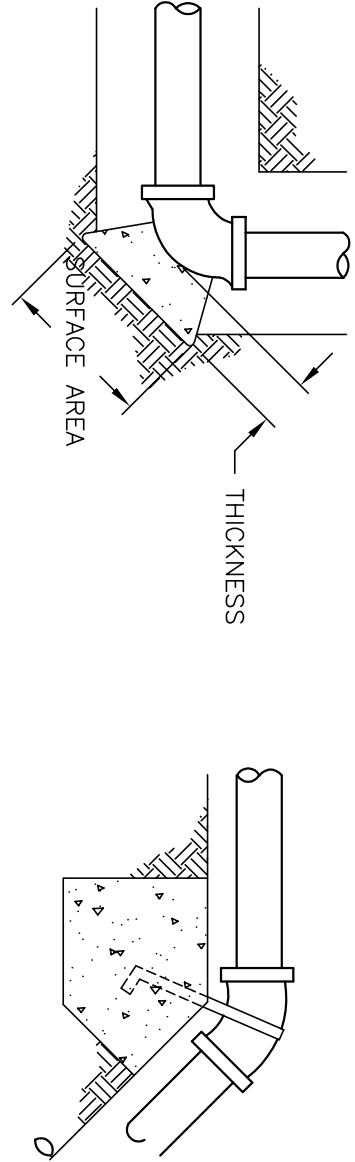
FIRE HYDRANT INSTALLATION



SERVICE CONNECTION

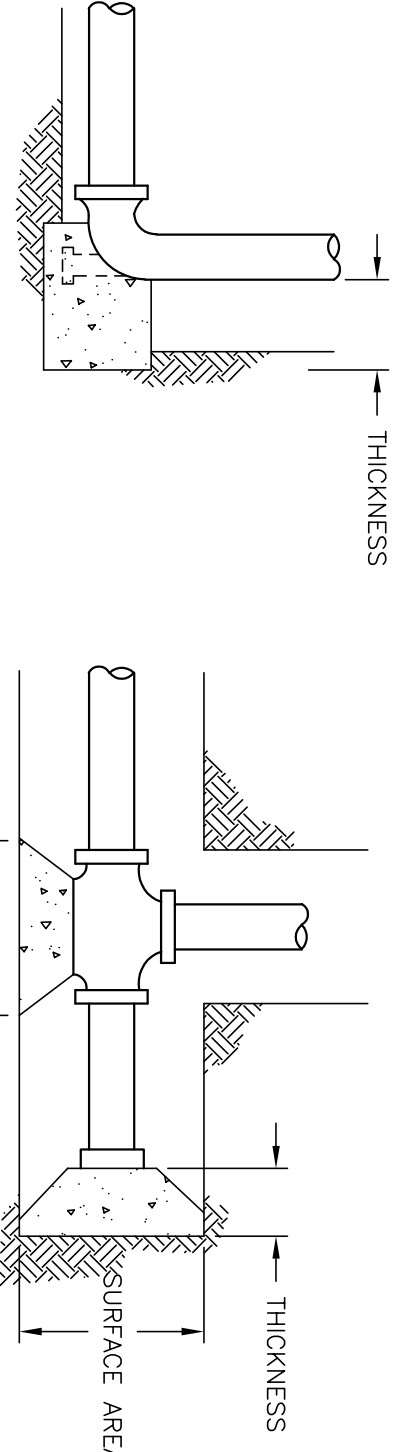


2" BLOWOFF DETAIL



HORIZONTAL BENDS

VERTICAL BENDS



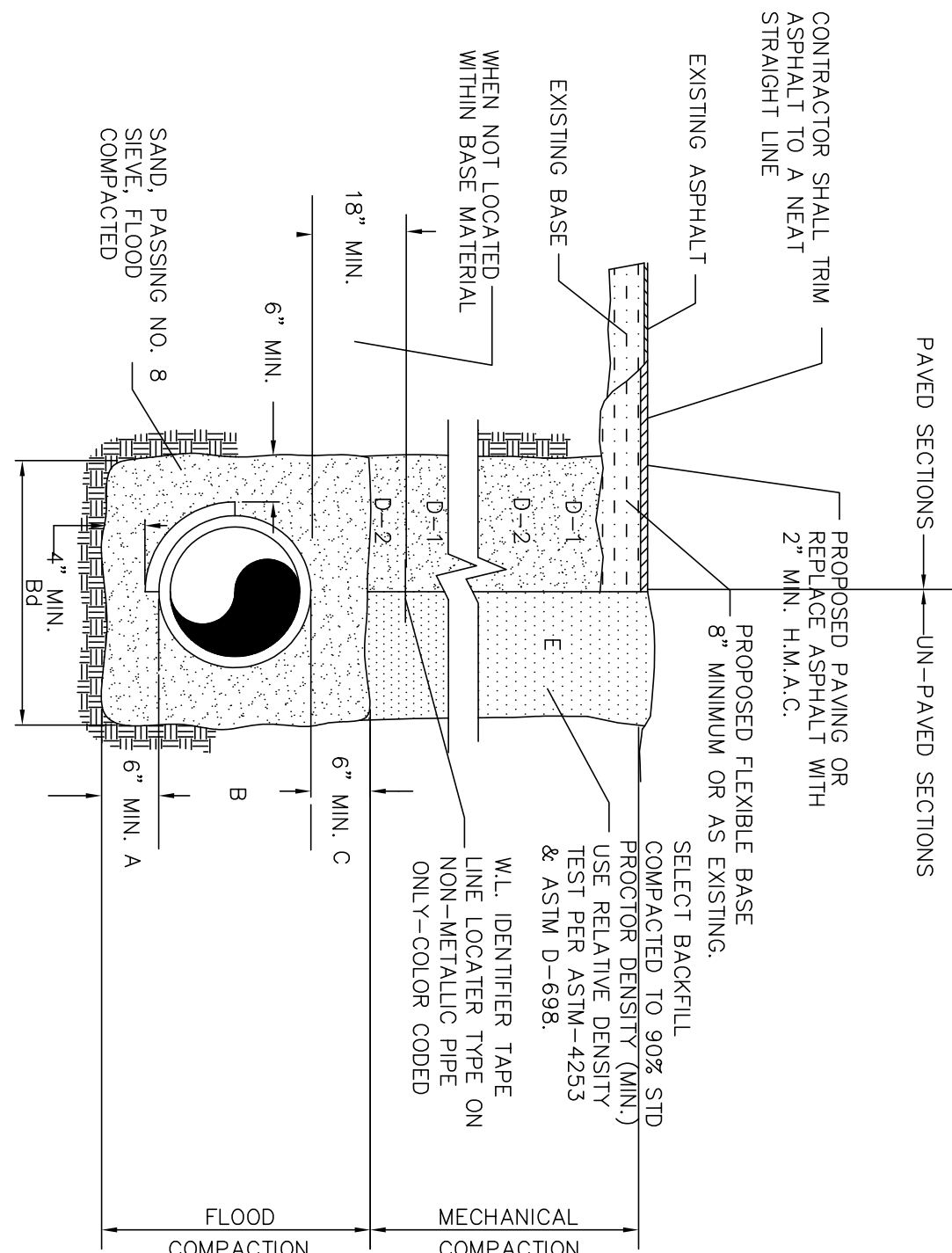
HYDRANT BURIES

TEES & DEAD ENDS

THRUST BLOCKS DETAIL

| THRUST BLOCK SIZE       |                      |                           |                       |
|-------------------------|----------------------|---------------------------|-----------------------|
| DIAMETER OF PIPE INCHES | SURFACE AREA SQ. FT. | THICKNESS AT BENDS INCHES | WEIGHT AT BENDS - LBS |
| 22-1/2" BENDS           |                      |                           |                       |
| 6 OR LESS               | 2                    | 8                         | 1,700                 |
| 8                       | 3                    | 12                        | 3,000                 |
| 10                      | 3.5                  | 12                        | 4,500                 |
| 12                      | 4                    | 14                        | 6,600                 |
| 14                      | 5                    | 18                        | 9,000                 |
| 16                      | 6                    | 18                        | 11,800                |
| 45" BENDS               |                      |                           |                       |
| 6 OR LESS               | 4                    | 12                        | 3,200                 |
| 8                       | 5                    | 14                        | 5,800                 |
| 10                      | 6                    | 18                        | 9,000                 |
| 12                      | 7                    | 18                        | 13,000                |
| 14                      | 8                    | 24                        | 17,000                |
| 16                      | 11.5                 | 24                        | 23,200                |
| 90" BENDS               |                      |                           |                       |
| 6 OR LESS               | 6                    | 12                        | 6,000                 |
| 8                       | 8                    | 15                        | 10,700                |
| 10                      | 10                   | 18                        | 16,700                |
| 12                      | 12                   | 18                        | 24,000                |
| 14                      | 18                   | 24                        | 32,600                |
| 16                      | 21                   | 24                        | 42,700                |
| TEES & DEAD ENDS        |                      |                           |                       |
| 6 OR LESS               | 3                    | 12                        | ---                   |
| 8                       | 4                    | 15                        | ---                   |
| 10                      | 6                    | 18                        | ---                   |
| 12                      | 8.5                  | 18                        | ---                   |
| 14                      | 11.5                 | 24                        | ---                   |
| 16                      | 15                   | 24                        | ---                   |

NOTE: ALL VALUES SHOWN ARE MINIMUM FOR A HYDROSTATIC PRESSURE OF 150 P.S.I. AND A SOIL RESISTANCE OF 2,000 LBS./SQ. FT. WITH PIPE LINE A MINIMUM OF 2 FT. OF COVER

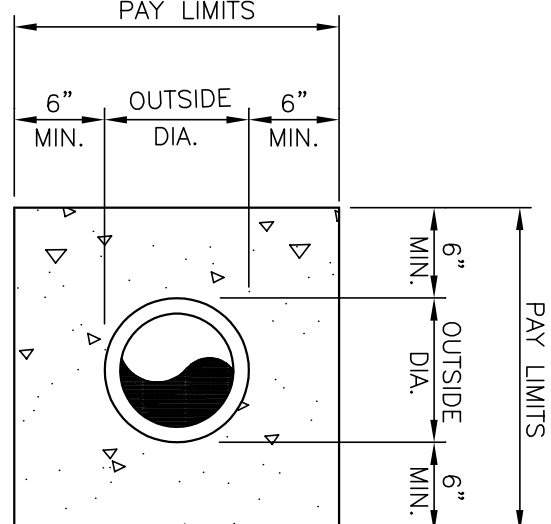


- A SAND BEDDING PLACED BEFORE PIPE IS Laid UP TO FLOW LINE OF PIPE (MIN. THICKNESS=6")
- B SAND BACKFILL PLACED AFTER PIPE IS Laid FROM BOTTOM OF PIPE TO SPRING LINE OF PIPE. (IF SAND BEDDING IS NOT USED, BACKFILL SHOULD BE PLACED TO SPRING LINE OF PIPE WITH ASTM 2221 FOR RIGID PIPE.
- C SAND BACKFILL PLACED FROM SPRING LINE OF PIPE TO 6" ABOVE TOP OF PIPE (6" LIFTS, HAND TAMPED)
- D-1 (CITY STREETS, PARKING AREA) SELECT EXCAVATED BACKFILL MATERIAL COMPACTED TO 95% SPD (6" LIFTS, MECHANICAL COMPACTION)
- D-2 (STATE MAINTAINED ROADWAY) COMPACTED SAND/CEMENT STABILIZED BACKFILL WITH 7% PORTLAND CEMENT COMPACTED AS PER ASTM D-4253 AND ASTM D-698
- E SELECT EARTH BACKFILL COMPACTED TO 90% STD. (12" LIFTS, MECHANICAL COMPACTION) FOUNDATION PREPARATION (WELLPONTS, GRAVEL OR CEMENT STABILIZATION OR APPROVED SUBSTITUTE) SHALL BE REQUIRED WHEN TRENCH BOTTOM IS UNSTABLE. BACKFILLING AT STRUCTURES SHALL BE PLACED IN UNIFORM LAYERS, MOISTENED AS REQUIRED TO APPROXIMATE OPTIMUM MOISTURE CONTENT, AND COMPACTED TO 95% STD. PROCTOR DENSITY (USE RELATIVE DENSITY TEST PER ASTM D-4253 & ASTM D-698). THE THICKNESS OF EACH LOOSE LAYER SHALL NOT EXCEED 6". STRUCTURE BACKFILL MATERIAL SHALL BE SAND, APPROVED SITE SOIL, OR OTHER APPROVED SUBSTITUTE.

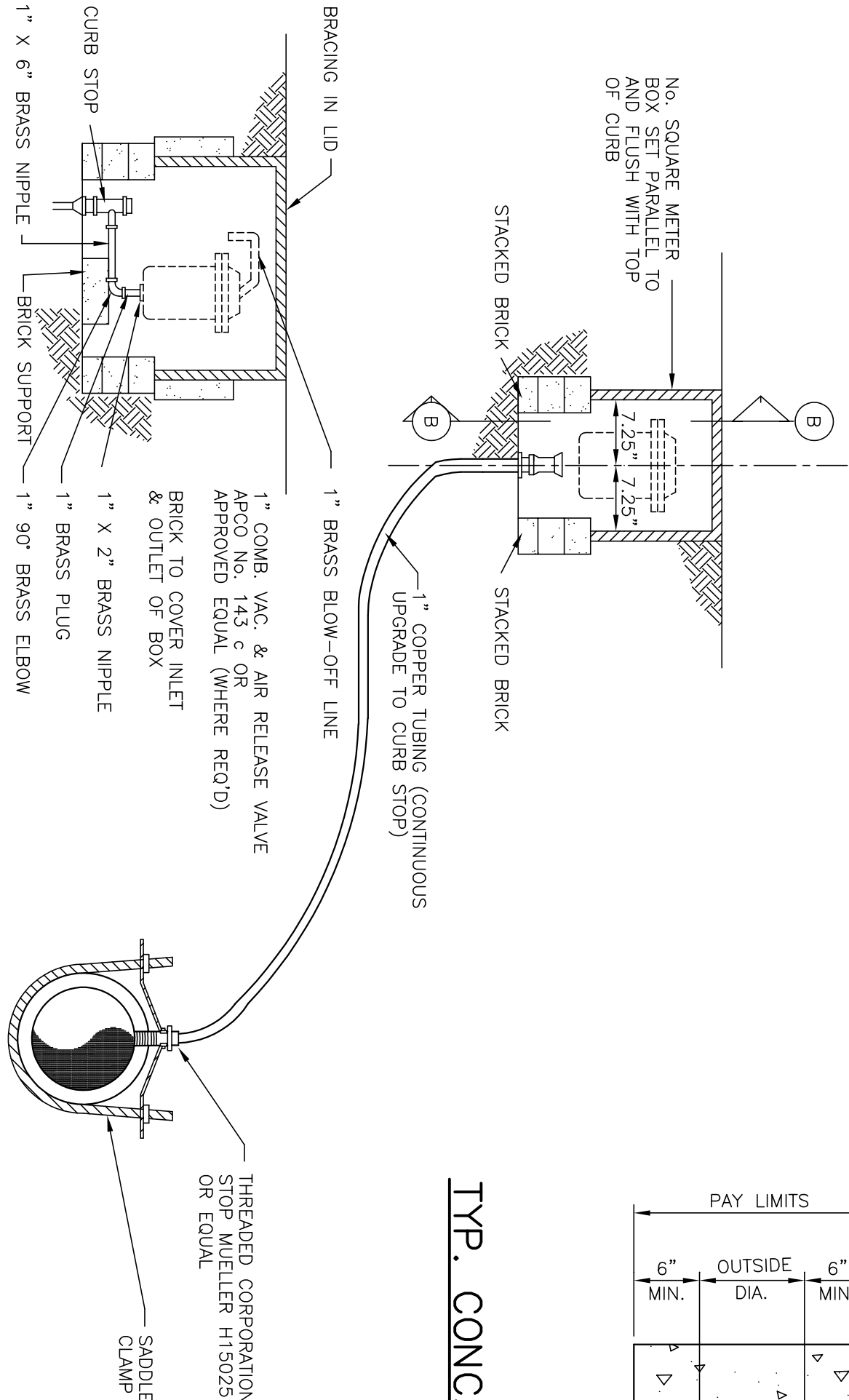
WATER LINE BEDDING DETAIL

SCALE: N.T.S.

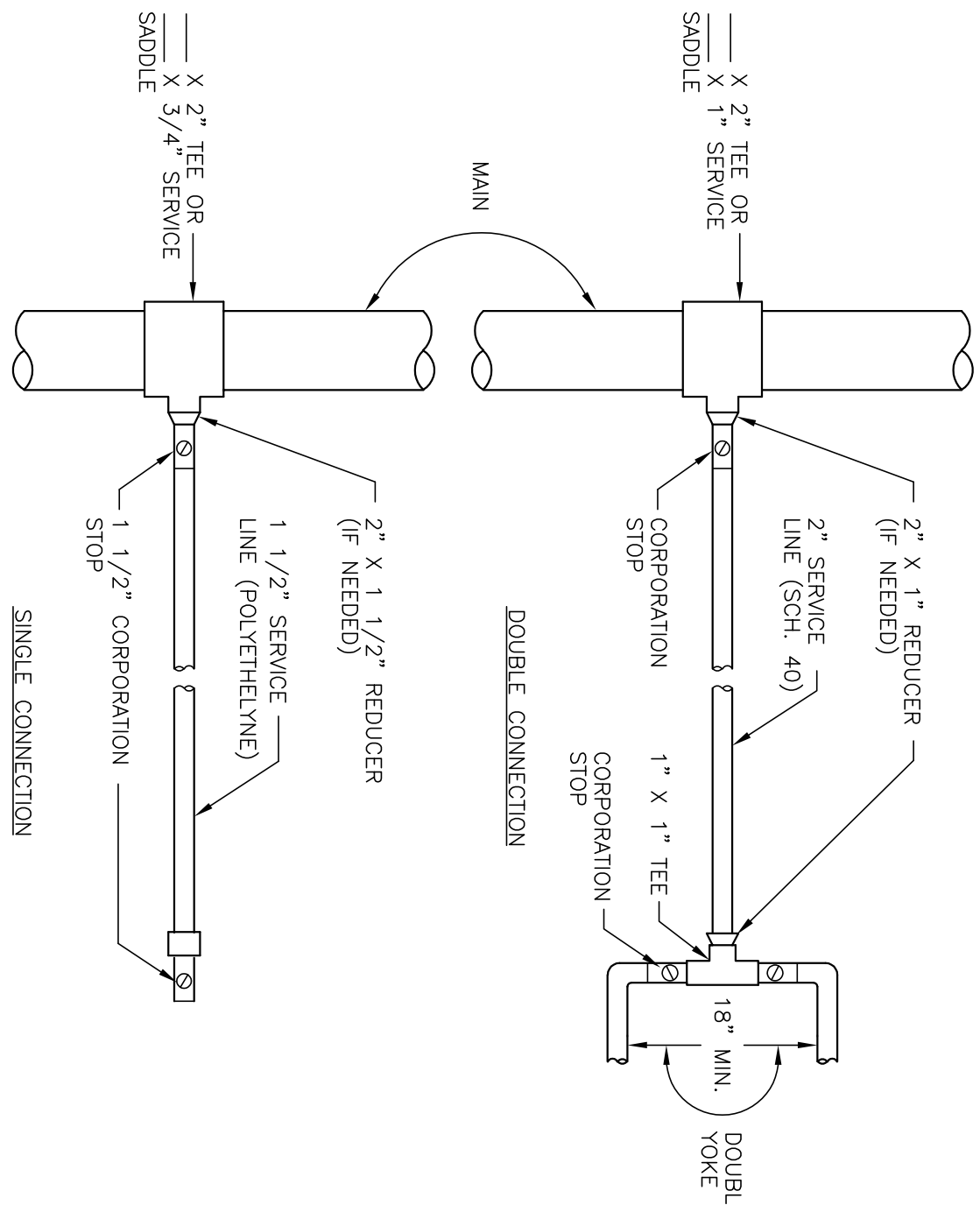
NOTE: SHOULD A CONFLICT BETWEEN THIS STANDARD AND THE RECOMMENDATION OF ANY GEOTECHNICAL REPORT ARISE, WRITTEN APPROVAL MUST BE RECEIVED BY CONTRACTOR FROM THE CITY OF McALLEN. CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF EITHER.



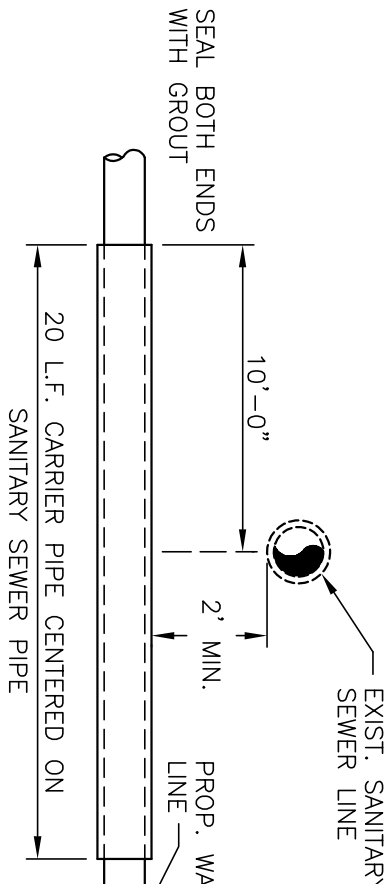
TYP. CONC. CONNECTION



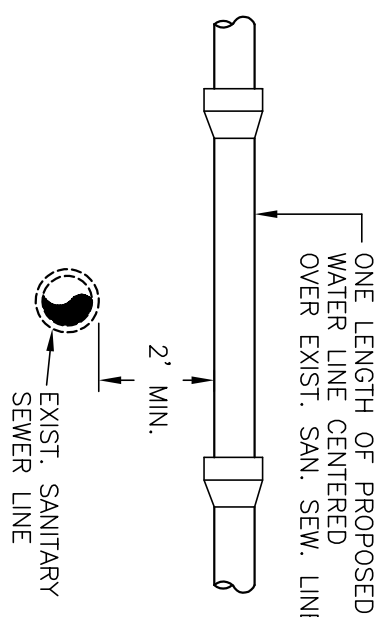
1" AIR RELEASE VALVE



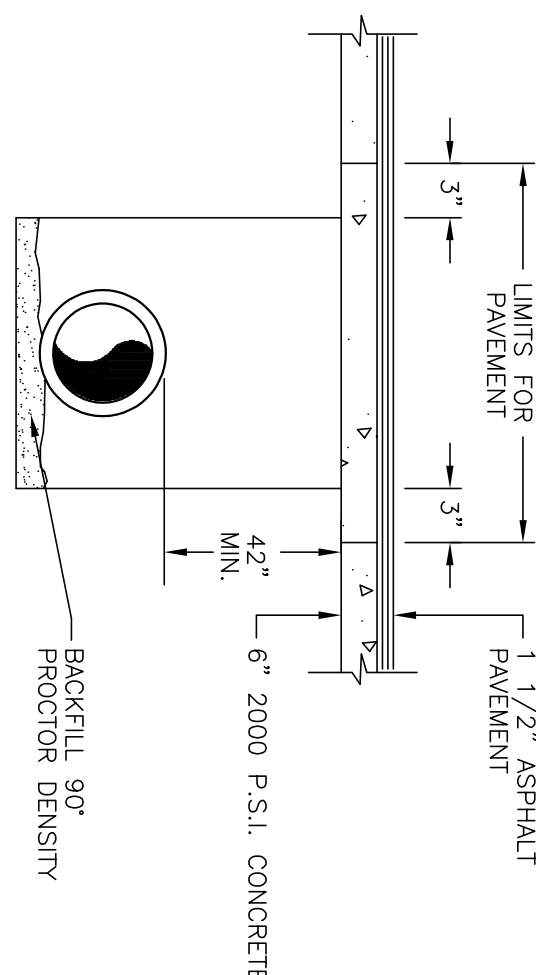
TYP. SERVICE CONNECTIONS (STREET CROSSING)



PROPOSED WATER LINE CROSSING (UNDER EXIST. S.S. LINE)



PROPOSED WATER LINE CROSSING (OVER EXIST. S.S. LINE)



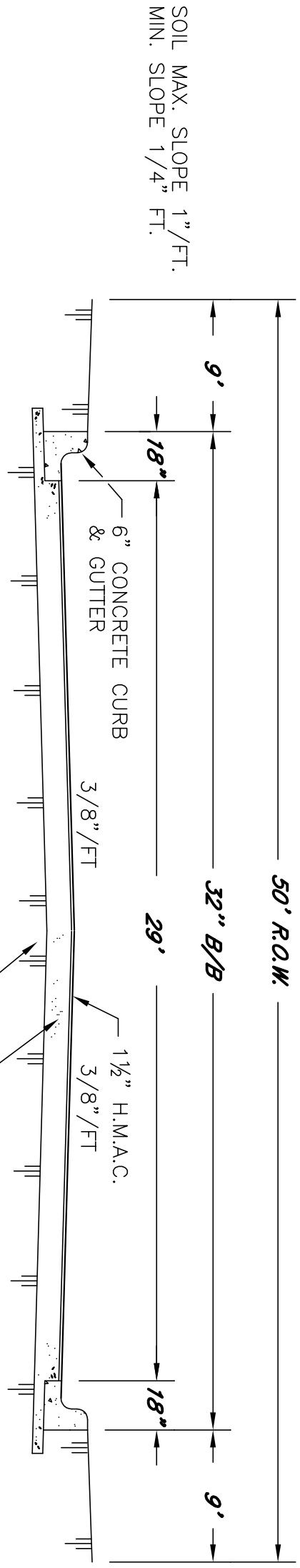
PATCH PAVING DETAIL

| REVISIONS   |             |
|-------------|-------------|
| PROJECT No. | 180102      |
| DATE        | APRIL, 2018 |
| BY          | JBG         |
| CHECK BY    | JH          |

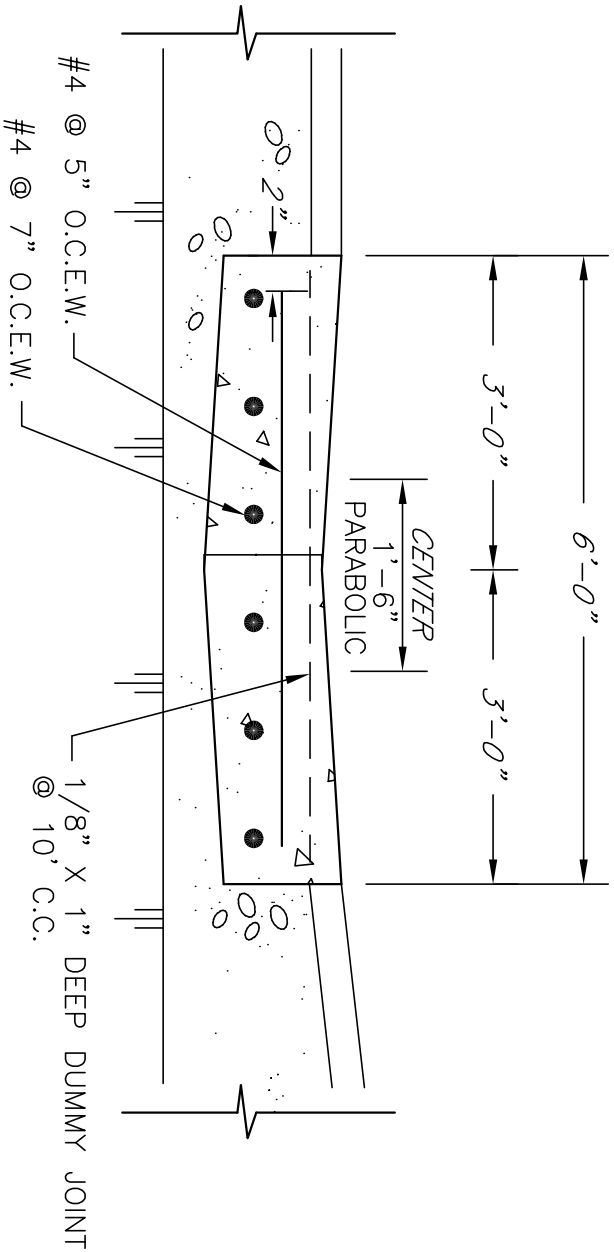
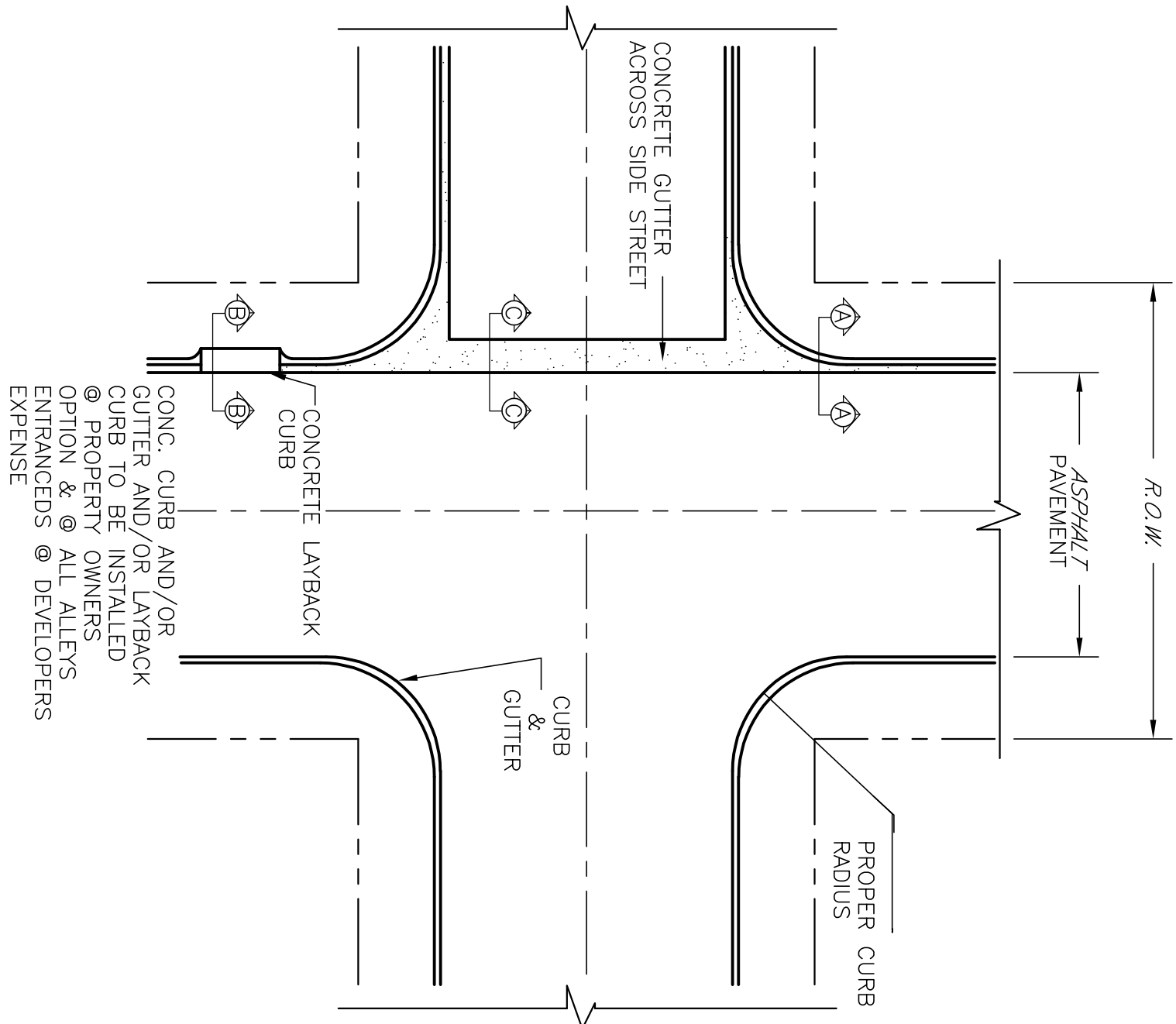
**JAVIER HINOJOSA ENGINEERING**  
CONSULTING ENGINEERS  
416 E. DOVE AVENUE McALLEN, TEXAS 78504  
PHONE (956) 668-1588  
johino@jve.com  
TTYPE FIRM NUMBER F-1295

**STANDARD WATER DETAILS**  
LAS PALMAS DEL NORTE SUBDIVISION No. 3 PHASE II  
HIDALGO COUNTY, TEXAS

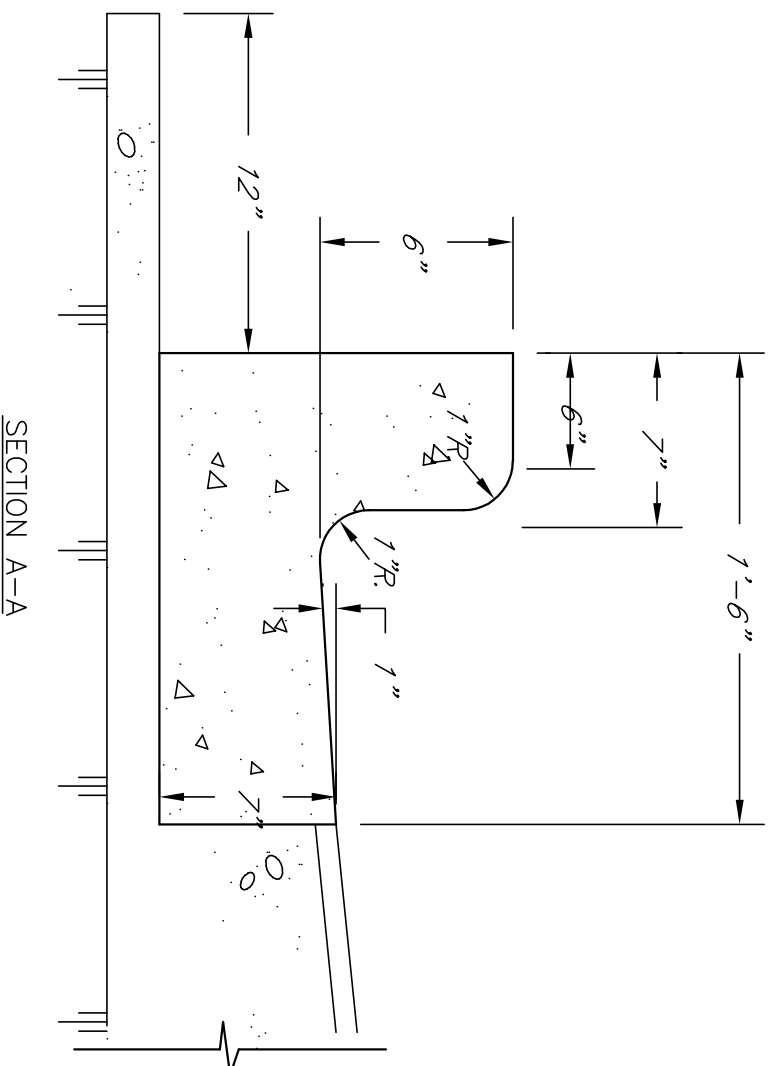
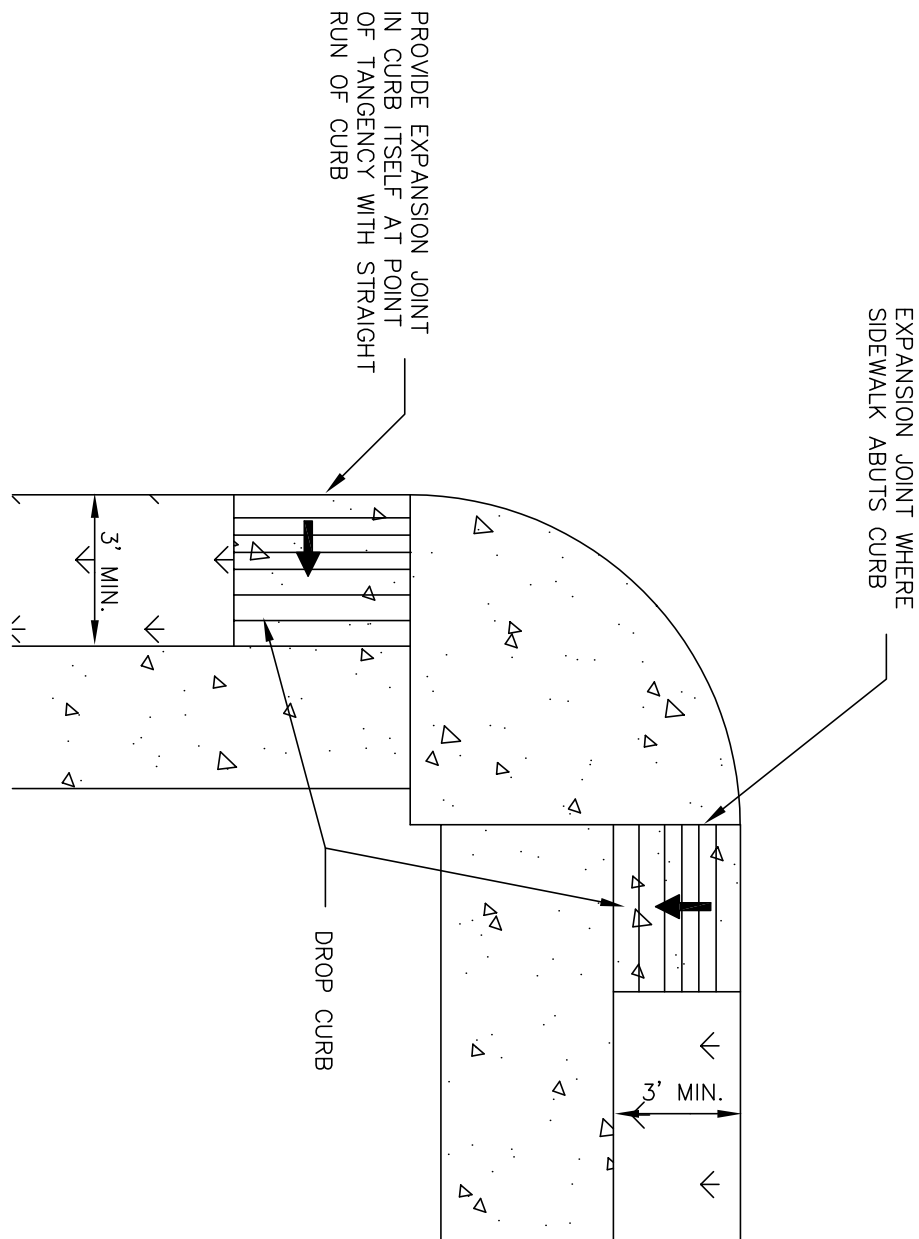
**SHEET 9**  
OF 10 SHEETS



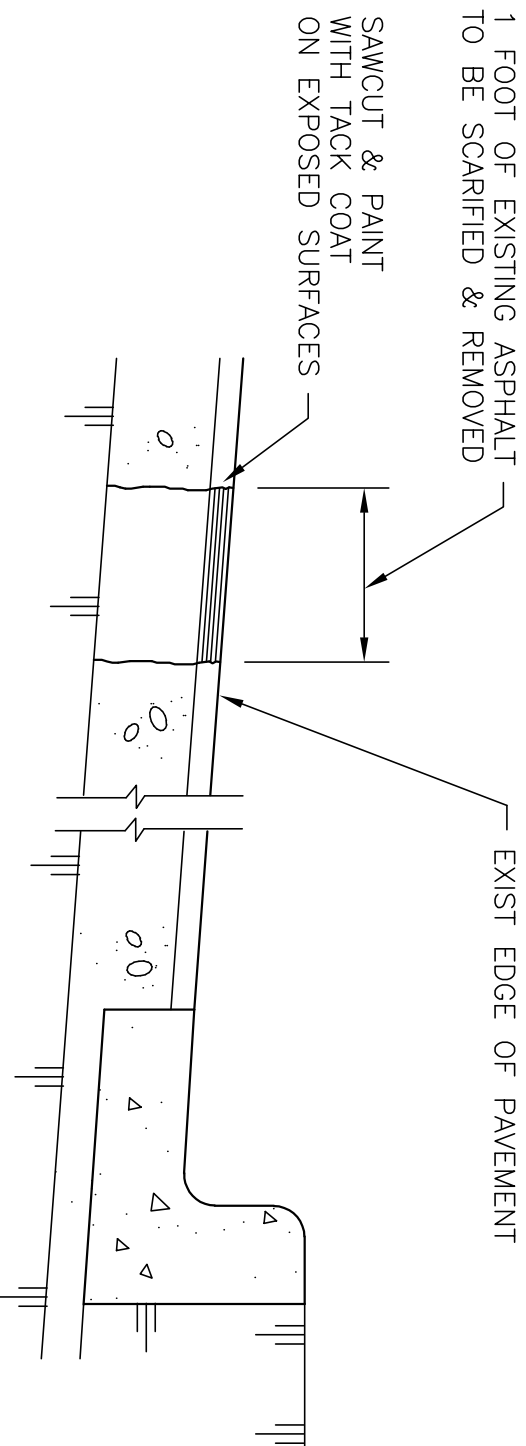
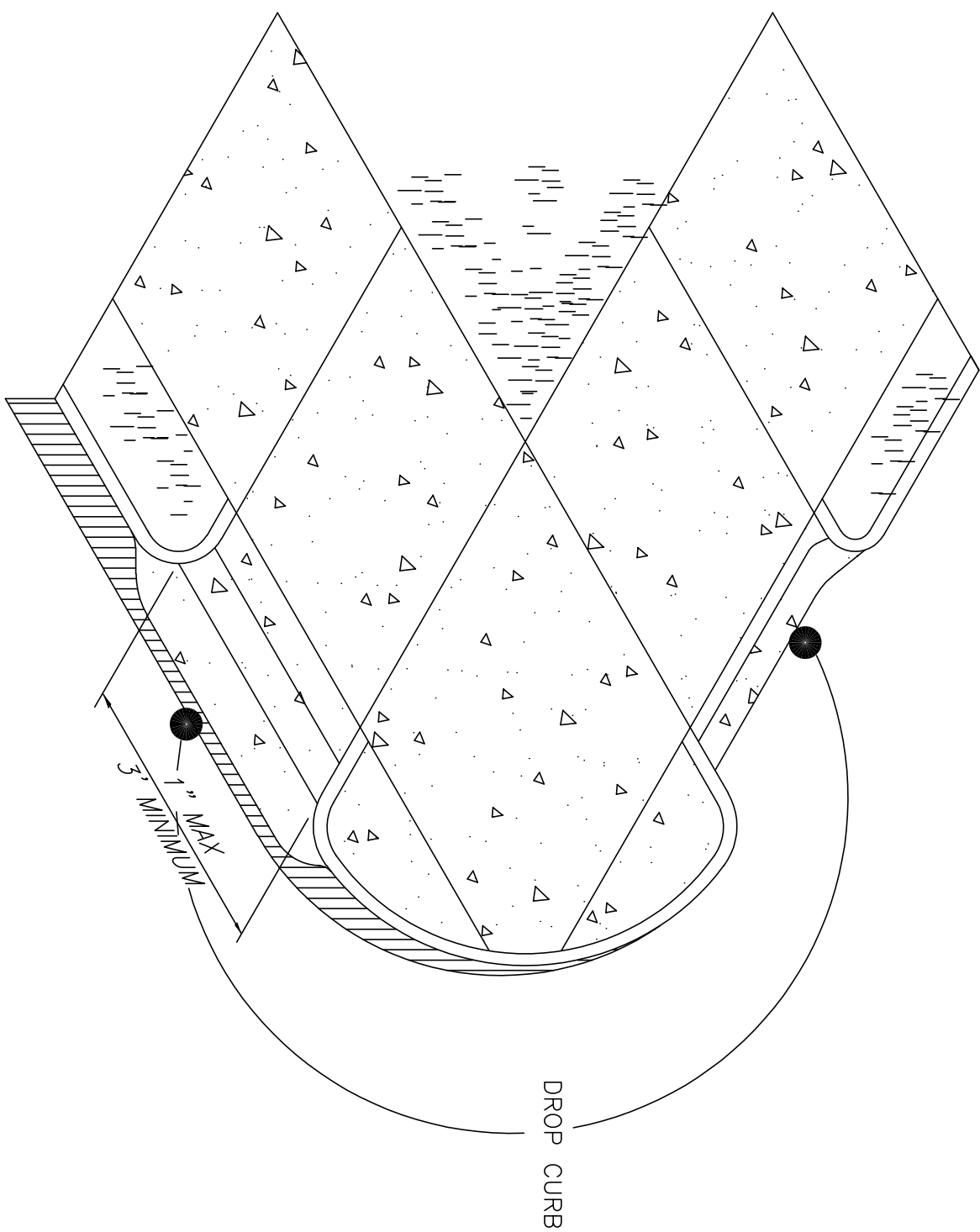
SID STREET CROSS SECTIONS



CONCRETE VALLEY GUTTER



CONCRETE CURB & GUTTER



NEW ASPHALT MEETING EXISTING PAVEMENT

| REVISIONS               |             | 180102                                          |  |
|-------------------------|-------------|-------------------------------------------------|--|
|                         | PROJECT No. | JAVIER HINOJOSA ENGINEERING                     |  |
|                         | DATE        | CONSULTING ENGINEERS                            |  |
|                         | APRIL, 2018 | 416 E. DOVE AVENUE MEALLEN, TEXAS 75504         |  |
|                         | JBG         | PHONE (956) 668-1588                            |  |
|                         | DRWN BY JH  | johinh@jgyr.com                                 |  |
|                         | CHK. BY JH  | TPE FIRM NUMBER F-1295                          |  |
| STANDARD PAVING DETAILS |             | LAS PALMAS DEL NORTE SUBDIVISION No. 3 PHASE II |  |
| HIDALGO COUNTY, TEXAS   |             | SHEET 10 OF 10 SHEETS                           |  |