

GENERAL NOTES:

- CONTRACTOR SHALL CONTACT CITY OF JACINTO CITY AT (713) 453-7411, MR. KYLE REED, AT LEAST FORTY EIGHT (48) HOURS PRIOR TO CONSTRUCTION FOR NOTIFICATION OF COMMENCEMENT.
- LOCATION OF EXISTING UNDERGROUND UTILITIES AND SERVICE LINES (WATER, SEWER, GAS, TELEPHONE, ELECTRICAL, ETC.) ARE DETERMINED FROM AVAILABLE RECORDS AND ARE APPROXIMATE. CONTRACTOR TO LOCATE LINES AND/ OR OBSTRUCTIONS AHEAD OF EXCAVATION.
- CONTRACTOR TO MAKE ARRANGEMENTS WITH THE APPROPRIATE UTILITY COMPANY FOR SECURING POLES, IF NECESSARY, WHILE CONSTRUCTION PASSES BY POLES. COST OF SECURING POLES WILL BE PAID FOR BY THE CONTRACTOR.
- CONSTRUCTION STAKING (ALIGNMENT AND GRADE) TO BE PROVIDED BY THE CONTRACTOR AT NO SEPARATE PAY.
- CONTRACTOR TO USE CAUTION WHEN CROSSING ALL EXISTING FACILITIES. ANY DAMAGE TO BE REPAIRED AT THE CONTRACTORS EXPENSE WITH NO SEPARATE PAY.
- SURPLUS EXCAVATED MATERIAL SHALL BE REMOVED AND DISPOSED OFF SITE BY THE CONTRACTOR (NO SEPARATE PAY). IF THE CITY NOTIFIES THE CONTRACTOR THAT THE OWNER HAS USE FOR THIS MATERIAL, THE MATERIAL WILL BE HAULED TO A SITE AS DIRECTED BY THE OWNER WITHIN THE CITY. NO FILL SHALL BE PLACED WITHIN ANY FLOODPLAIN HAZARD AREA WITHOUT APPROVAL FROM THE CITY.
- WHERE CONTRACTOR'S WORK AND/ OR EQUIPMENT CAUSES AN OBSTRUCTION TO TRAFFIC, CONTRACTOR SHALL PROVIDE AND INSTALL TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH PART IV OF THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (TEXAS M.U.T.C.D., MOST RECENT EDITION AS REVISED) DURING CONSTRUCTION.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH APPLICABLE LOCAL REQUIREMENTS.
- CONTRACTOR SHALL PROTECT EXISTING FACILITIES DURING INSTALLATION OF PROPOSED WORK.
- ALL WORK IN THE TEXAS DEPARTMENT OF TRANSPORTATION AND COUNTY RIGHT-OF-WAYS SHALL CONFORM TO THE STANDARDS OF THOSE GOVERNMENTAL ENTITIES. CONTRACTOR IS RESPONSIBLE FOR THE REPLACEMENT AND/ OR REPAIR OF ANY DAMAGE TO TxDOT MARKERS.
- CONTRACTOR SHALL MAINTAIN DRAINAGE TO ORIGINAL OR BETTER CONDITION THROUGHOUT THE CONSTRUCTION OF THE PROJECT. NO SEPARATE PAY.
- PAVED SURFACES SHALL BE PROTECTED FROM DAMAGE FROM TRACKED EQUIPMENT.
- OBTAIN ALL PERMITS, NOT PROVIDED BY OWNER, PRIOR TO STARTING CONSTRUCTION.
- CONTRACTOR TO MAINTAIN ACCESS FOR PROPERTY OWNERS, POST OFFICE VEHICLES, GARBAGE TRUCKS AND EMERGENCY VEHICLES AT ALL TIMES.
- NOTIFY ALL PROPERTY OWNERS A MINIMUM OF TWENTY FOUR (24) HOURS PRIOR TO BLOCKAGE OF DRIVEWAYS OR ENTERING OF UTILITY EASEMENTS.
- PROPERTY OWNERS SHALL BE NOTIFIED, IN WRITING, BY CONTRACTOR, WITH DOOR HANGERS 2 WEEKS BEFORE CONSTRUCTION BEGINS. (PROPERTY OWNER SHALL BE PROVIDED THE MINIMUM FOLLOWING INFORMATION: WORK TO BE PERFORMED, STARTING AND ENDING DATES, AND THE NAME AND NUMBER OF CONTRACTOR'S REPRESENTATIVE & CITY OF JACINTO CITY OFFICIAL TO BE CONTACTED FOR QUESTIONS. WRITTEN NOTICES SHALL BE APPROVED BY THE CITY OF JACINTO CITY PRIOR TO DISTRIBUTION).
- ALL ITEMS OF WORK REQUIRED UNDER THIS CONTRACT NOT SPECIFICALLY CALLED FOR IN THE PROPOSAL AS PAY ITEMS SHALL BE CONSIDERED INCIDENTAL TO VARIOUS BID ITEMS AND NO SEPARATE PAYMENT SHALL BE MADE FOR SAME.
- ADJUST MANHOLE RINGS, VALVE BOXES, GRATES, ETC. AS REQUIRED FOR NEW PAVEMENT, AND/OR TO FINISHED GRADE OUTSIDE PAVEMENT.
- ALL TRAFFIC SIGNS AND STRIPING SHALL CONFORM TO THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- IT IS IMPERATIVE THAT CONSTRUCTION IN PROJECT AREA INCONVENIENCE RESIDENTS AND BUSINESSES AS LITTLE AS POSSIBLE. COMPLETE CLEAN-UP NOT GREATER THAN ONE BLOCK BEHIND ACTIVE CONSTRUCTION AREA. CLEAN-UP INCLUDES COMPACTION OF BACKFILL, CLOSURE OF BORE PITS, RESHAPING OF DITCHES, SURFACE RESTORATION, REMOVAL OF ALL EXCESS EXCAVATED MATERIAL, REMOVAL OF EQUIPMENT AND CONSTRUCTION MATERIALS, AND SWEEPING OF STREETS.
- CONTRACTOR SHALL NOTIFY CITY OF JACINTO CITY AMBULANCE, POLICE, FIRE, MAIL, TRASH AND OTHER EMERGENCY SERVICE AGENCIES AT LEAST 48 HOURS PRIOR TO CLOSURE OF ANY STREET, INTERSECTION, OR LANE OF TRAFFIC. CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO ALLOW ACCESS TO EMERGENCY VEHICLES AT ALL TIMES.
- CONTRACTOR TO CONTACT "DIG-TESS" AT 1-800-344-8377 AT LEAST 48 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION FOR LOCATION AND MARKING OF UNDERGROUND CABLE.
- CONTRACTOR TO SAW-CUT FULL DEPTH ALL TIE-INS AND DRIVEWAY RECONNECTIONS FOR CLEAN EDGE THROUGHOUT ENTIRETY OF PROJECT AS DESIRED BY CITY. (NO EXTRA PAY)
- EXISTING DRIVEWAYS THAT ARE NOT SPECIFICALLY CALLED OUT TO BE REPLACED WITH CONCRETE SHALL BE RECONNECTED TO PROPOSED PAVEMENT AT LIKE CONDITIONS OR BETTER THAN BEFORE CONSTRUCTION BEGAN.
- THE CONTRACTOR SHALL COORDINATE, MOVE, AND RELOCATE ALL EXISTING MAILBOXES, SIGNS, POLE, UTILITIES, ETC. THAT CONFLICT WITH THE CONSTRUCTION OF THE CONCRETE PAVING.

PAVEMENT NOTES:

- THE PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH HARRIS COUNTY SPECIFICATIONS OR WHAT IS SHOWN ON EXHIBITS. WHICHEVER IS MORE STRINGENT SHALL BE FOLOWED.
- TYPICAL ROADWAY SHALL BE 7-INCH REINFORCED CONCRETE PAVEMENT. THE CONCRETE SHOULD CONTAIN A MINIMUM OF 5.5 SACKS OF PORTLAND CEMENT PER CUBIC YARD OF CONCRETE AND A COMPRESSIVE STRENGTH OF 3500 PSI AT 28 DAYS UNLESS OTHERWISE NOTED.
- EXISTING SUBGRADE SHALL BE 8-INCH THICK LIME STABILIZED SUBGRADE BY DRY WEIGHT. THE EXACT PERCENTAGES WILL BE SPECIFIED AFTER SAMPLING THE ROUGH GRADED SITE AND RUNNING THE STABILIZATION TEST IN THE LABORATORY AND APPROVED BY THE GEOTECHNICAL ENGINEER.
- ALL REINFORCEMENT STEEL TO BE No. 4 BARS, GRADE 60 STEEL.
- CONTRACTOR TO USE APPROPRIATE SIZE REBAR CHAIRS IN ORDER TO CENTER THE REINFORCING IN THE PROPOSED CONCRETE PAVEMENT.
- SHOULD ANY STRUCTURAL FILL BE REQUIRED TO RAISE THE GRADE IT SHOULD CONSIST OF LEAN CLAY OR SANDY LEAN CLAY WITH A LIQUID LIMIT LESS THAN 40 AND A PLASTICITY INDEX BETWEEN 10 AND 20. THE STRUCTURAL FILL SHOULD BE COMPACTED AT MOISTURE CONTENT WITHIN THREE PERCENT ABOVE OPTIMUM TO REDUCE SWELLING POTENTIAL OF THE COMPACTED FILL. THE FILL MATERIAL SHOULD BE PLACED IN LOOSE LIFTS NOT EXCEEDING EIGHT INCHES AND SHOULD BE COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698. THE STRUCTURAL FILL PAD SHOULD EXTEND AT LEAST TWO FEET OUTSIDE THE PAVING AREA. THE SURFICIAL CLAY IS NOT SUITABLE FOR STRUCTURAL FILL UNLESS STABILIZED WITH SUFFICIENT LIME.
- TYPICAL PAVEMENT SECTIONS ARE SHOWN ON EXHIBIT 05.
- CONTRACTOR TO COORDINATE ALL STREET CLOSURES AND TEMPORARY DETOURS WITH THE CITY OF JACINTO CITY.
- DOUBLE REFLECTORIZED BLUE TRAFFIC MARKERS SHALL BE PLACED 1 FOOT OFFSET OF THE CENTERLINE AT ALL FIRE HYDRANT LOCATIONS BY THE PAVING CONTRACTOR. HYDRANTS LOCATED AT INTERSECTIONS SHALL HAVE A BUTTON PLACED ON EACH STREET. NO SEPARATE PAY.
- PROPOSED CURB REPLACEMENTS TO MATCH EXISTING DIMENSIONS AND REINFORCEMENT.

UTILITY NOTES

CAUTION: UNDERGROUND GAS FACILITIES
LOCATIONS OF CENTERPOINT ENERGY MAIN LINES (TO INCLUDE CENTERPOINT ENERGY, INTRASTATE PIPELINE, LLC. WHERE APPLICABLE) ARE SHOWN IN AN APPROXIMATE LOCATION ONLY. SERVICE LINES ARE USUALLY NOT SHOWN. OUR SIGNATURE ON THESE PLANS ONLY INDICATES THAT OUR FACILITIES ARE SHOWN IN APPROXIMATE LOCATION. IT DOES NOT IMPLY THAT A CONFLICT ANALYSIS HAS BEEN MADE. THE CONTRACTOR SHALL CONTACT THE UTILITY COORDINATING COMMITTEE AT 1-800-545-6005 OR 811 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE MAIN AND SERVICE LINES FIELD LOCATED.

- WHEN CENTERPOINT ENERGY PIPELINE MARKINGS ARE NOT VISIBLE, CALL (713) 207-5463 OR (713) 945-8037 (7:00 A.M. TO 4:30 P.M.) FOR STATUS OF LINE LOCATION REQUEST BEFORE EXCAVATION BEGINS.
- WHEN EXCAVATING WITHIN EIGHTEEN INCHES (18") OF THE INDICATED LOCATION OF CENTERPOINT ENERGY FACILITIES, ALL EXCAVATION MUST BE ACCOMPLISHED USING NON-MECHANIZED EXCAVATION PROCEDURES.
- WHEN CENTERPOINT ENERGY FACILITIES ARE EXPOSED, SUFFICIENT SUPPORT MUST BE PROVIDED TO THE FACILITIES TO PREVENT EXCESSIVE STRESS ON THE PIPING.
- FOR EMERGENCIES REGARDING GAS LINES CALL (713) 659-3552 OR (713) 207-4200.

THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY DAMAGES CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND FACILITIES.

CAUTION: UNDERGROUND CABLE FACILITIES
TELEPHONE AND TELEVISION CABLE EXISTS UNDERGROUND THROUGHOUT THE PROPOSED PROJECT AREA. CONTRACTOR TO CONTACT "DIG-TESS" AT 1-800-344-8377 AT LEAST 48 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION FOR LOCATION AND MARKING OF UNDERGROUND CABLE.

- CAUTION: AT&T TEXAS/SWBT FACILITIES**
- THE LOCATIONS OF AT&T TEXAS/SWBT FACILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND UTILITIES.
 - THE CONTRACTOR SHALL CALL 1-800-344-8377 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE UNDERGROUND LINES FIELD LOCATED.
 - WHEN EXCAVATING WITHIN EIGHTEEN INCHES (18") OF THE INDICATED LOCATION OF AT&T TEXAS/SWBT FACILITIES, ALL EXCAVATIONS MUST BE ACCOMPLISHED USING NON-MECHANIZED EXCAVATION PROCEDURES. WHEN BORING, THE CONTRACTOR SHALL EXPOSE THE AT&T TEXAS/SWBT FACILITIES.
 - WHEN AT&T TEXAS/SWBT FACILITIES ARE EXPOSED, THE CONTRACTOR WILL PROVIDE SUPPORT TO PREVENT DAMAGE TO THE CONDUIT DUCTS OR CABLES. WHEN EXCAVATING NEAR TELEPHONE POLES THE CONTRACTOR SHALL BRACE THE POLE FOR SUPPORT.
 - THE PRESENCE OR ABSENCE OF AT&T TEXAS/SWBT UNDERGROUND CONDUIT FACILITIES OR BURIED CABLE FACILITIES SHOWN ON THESE PLANS DOES NOT MEAN THAT THERE ARE NO DIRECT BURIED CABLES OR OTHER CABLES IN CONDUIT IN THE AREA.
 - PLEASE CONTACT THE AT&T TEXAS DAMAGE PREVENTION MANAGER MR. ROOSEVELT LEE JR. AT (713) 567-4552 OR EMAIL AT RL7259@ATT.COM, IF THERE ARE QUESTIONS ABOUT BORING OR EXCAVATING NEAR AT&T TEXAS/SWBT FACILITIES.

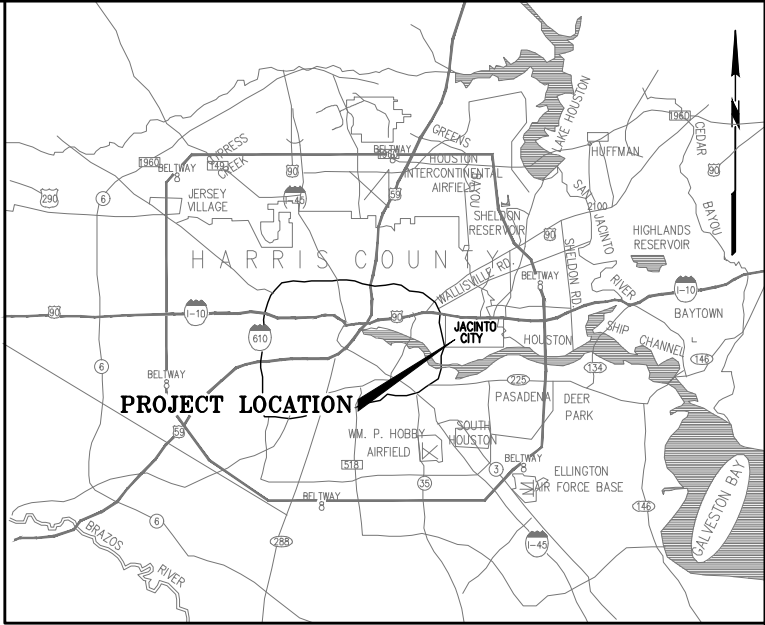
WARNING: OVERHEAD ELECTRIC FACILITIES
OVERHEAD LINES MAY EXIST ON THE PROPERTY. THE LOCATION OF OVERHEAD LINES HAS NOT BEEN SHOWN ON THESE DRAWINGS AS THE LINES ARE CLEARLY VISIBLE, BUT YOU SHOULD LOCATE THEM PRIOR TO BEGINNING ANY CONSTRUCTION. TEXAS LAW, SECTION 752, HEALTH & SAFETY CODE, FORBIDS ACTIVITIES THAT OCCUR IN CLOSE PROXIMITY TO HIGH VOLTAGE LINES, SPECIFICALLY:

- ANY ACTIVITY WHERE PERSON OR THINGS MAY COME WITHIN SIX (6) FEET OF LIVE OVERHEAD HIGH VOLTAGE LINES; AND
- OPERATING A CRANE, DERRICK, POWER SHOVEL, DRILLING RIG, PILE DRIVER, HOISTING EQUIPMENT, OR SIMILAR APPARATUS WITHIN 10 FEET OF LIVE OVERHEAD HIGH VOLTAGE LINES

PARTIES RESPONSIBLE FOR THE WORK, INCLUDING CONTRACTORS, ARE LEGALLY RESPONSIBLE FOR THE SAFETY OF CONSTRUCTION WORKERS UNDER THIS LAW. THIS LAW CARRIES BOTH CRIMINAL AND CIVIL LIABILITY. TO ARRANGE FOR LINES TO BE TURNED OFF OR REMOVED CALL CENTERPOINT ENERGY AT (713) 207-2222.

ACTIVITIES ON OR ACROSS CENTERPOINT ENERGY FEE OR EASEMENT PROPERTY
NO APPROVAL TO USE, CROSS OR OCCUPY CENTERPOINT FEE OR EASEMENT PROPERTY IS GIVEN. IF YOU NEED TO USE CENTERPOINT PROPERTY, PLEASE CONTACT OUR SURVEYING & RIGHT OF WAY DIVISION AT (713) 207-6348 OR (713) 207-5769.

CAUTION: UNDERGROUND PIPELINES
UNDERGROUND PIPELINES ARE SHOWN ACCORDING TO BEST AVAILABLE INFORMATION. CONTRACTOR TO PROCEED WITH CAUTION DURING EXCAVATION. CONTRACTOR TO COORDINATE WITH PIPELINE OWNER IN CASE OF CONFLICTS OR QUESTIONS.

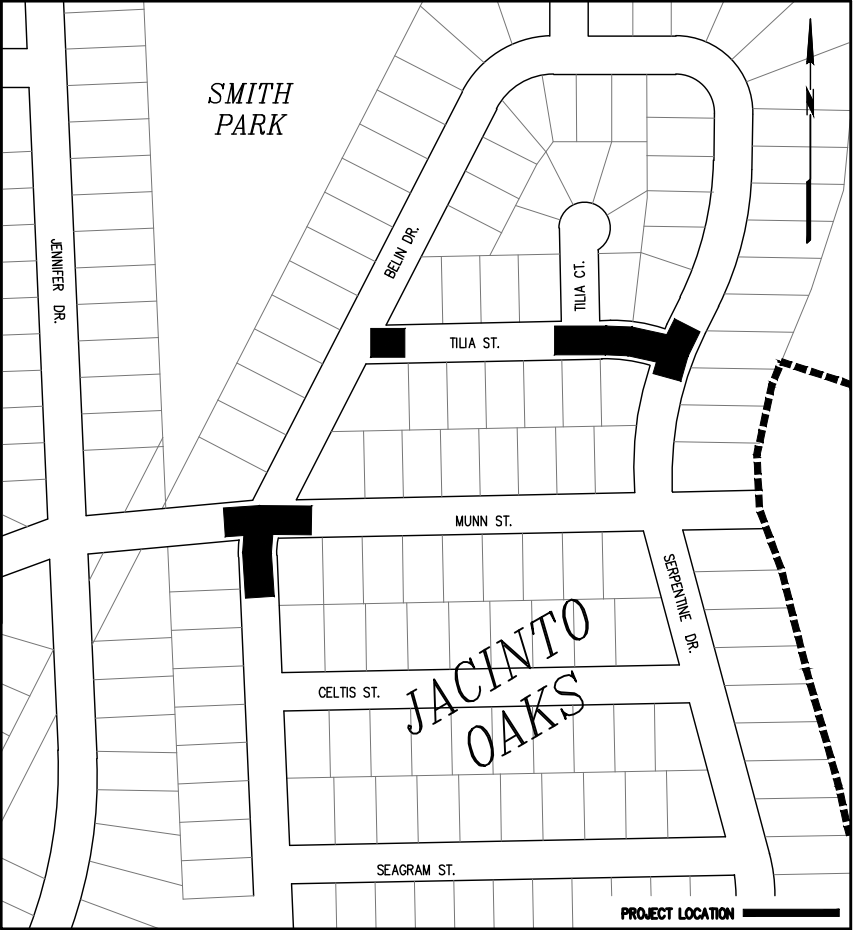


VICINITY MAP

SCALE: N.T.S.

STORM SEWER NOTES

- THE STORM SEWER SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH HARRIS COUNTY STANDARD SPECIFICATIONS, LATEST PRINTING AND AMENDMENTS THERETO.
- REINFORCED CONCRETE PIPE STORM SEWER SHALL BE IN ACCORDANCE WITH ASTM C-76, CLASS III, WALL B, WITH RUBBER GASKET.
- REINFORCED CONCRETE BOX CULVERTS SHALL CONFORM TO ASTM C-1433, WITH RUBBER GASKET.
- BEDDING AND BACKFILL SHALL CONFORM TO HARRIS COUNTY SPECIFICATIONS AND DETAILS ON EXHIBITS.
- EXISTING EXCAVATED INLETS, CURB AND GUTTER SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND REMOVED FROM THE CONSTRUCTION SITE.
- CONTRACTOR TO MAINTAIN ADEQUATE DRAINAGE AT ALL TIMES AND SHALL RESHAPE AND REGRADE ANY DITCHES DISTURBED DURING CONSTRUCTION, AT NO SEPARATE PAY.
- ALL UTILITIES SHALL BE INSTALLED PER COUNTY STANDARDS FOR UTILITIES UNDER PAVEMENT WHERE FUTURE PAVEMENT IS PLANNED BY CITY.



LOCATION MAP

SCALE: N.T.S.

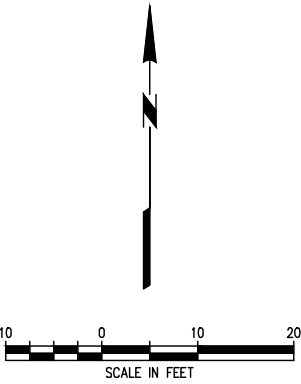
CITY OF JACINTO CITY
JACINTO OAKS ROAD REPAIR




VICINITY MAP & GENERAL NOTES

LJA Engineering, Inc.

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Phone 713.450.1300 Fax 713.450.1385 FRN - F-1386

SCALE: AS SHOWN JOB No. E086-0000 EXHIBIT No. 01




-  PHASE 3 LIMITS OF PAVING RESTORATION
-  SAW-CUT LIMITS FOR ROADWAY
-  EXIST. EXPANSION JOINT

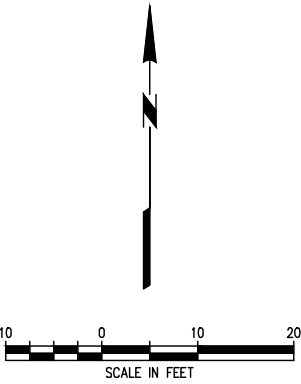
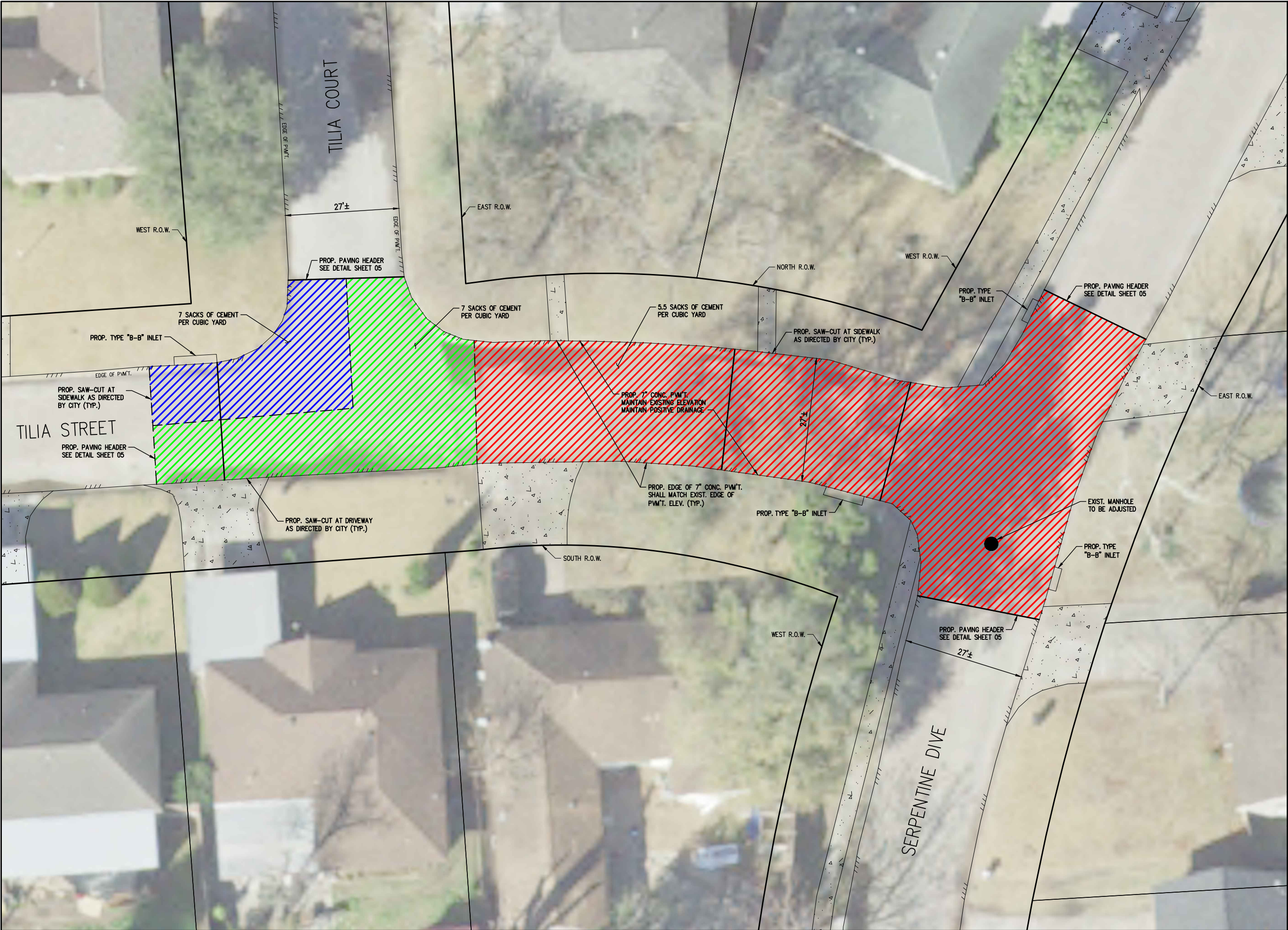
QUANTITIES
5.5 SACKS OF CONC. \approx 86 S.Y.






**CITY OF JACINTO CITY
JACINTO OAKS ROAD REPAIR**

BELIN DRIVE & TILIA STREET

LJA Engineering, Inc. 
11821 East Freeway Suite 360 Houston, Texas 77029
Phone 713.450.1300 Fax 713.450.1385 FRN - F-1386


SCALE: AS SHOWN JOB No. E086-0000 EXHIBIT No. 02



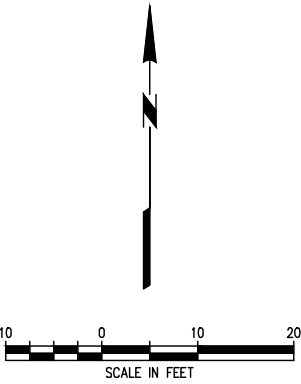
-  PHASE 1 LIMITS OF PAVING RESTORATION
-  PHASE 2 LIMITS OF PAVING RESTORATION
-  PHASE 3 LIMITS OF PAVING RESTORATION
-  SAW-CUT LIMITS FOR ROADWAY
-  EXIST. EXPANSION JOINT

QUANTITIES
5.5 SACKS OF CONC. \approx 532 S.Y.
7 SACKS OF CONC. \approx 268 S.Y.

**CITY OF JACINTO CITY
JACINTO OAKS ROAD REPAIR**
**TILIA STREET &
SERPENTINE DRIVE**

LJA Engineering, Inc. 
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SCALE: AS SHOWN JOB No. E086-0000 EXHIBIT No. 03



- PHASE 1 LIMITS OF PAVING RESTORATION
- SIDEWALK RESTORATION
- SAW-CUT LIMITS FOR ROADWAY
- EXIST. EXPANSION JOINT

QUANTITIES
5.5 SACKS OF CONC. ≈ 385 S.Y.
SIDEWALK RESTORATION ≈ 5 S.Y.

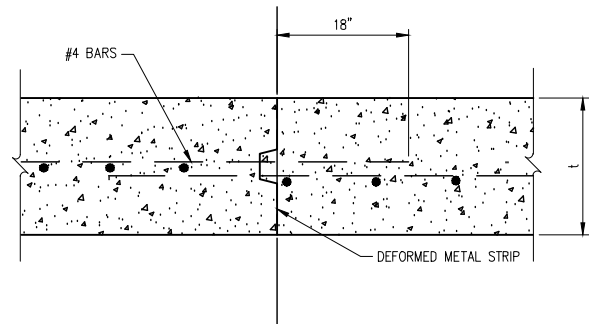
**CITY OF JACINTO CITY
JACINTO OAKS ROAD REPAIR**

BELIN DRIVE & MUNN STREET

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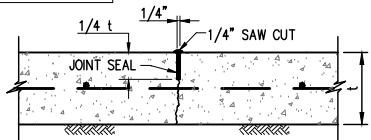
SCALE: AS SHOWN JOB No. E086-0000 EXHIBIT No. 04

t = THICKNESS OF CONCRETE PAVEMENT REFER TO SUBDIVISION RULES AND REGULATIONS.



CONSTRUCTION JOINT DETAIL

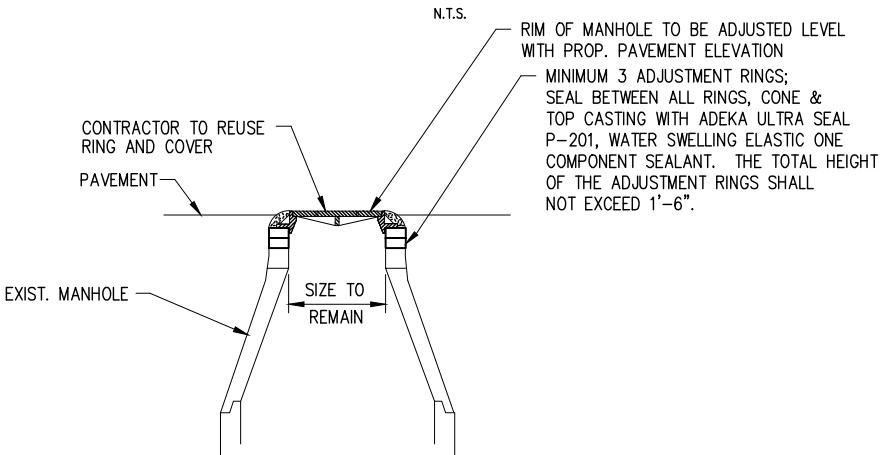
t = THICKNESS OF CONCRETE PAVEMENT.



SAW CUT CONTRACTION JOINT DETAIL

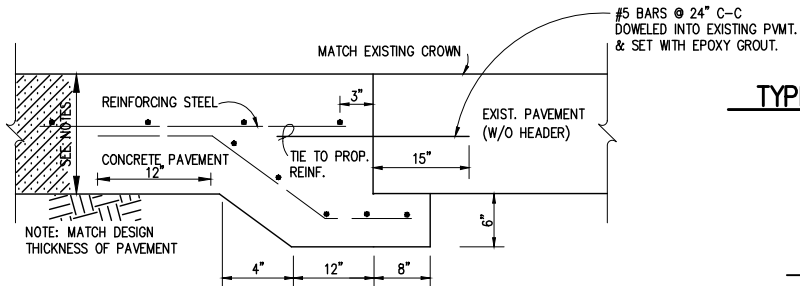
N.T.S.

NOTES:
1. WHERE SAWS JOINTS ARE PERMITTED BY THE ENGINEER, THEY SHALL BE SAWS AS SOON AS SAWS CAN BE ACCOMPLISHED, WITHOUT DAMAGE TO THE PAVEMENT, AND AS DIRECTED BY THE ENGINEER. ONCE SAWS HAS COMMENCED, IT SHALL BE CONTINUED UNTIL COMPLETED. THE SAW CUT SHALL BE MADE WITH ONE PASS OF THE CONCRETE SAW. SAWS MUST BE ACCOMPLISHED EVEN IN RAIN OR COLD WEATHER. ALL SAWS MUST BE COMPLETED WITHIN TWENTY-FOUR HOURS OF THE CONCRETE PAVEMENT PLACEMENT.



MANHOLE ADJUSTMENT DETAIL

N.T.S.

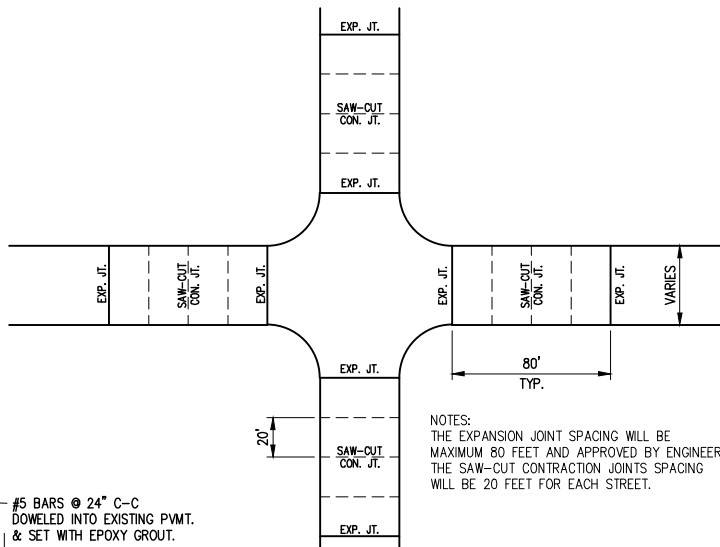


CONCRETE TO CONCRETE STANDARD PAVING HEADER

N.T.S.

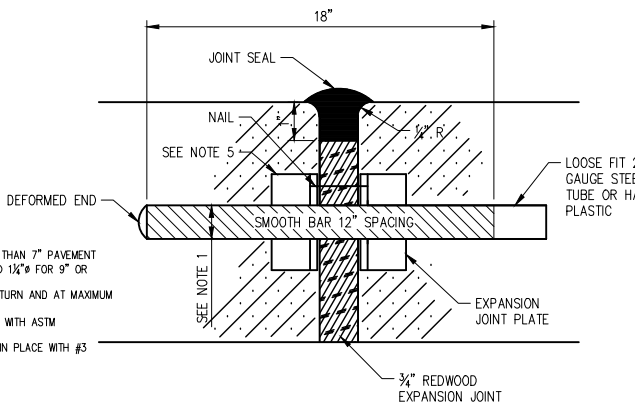
NOTES:

1. DOWELS FOR PAVEMENT EXPANSION SHALL BE 3/4" FOR 6" TO LESS THAN 7" PAVEMENT THICKNESS, 1" FOR 7" TO LESS THAN 9" PAVEMENT THICKNESS AND 1 1/4" FOR 9" OR GREATER PAVEMENT THICKNESS.
2. EXPANSION JOINT SHALL BE PLACED AT THE END OF EACH CURB RETURN AND AT MAXIMUM 80' SPACING.
3. ALL JOINT SEAL MATERIAL SHALL BE ASPHALT RUBBER ACCORDANCE WITH ASTM DESIGNATION D3405.
4. IF DEFORMED METAL STRIPS ARE ALLOWED, THEY SHALL BE STAKED IN PLACE WITH #3 BARS.
5. PRE-MANUFACTURED JOINT PLATE.



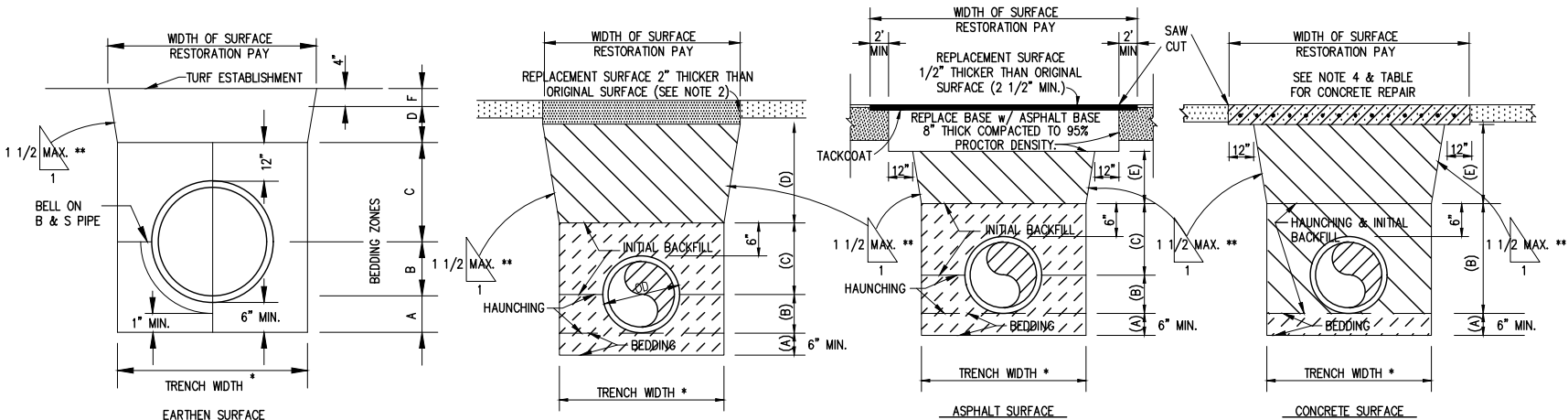
TYPICAL EXPANSION JOINT LAYOUT

N.T.S.



EXPANSION JOINT DETAIL

N.T.S.



- * PIPE LESS THAN 30"
MAX. 1'-6" + DIAMETER
MIN. 1'-0" + DIAMETER
- PIPE 30" AND LARGER
MAX. 2'-0" + DIAMETER
MIN. 1'-4" + DIAMETER
- ** SLOPE FOR PAYMENT CALCULATIONS

ZONE MATERIALS
AS- AGGREGATE STONE (MAY BE USED INLIEU OF CS IF APPROVED BY ENGINEER).
BS- BANKSAND.
CS- CEMENT STABILIZED SAND.
EF- EARTH FILL (PLACED AFTER PIPE IS LAID)
ES- EARTH FILL SELECT (PLACED WITH PIPE LAYING).
TS- TOP SOIL.

PIPE MATERIAL	A	B	C	D	E	F
CORRUGATED METAL PIPE	CS	CS	CS	EF	CS	TS
REINFORCED CONCRETE PIPE	CS	CS	CS	EF	CS	TS
DUCTILE IRON (PRESSURE PIPE)	BS	BS	BS	EF	CS	TS
DUCTILE IRON (GRAVITY PIPE)	CS	CS	CS	EF	CS	TS
PVC (PRESSURE PIPE)	BS	BS	BS	EF	CS	TS
PVC (GRAVITY PIPE)	CS	CS	CS	EF	CS	TS
STEEL	BS	BS	BS	EF	CS	TS

EMBEDMENT, BACKFILL AND SURFACE RESTORATION NOTES

1. PAVEMENT REPAIRS SHALL BE MADE WITH LIKE MATERIALS TO THE EXISTING PAVEMENT UNLESS OTHERWISE NOTED.
2. UNPAVED DRIVEWAYS (NOT SURFACED WITH ASPHALT) SHALL BE REPAIRED WITH A MINIMUM OF 6 INCHES OF CRUSHED LESTONE.
3. PAVEMENT REPAIR SHALL EXTEND A MINIMUM OF 12 INCHES OUTSIDE THE TRENCH LINE ONTO UNDISTURBED SOIL.
4. CONCRETE PAVEMENT REPAIR TO INCLUDE:
A. SAW CUT (1" DEPTH) EXISTING CONCRETE PAVEMENT
B. CUT AND BEND REINFORCEMENT STEEL OUT OF PATH OF TRENCH
C. COMPLETE PIE LAYING BACKFILL OPERATION.
D. BEND STEEL BACK TO ORIGINAL LOCATION, SPLICE AS NECESSARY. SEE TABLE FOR BAR SIZES AND LENGTH OF SPLICE BAR.
E. REPLACEMENT CONCRETE SHALL BE 2 INCHES THICKER THAN THE ORIGINAL PAVEMENT.
5. SEE SPECIFICATION ITEM 2221 FOR SPECIFIC REQUIREMENTS FOR ZONE MATERIALS.

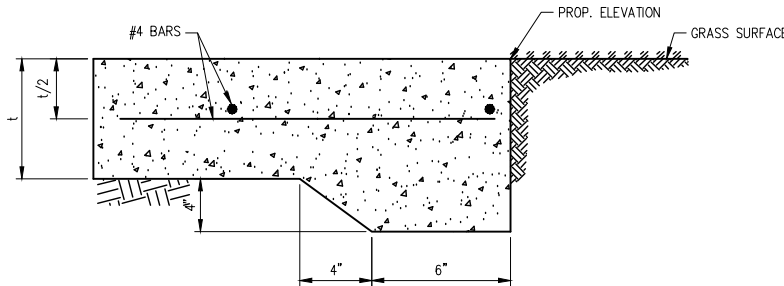
TABLE OF SLAB DEPTH & REINFORCEMENT

Min. Depth of Sub	Width of Trench	Size of Bar	Spacing	Length of Bar
8"	18"	4	9"	40"
8"	24"	4	8"	46"
8"	30"	4	7"	52"
8"	36"	4	6"	58"
10"	42"	4	8 1/2"	64"
10"	48"	4	7 1/2"	70"
10"	54"	4	7"	76"
10"	60"	4	6 1/2"	82"
10"	66"	5	9"	88"
10"	72"	6	8 1/2"	94"
10"	78"	6	8"	100"
10"	84"	6	7 1/2"	106"

EMBEDMENT, BACKFILL AND SURFACE RESTORATION

N.T.S.

t = THICKNESS OF CONCRETE PAVEMENT REFER TO SUBDIVISION RULES AND REGULATIONS.



CONCRETE TO GRASS STANDARD PAVING HEADER

N.T.S.

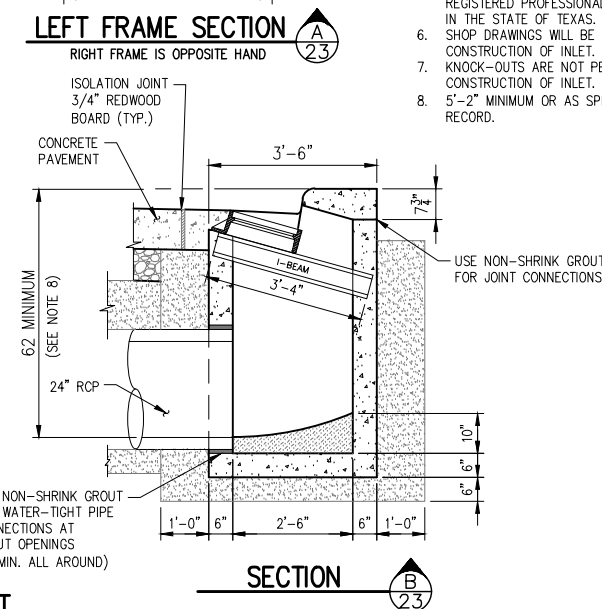
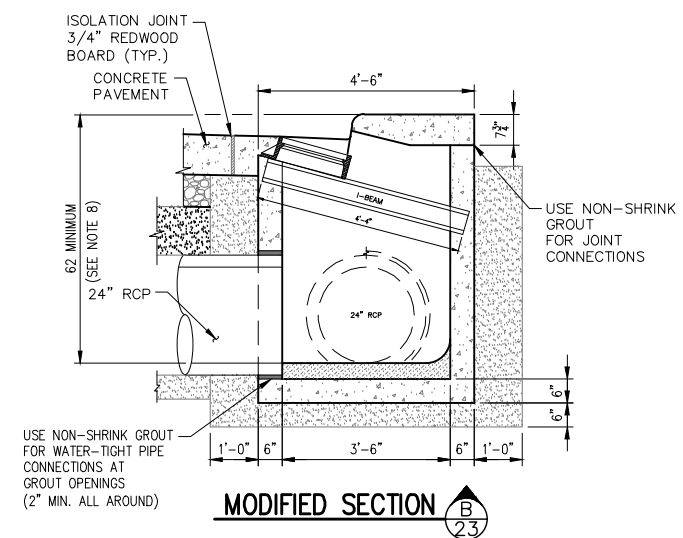
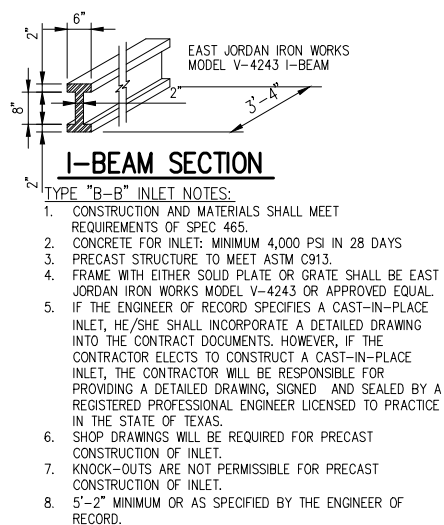
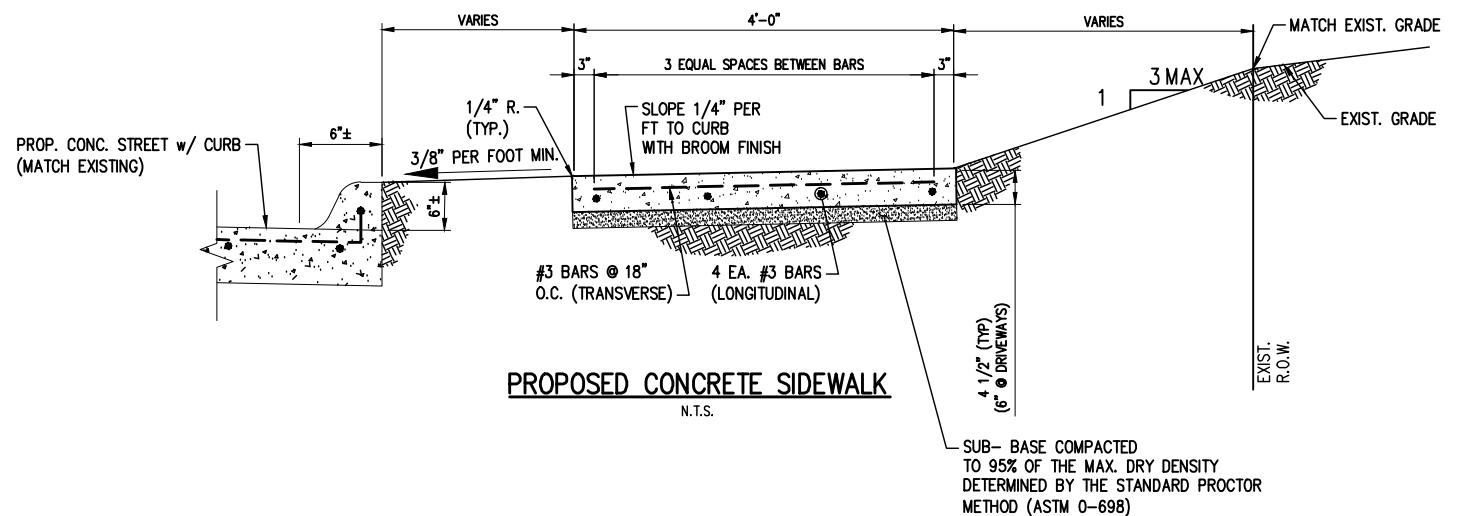
CITY OF JACINTO CITY
JACINTO OAKS ROAD REPAIR

STANDARD PAVING DETAILS

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Phone 713.450.1300 Fax 713.450.1385 FRN - F-1386


SCALE: AS SHOWN JOB No. E086-0000 EXHIBIT No. 05



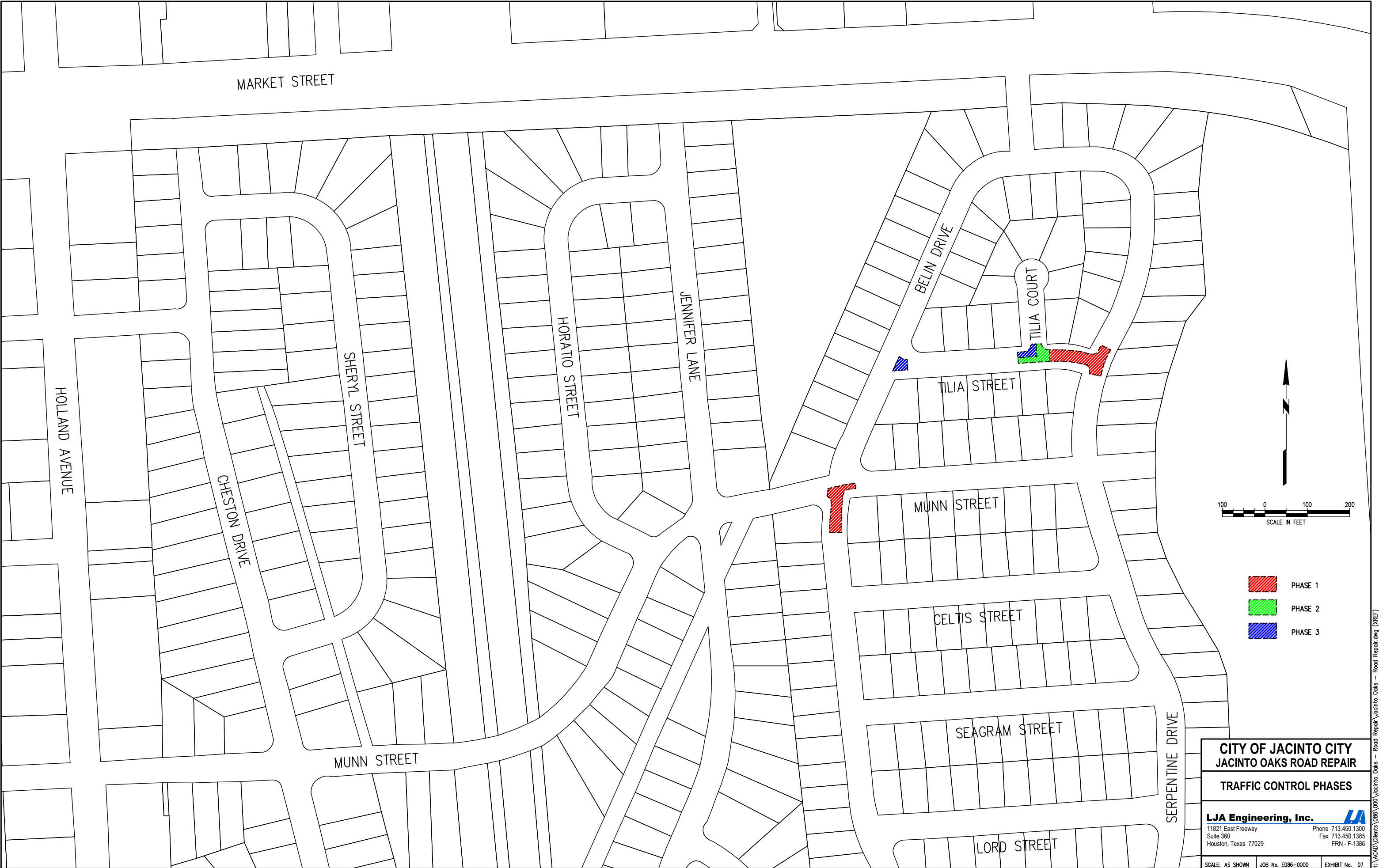
TYPE "B-B" INLET
SCALE: 1/2" = 1'-0"


MODIFIED TYPE "B-B" INLET
SCALE: 1/2" = 1'-0"

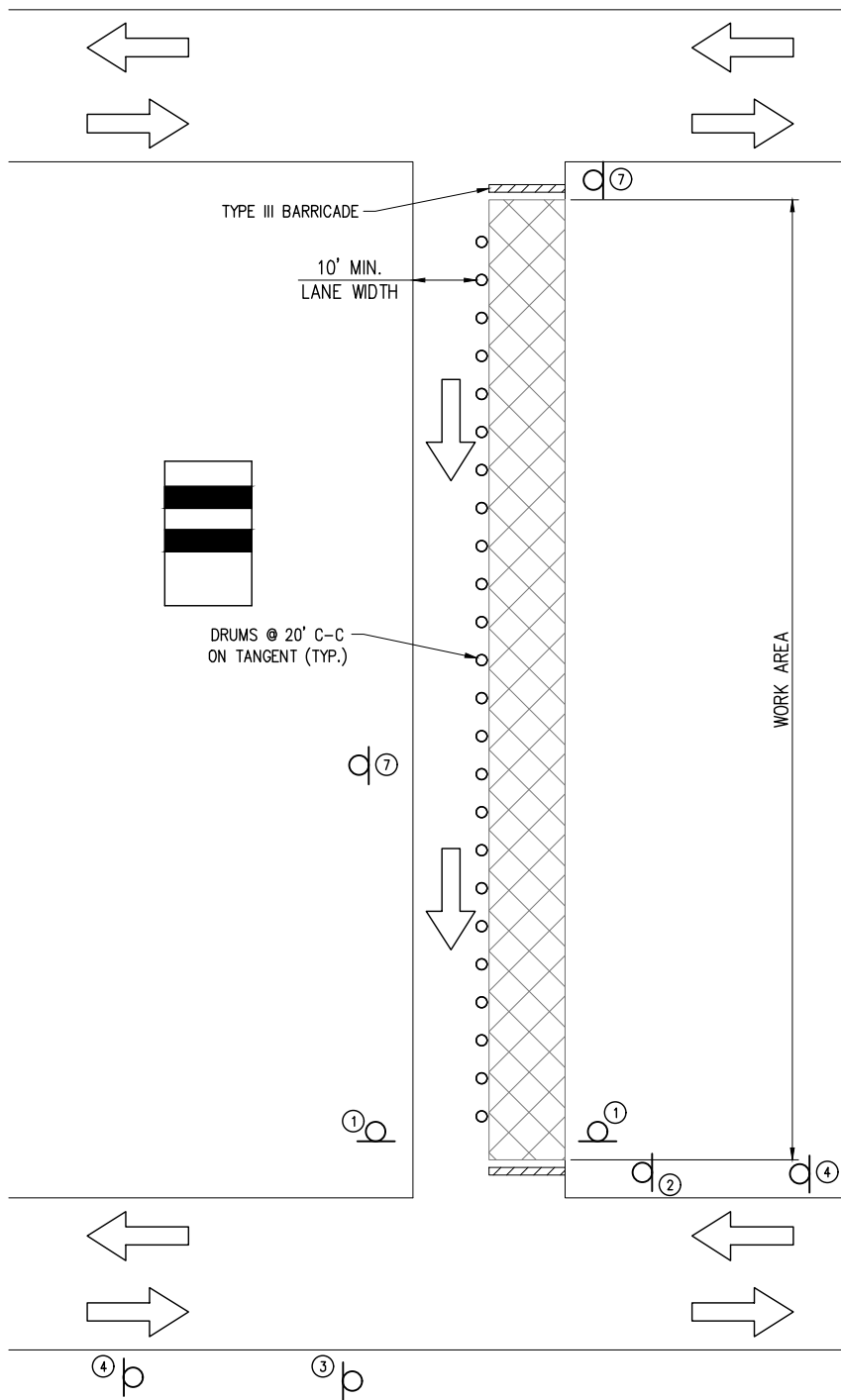
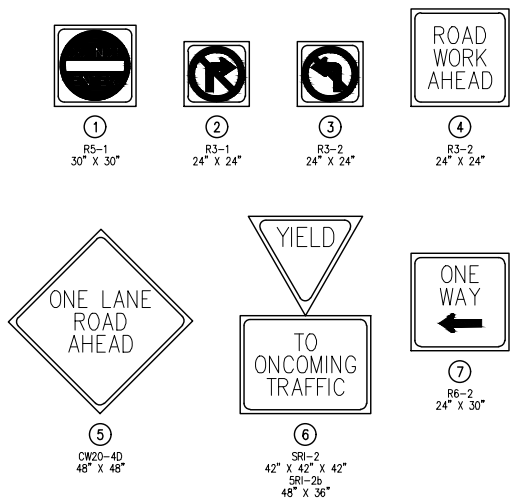
CITY OF JACINTO CITY
JACINTO OAKS ROAD REPAIR
STANDARD STORM SEWER
DETAILS & ROAD SECTIONS

LJA Engineering, Inc. 
11821 East Freeway Phone 713.450.1300
Suite 360 Fax 713.450.1385
Houston, Texas 77029 FRN - F-1386

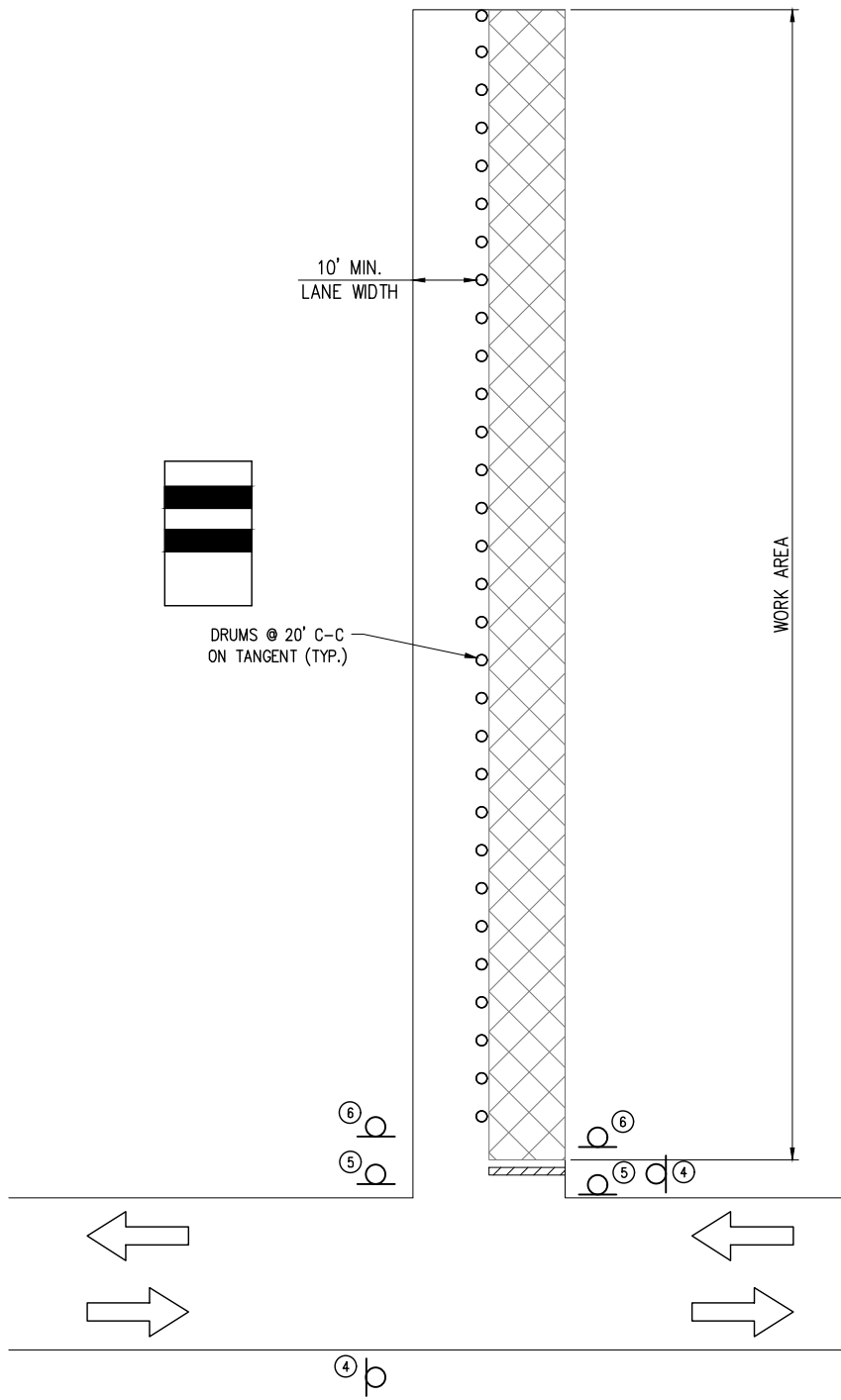
SCALE: AS SHOWN	JOB No. E086-0000	EXHIBIT No. 06
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CITY OF JACINTO CITY JACINTO OAKS ROAD REPAIR		
TRAFFIC CONTROL PHASES		
LJA Engineering, Inc. 		
11821 East Freeway Suite 360 Houston, Texas 77029		Phone 713.450.1300 Fax 713.450.1385 FRN - F-1386
SCALE: AS SHOWN	JOB No. E086-0000	EXHIBIT No. 07




TYPICAL ONE WAY
OPERATION DETAIL
N.T.S.



TYPICAL ONE LANE TWO WAY
DEAD END OPERATION DETAIL
N.T.S.

- NOTES:
1. CONTRACTOR TO MAINTAIN ACCESS FOR PROPERTY OWNERS, POST OFFICE VEHICLES, GARBAGE TRUCKS AND EMERGENCY VEHICLES AT ALL TIMES.
 2. CONTRACTOR TO ONLY USE TWO WAY OPERATION AT DEAD END STREETS.
 3. CONTRACTOR TO USE FLAGMAN FOR THE DURATION OF CONSTRUCTION. NO EXTRA PAY.

CITY OF JACINTO CITY JACINTO OAKS ROAD REPAIR		
TRAFFIC CONTROL PLAN ONE WAY OPERATION		
LJA Engineering, Inc. 		
11821 East Freeway Suite 360 Houston, Texas 77029	Phone 713.450.1300 Fax 713.450.1385 FRN - F-1386	
SCALE: AS SHOWN	JOB No. E086-0000	EXHIBIT No. 08