

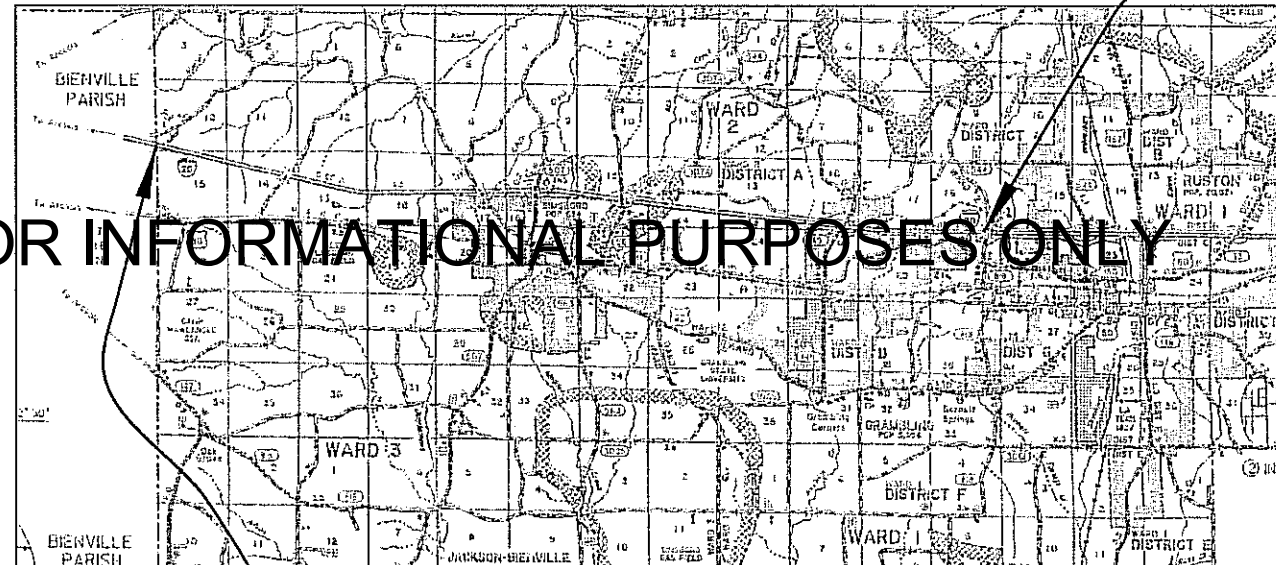
S. P. 45|-05-0||9

LINCOLN PARISH

C.S. LOG MILE 11.944
STA. 892+31
END. S.P. 451-05-0119
END. CONSTRUCTION



FOR INFORMATIONAL PURPOSES ONLY



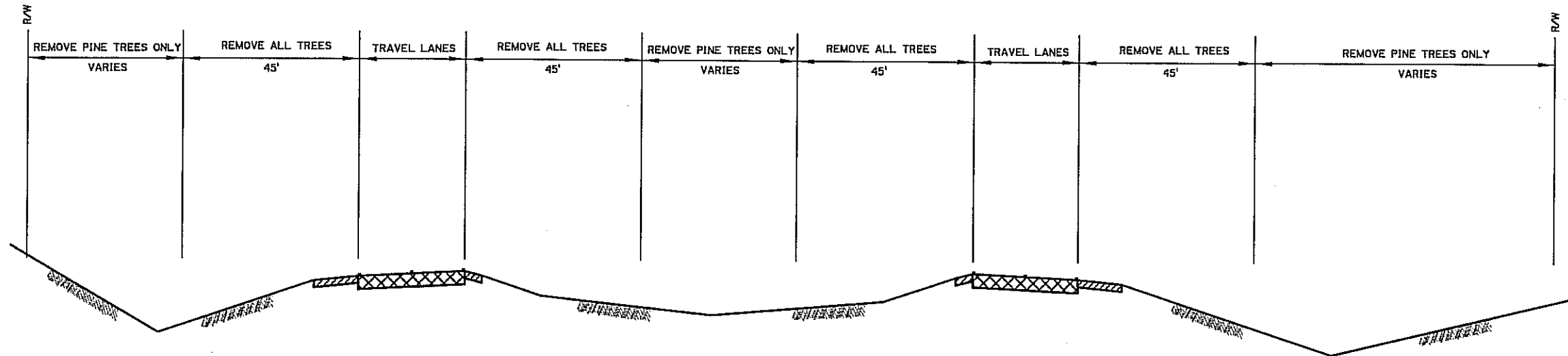
J. Moley
DISTRICT ADMINISTRATOR
DATE 9/1/09

DESCRIPTION	ALGEBRAIC SUM OF ALL EQUATIONS	GROSS LENGTH	EXCEPTION	BRIDGE LENGTH		ROADWAY LENGTH	
STATION TO STATION	FEET	FEET	FEET	FEET	MILES	FEET	MILES
261+69 TO 892+31		63062				63062	11.944
TOTAL LENGTH OF BRIDGES							
TOTAL LENGTH OF ROADWAY						63062	11.944
TOTAL MILES				11.944			

PROFILE : HOR.
 VERT.

01-SEP-2009 13:10

R:\District 05 Design\Lincoln Parish\451-05-01\9\TYPICAL.dgn



LIMITS OF TREE REMOVAL
N.T.S.

GENERAL NOTES

ALL TREES (WITH ANY PORTION OF THE TRUNK WITHIN 45' OF TRAVEL LANE) ARE TO BE REMOVED AND PAID UNDER ITEM NO. 201-01-00100, CLEARING AND GRUBBING.
ALL PINE TREES (MORE THAN 45' FROM THE TRAVEL LANE) ARE TO BE REMOVED AND PAID FOR UNDER ITEM NO. 201-01-00200, CLEARING AND GRUBBING (SELECTIVE)
THE LIMITS OF WORK SHALL BE THE RIGHT-OF-WAY LINES OR AS SHOWN ON THE PLANS.

ALL PINE TREES REMOVED UNDER ITEM 201-01-00200 ARE TO BE CUT OFF WITHIN 6" OF GROUND LEVEL. THE STUMPS ARE TO REMAIN UNLESS OTHERWISE NOTED.

ITEM NO. 713-01-00100, TEMPORARY SIGNS AND BARRICADES - ANY SIGNS OR OBJECT MARKERS MOVED BY THE CONTRACTOR FOR CONSTRUCTION OPERATIONS SHALL BE PUT BACK IMMEDIATELY UPON COMPLETION OF SAID CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL REPLACE IN KIND AND AT HIS OWN EXPENSE ANY HIGHWAY WARNING OR REGULATORY SIGNS WHICH BECOME DAMAGED AS A RESULT OF CONSTRUCTION.

DISTURBED AREAS SHALL BE SEEDED, FERTILIZED, AND MULCHED TO THE SATISFACTION OF THE PROJECT ENGINEER.

ANY SHOULDERS, SLOPES, DITCHES, FENCES, ETC. DAMAGED DURING THE TREE REMOVAL OPERATION SHALL BE REPAIRED TO THE SATISFACTION OF THE PROJECT ENGINEER AT THE CONTRACTOR'S EXPENSE.

ALL VEGETATIVE DEBRIS CREATED AS A RESULT OF ITEM 201-01-00100 IS TO BE PROPERLY DISPOSED OF ACCORDANCE WITH SECTION 202-02.

NO BURNING WILL BE ALLOWED WITHIN THE LIMITS OF THE RIGHT OF WAY.

LANE CLOSURES WILL ONLY BE ALLOWED DURING DAYLIGHT HOURS. ALSO LANE CLOSURES WILL BE LIMITED TO A MAXIMUM OF 2 MILES. A MAXIMUM OF ONE LANE CLOSURE PER DIRECTION OF INTERSTATE TRAVEL WILL BE ALLOWED.

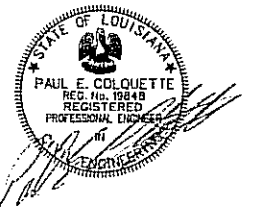
THE CONTRACTOR WILL NOT BE ALLOWED TO WORK WITHIN THE MEDIAN AND THE OUTSIDE OF THE ROADWAY SIMULTANEOUSLY DURING ANY PORTION OF THE PROJECT.

FOR THIS PROJECT THE FIFTH SENTENCE OF SECTION 201.02 OF THE 2006 EDITION OF THE LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES SHALL NOT APPLY.

DRAINAGE MUST BE MAINTAINED AT ALL TIMES THROUGHOUT THE PROJECT. ANY STREAMS OR DRAINAGE AREAS WITHIN THE PROJECT LIMITS SHALL BE CLEARED OF ANY DEBRIS CREATED AS A RESULT OF THIS PROJECT.

WHEN NO WORK IS IN PROGRESS, EQUIPMENT, TEMPORARY PORTABLE SIGNS, AND MATERIALS USED TO PERFORM THE WORK SHALL NOT REMAIN WITHIN 60' OF THE EDGE OF THE CLOSEST TRAVEL LANE AT NIGHT UNLESS DIRECTED OTHERWISE BY THE PROJECT ENGINEER.

NO EQUIPMENT WILL BE ALLOWED TO CROSS THE INTERSTATE WITHOUT PRIOR APPROVAL OF THE PROJECT ENGINEER.



SHEET NUMBER		2	
PARISH		LINCOLN	
FEDERAL PROJECT		451-05-0119	
STATE PROJECT		JULY 2009	
DESIGNED/PEC	CHECKED/DEP	DATE	BY
DESIGNED/PEC	CHECKED/DEP	DATE	BY
DESIGNED/PEC	CHECKED/DEP	DATE	BY
REVISION DESCRIPTION			
NO.			
DATE			
NO.			
TYPICAL SECTION			
DISTRICT 05 DESIGN			

CLEARING AND GRUBBING

STATION	201-01-00100	201-01-00200
	CLEARING AND GRUBBING	CLEARING AND GRUBBING (SELECT)
	ACRE	ACRE
261+69		
	19.96	9.60
310+00		
	20.66	14.27
360+00		
	20.66	18.43
415+00		
	20.66	24.05
460+00		
	20.66	20.95
510+00		
	22.73	22.95
565+00		
	20.66	18.52
615+00		
	20.66	17.15
665+00		

STATION	201-01-00100	201-01-00200
	CLEARING AND GRUBBING	CLEARING AND GRUBBING (SELECT)
	ACRE	ACRE
665+00		
	20.66	13.56
715+00		
	20.66	16.86
765+00		
	20.66	16.26
815+00		
	20.66	13.94
865+00		
	11.28	5.88
892+31		
TOTAL	260.57	210.11

NOTE: FOR INFORMATIONAL PURPOSES ONLY



SHEET NUMBER		3	
PARISH		LINCOLN	
FEDERAL PROJECT			
STATE PROJECT		451-05-0119	
DESIGNED	CHECKED	DATE	JULY 2009
REC'D	DEP		
DETAILS	DEP		
CHECKED	DEP		
BY			
REVISION DESCRIPTION			
V.C.			
DATE			
BY			
SUMMARY SHEET			
DISTRICT 05 DESIGN			



Summary Of Estimated Quantities

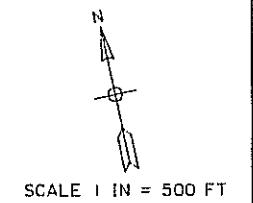
Proposal ID: 451-05-0119 State Project Number:
Federal Project Number:
Proposal Description: PINE TREE REMOVAL ALONG I-20

Item No.	Description	Supplemental Description	Alternate Set Member	Units	Quantity
General Items					
201-01-00100	Clearing and Grubbing			LUMP	1
201-01-00200	Clearing and Grubbing (Selective)			LUMP	1
203-07-00100	Borrow (Vehicular Measurement)			CUYD	400.000
204-05-00100	Temporary Sediment Check Dams (Hay)			EACH	30.000
204-06-00100	Temporary Silt Fencing			LNFT	10,000.000
713-01-00100	Temporary Signs and Barricades			LUMP	1.000
716-01-00100	Mulch (Vegetative)			TON	52.000
717-01-00100	Seeding			LB	1,560.000
718-01-00100	Fertilizer			LB	26,000.000
727-01-00100	Mobilization			LUMP	1.000
NS-713-00001	Dynamic Message Sign Unit			EACH	4.000

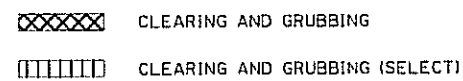
FOR INFORMATIONAL PURPOSES ONLY



Notes:

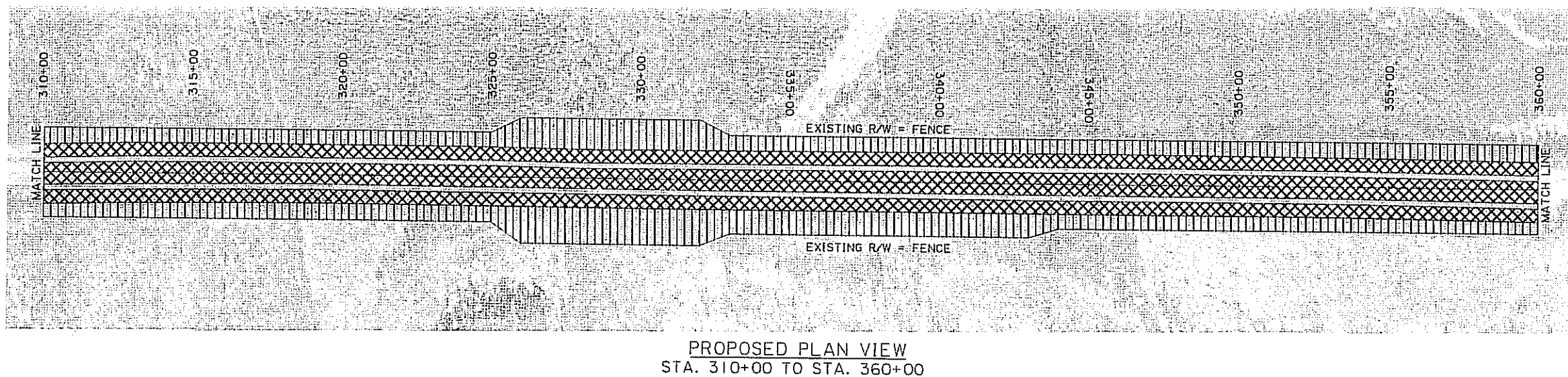




STATE OF LOUISIANA
PAUL E. COLQUETTE
REG. NO. 10848
REGISTERED
PROFESSIONAL ENGINEER
CIVIL ENGINEERING

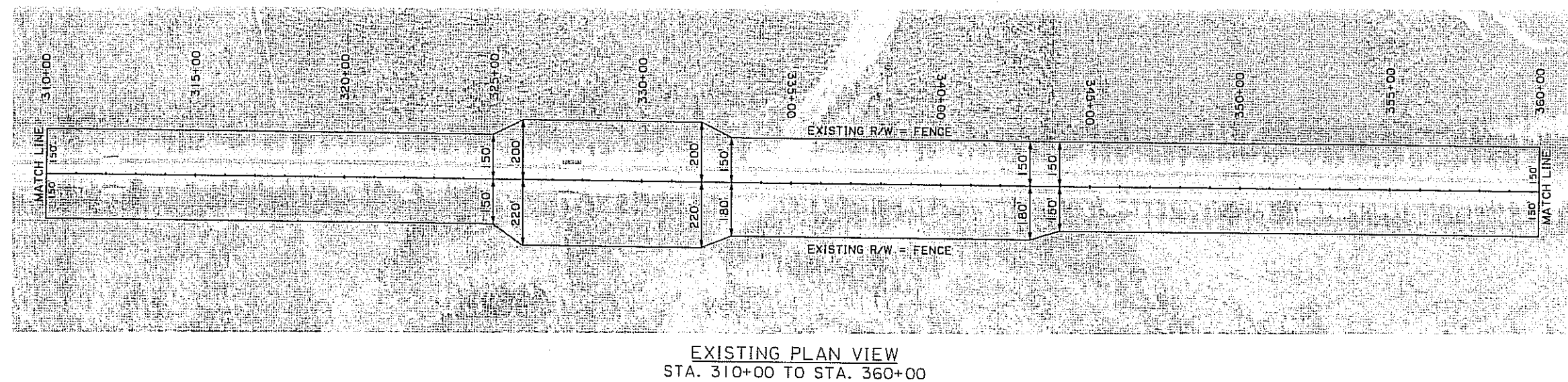


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					RETAIL/UR/LW	CHECKED					DEP
					DATE	JULY 2009					STATE PROJECT
REVISION DESCRIPTION			NO.	DATE	BY						

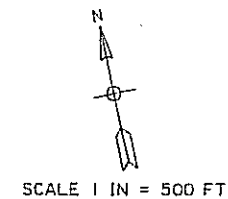
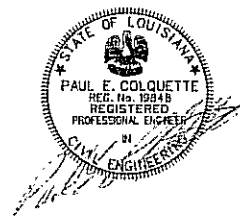


☒ CLEARING AND GRUBBING


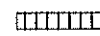
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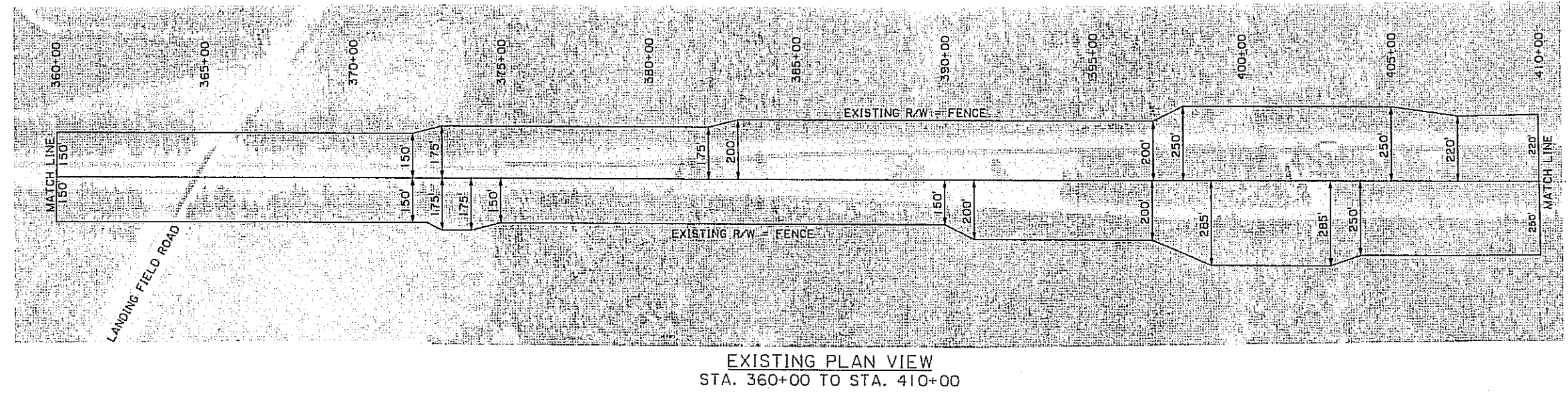
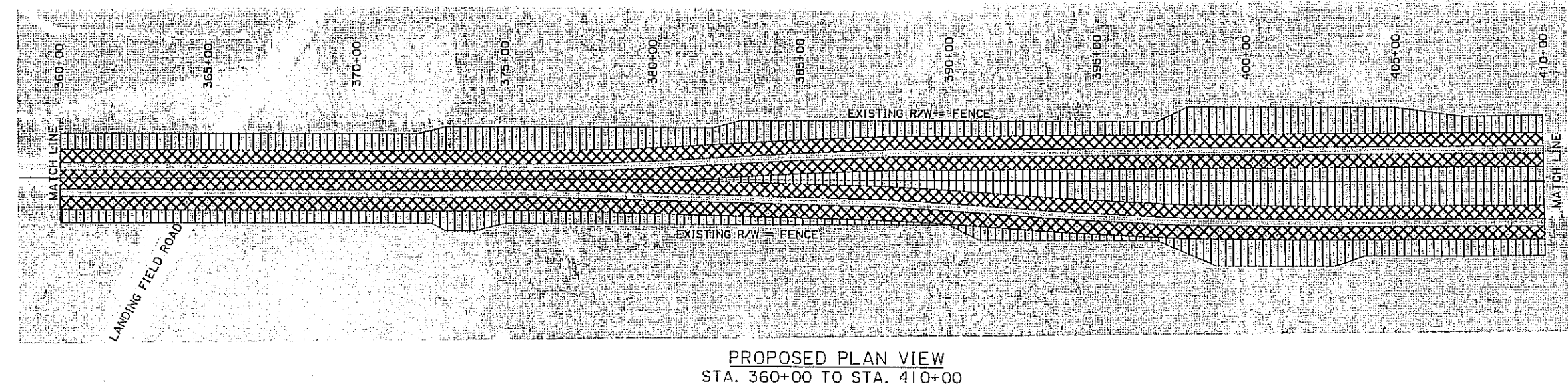


FOR INFORMATIONAL PURPOSES ONLY




	DISTRICT 05 DESIGN		PLAN SHEET		SHEET NUMBER		5
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					CHECKED BY	QEP	
					DETAILED BY	RLW	FEDERAL PROJECT
					CHECKED BY	QEP	
					DATE	11/11/2005	STATE PROJECT
					SHEET	1	451-05-0119

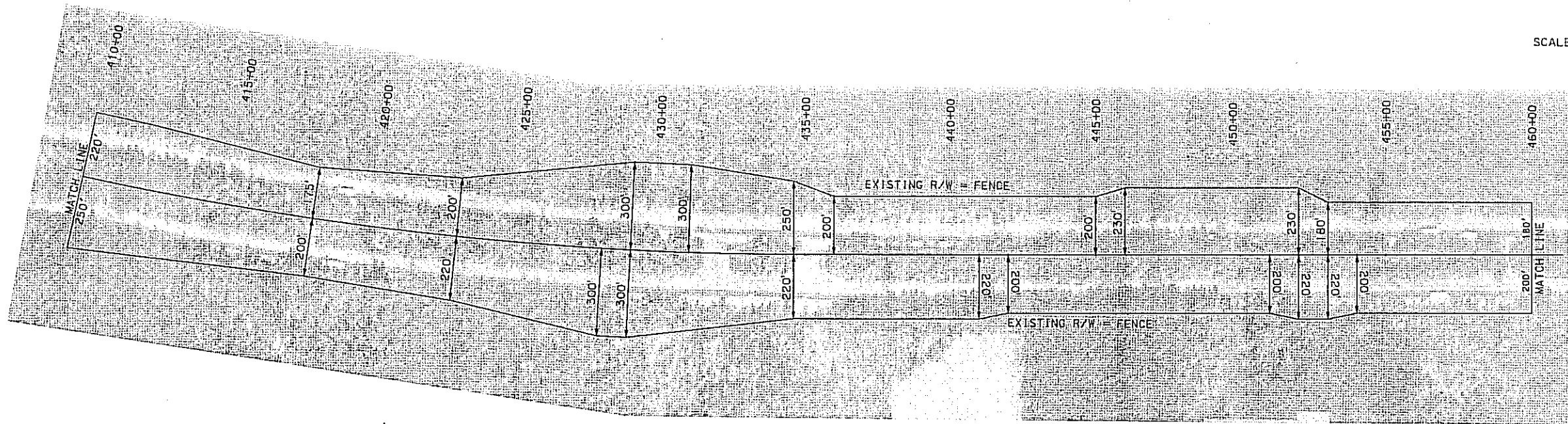
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-  CLEARING AND GRUBBING (SELECT)



SCALE 1 IN = 500 FT

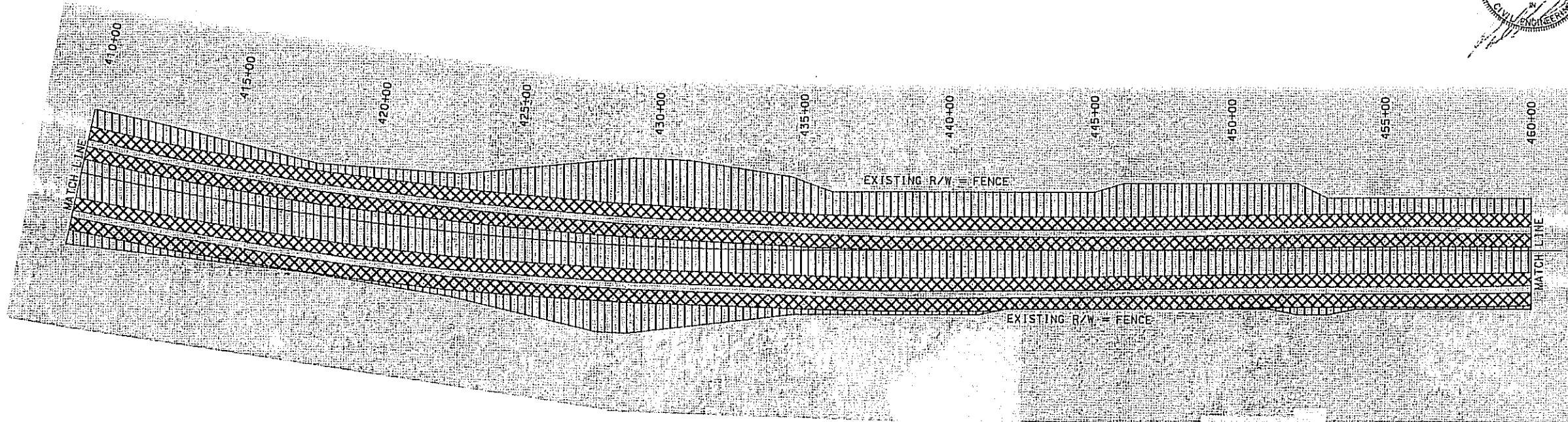


SHEET NUMBER		6	
PARISH		LINCOLN	
DESIGNED/PEC	CHECKED/DEP	IN CHARGE/RLW	CHECKED/DEP
DATE		JULY 2009	
BY		STATE PROJECT	
REVISION DESCRIPTION		451-05-0119	
NO.		DATE	
PLAN SHEET		DISTRICT 05 DESIGN	



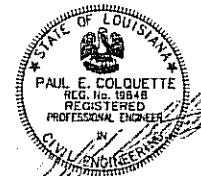
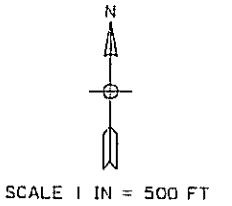
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STA. 410+00 TO STA. 460+00

FOR INFORMATIONAL PURPOSES ONLY

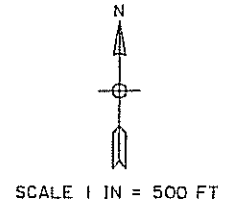


PROPOSED PLAN VIEW
STA. 410+00 TO STA. 460+00

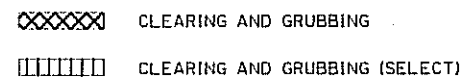
- CLEARING AND GRUBBING
- CLEARING AND GRUBBING (SELECT)



SHEET NUMBER		7	
PARISH		LINCOLN	
FEDERAL PROJECT		451-05-0119	
STATE PROJECT		JULY 2009	
DESIGNED/REC	CHECKED/DEP	DATE	BY
DETAILS/R/W	CHECKED/DEP	DATE	BY
REVISION DESCRIPTION			
No. DATE			
PLAN SHEET			
DISTRICT 05 DESIGN			



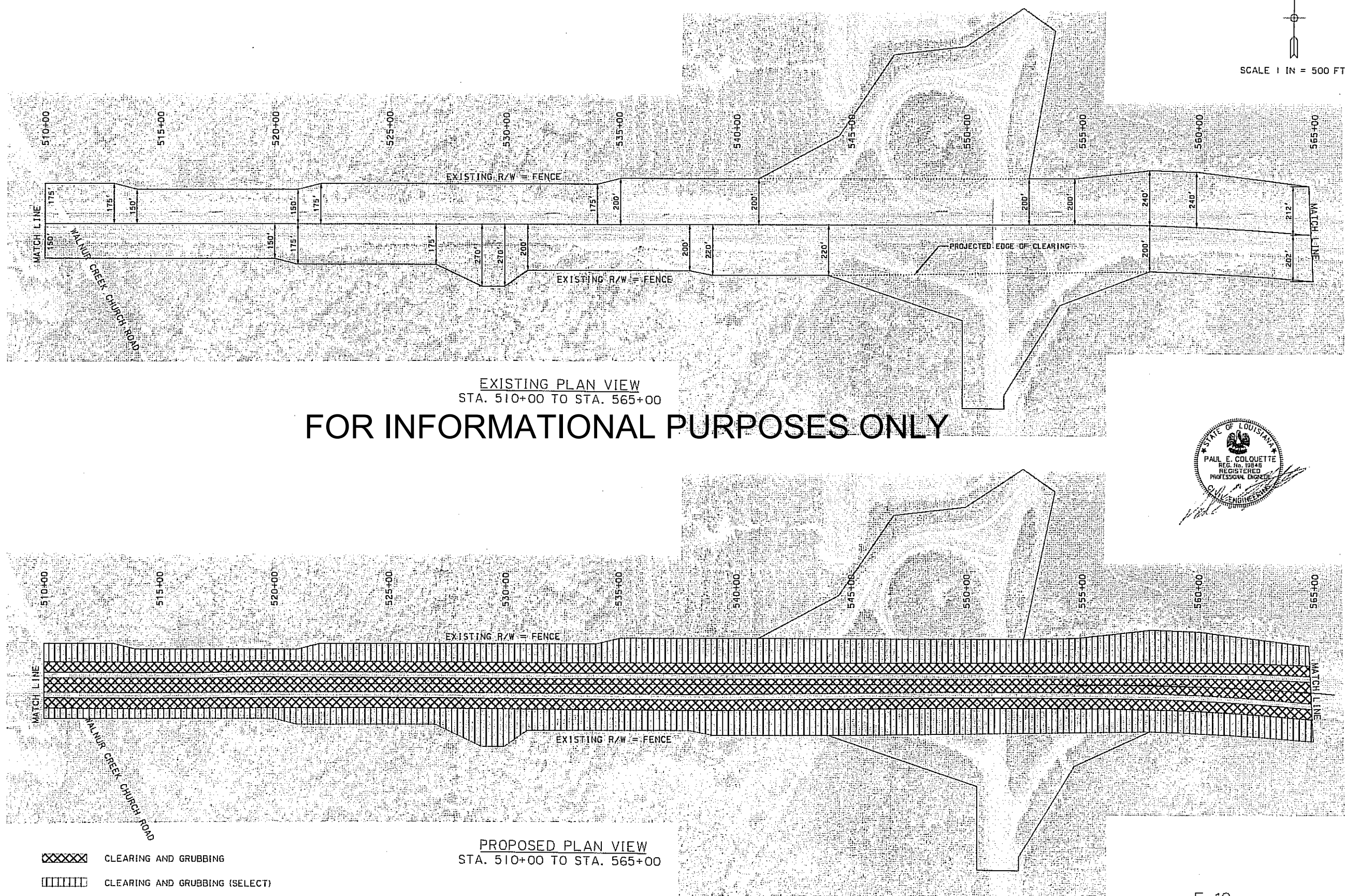
FOR INFORMATIONAL PURPOSES ONLY



DISTRICT 08 DESIGN			PLAN SHEET				
NO.	DATE						
				BY	REVISION DESCRIPTION		
				DATE	SHEET	JULY 2009	
				CHECKED DEP	FEDERAL PROJECT		
				DETAILED ALW	FEDERAL PROJECT		
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				CHECKED PERS	PARTIAL	LINCOLN	
				APPROVED FOR	PROJECT NUMBER	8	

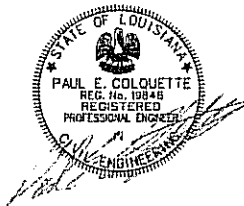
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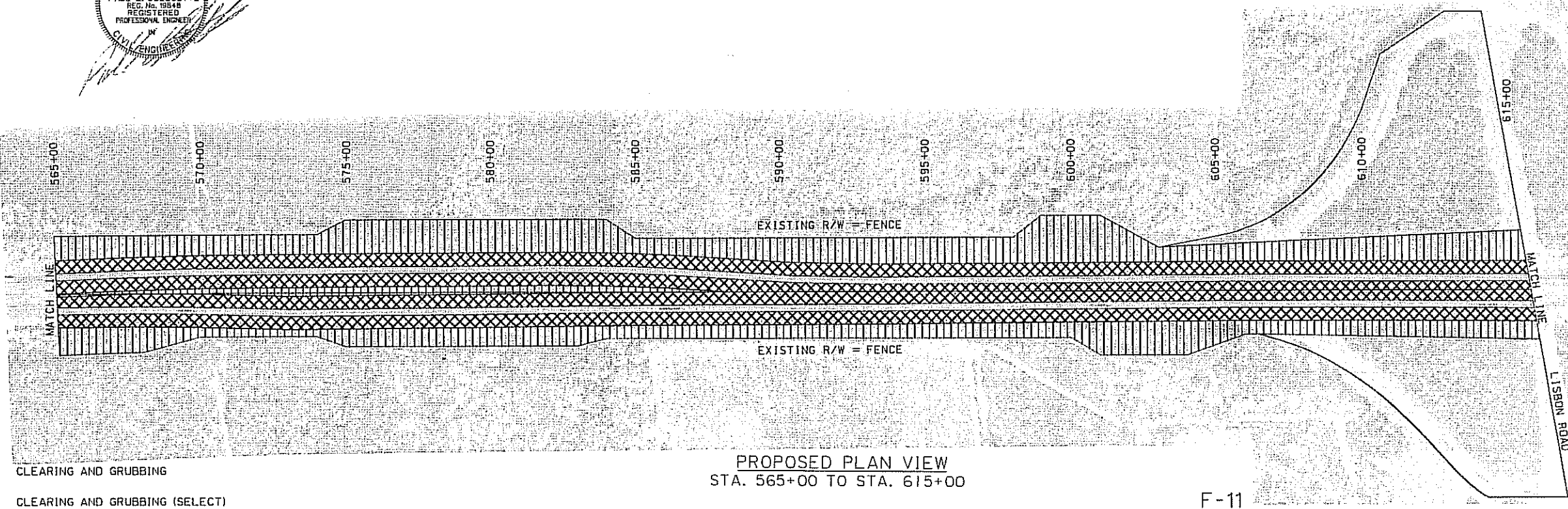
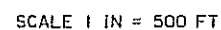



SCALE 1 IN = 500 FT

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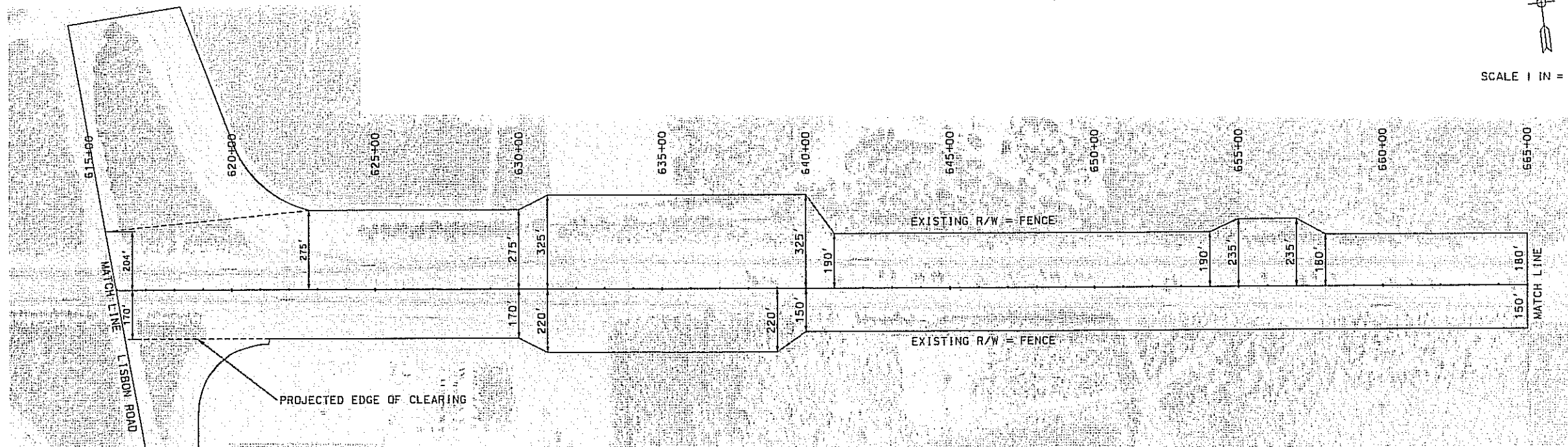
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PROJECT		451-05-0119	
DATE		JULY 2009	
BY			
REVISION DESCRIPTION			
NO.		DATE	
PLAN SHEET			
DISTRICT 05 DESIGN			



	CLEARING AND GRUBBING
	CLEARING AND GRUBBING (SELECT)

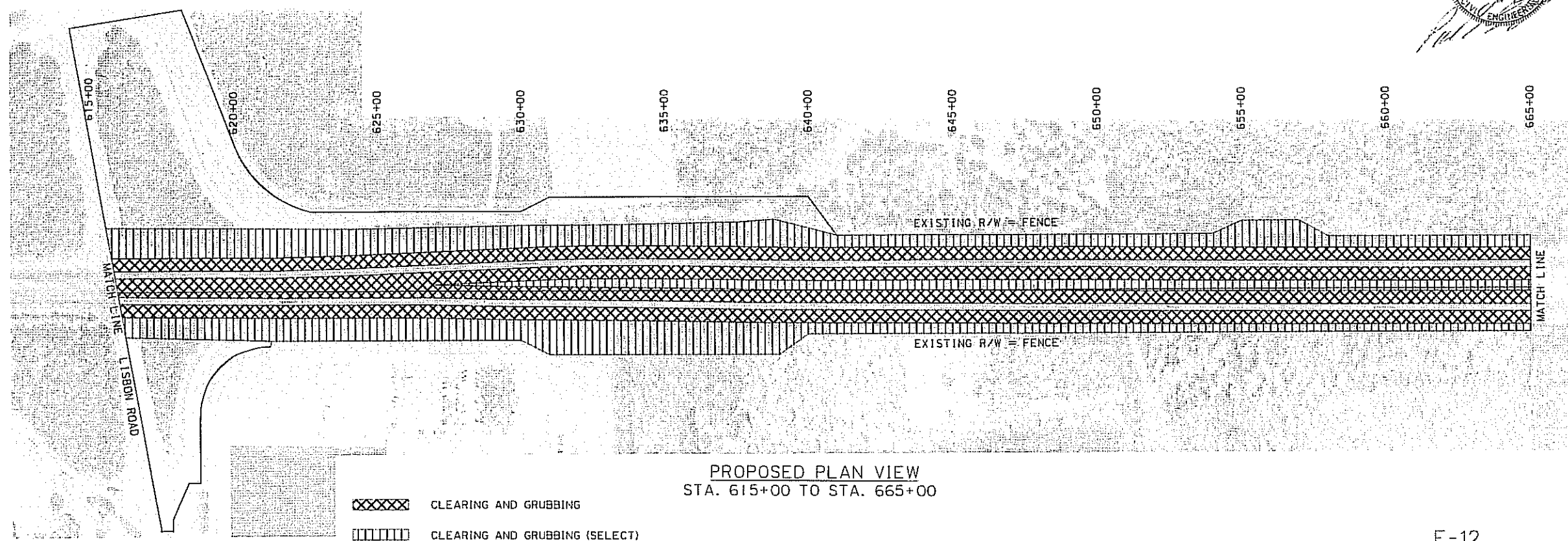
PROPOSED PLAN VIEW
STA. 565+00 TO STA. 615+00

F-11



EXISTING PLAN VIEW
STA. 615+00 TO STA. 665+00

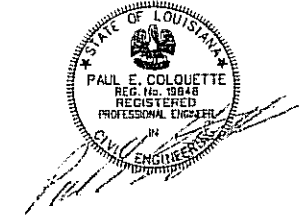
FOR INFORMATIONAL PURPOSES ONLY





PROPOSED PLAN VIEW
STA. 615+00 TO STA. 665+00

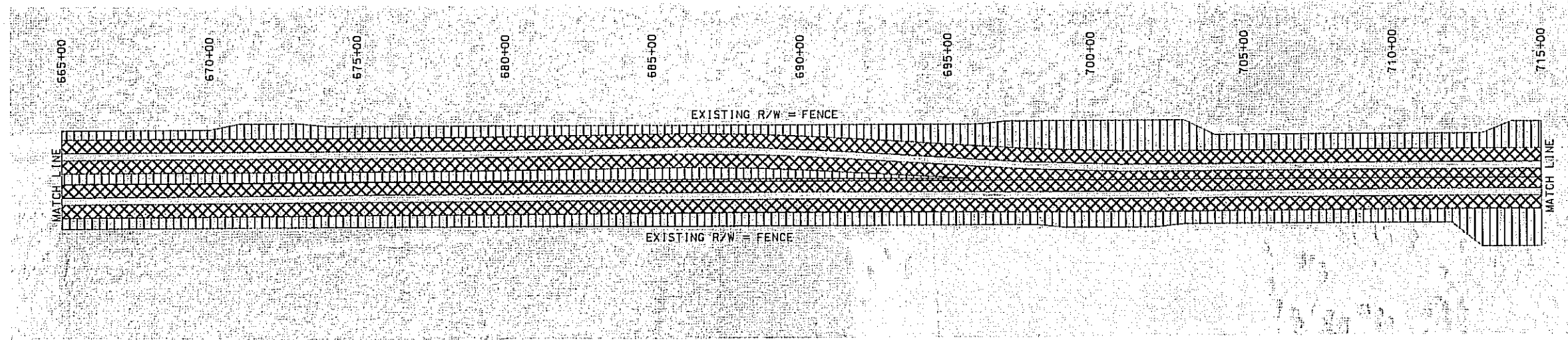
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- CLEARING AND GRUBBING (SELECT)

SCALE 1 IN = 500 FT

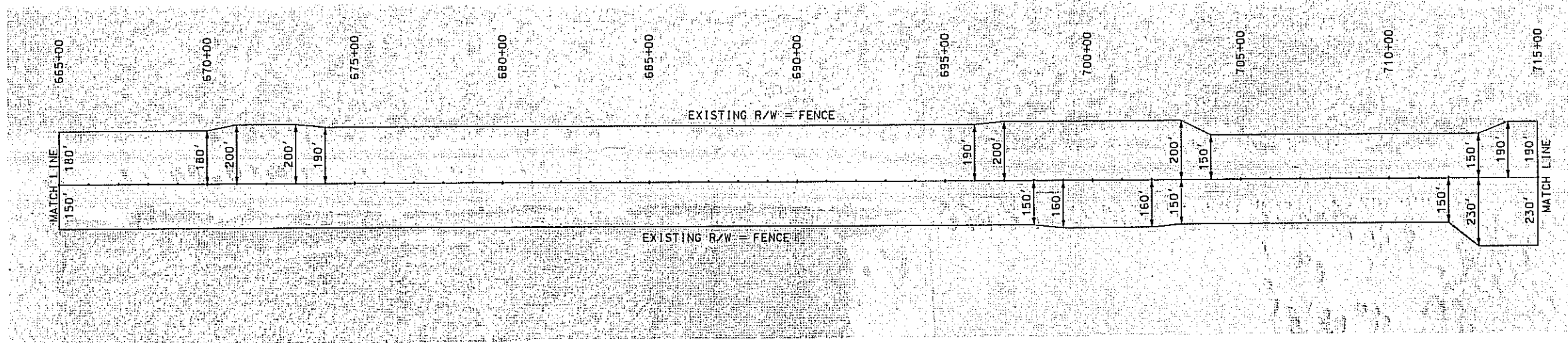


SHEET NUMBER		11
LINCOLN		
FEDERAL PROJECT		
STATE PROJECT		451-05-0119
DATE		JULY 2009
BY		
SECTION DESCRIPTION		
DATE		
NO.		
PLAN SHEET		
DISTRICT 05 DESIGN		

-  CLEARING AND GRUBBING
-  CLEARING AND GRUBBING (SELECT)

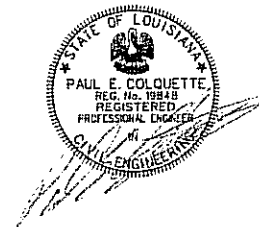


PROPOSED PLAN VIEW
STA. 665+00 TO STA. 715+00

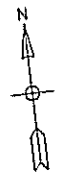


EXISTING PLAN VIEW
STA. 665+00 TO STA. 715+00

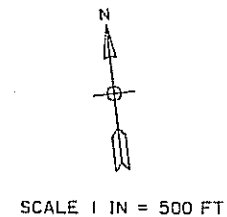
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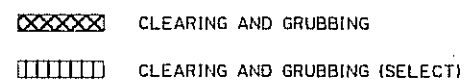
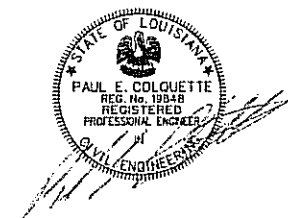
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PLAN SHEET				SHEET NUMBER		12	
		DISTRICT OF DESIGN		DESIGNER	PEC	PARISH	LINCOLN
				CHECKED DEP		FEDERAL PROJECT	
				DETAILER/REV		STATE PROJECT	451-05-01/9
				CHECKED DEP		DATE	JULY 2009
				BY		SHEET	
				REVISION DESCRIPTION			



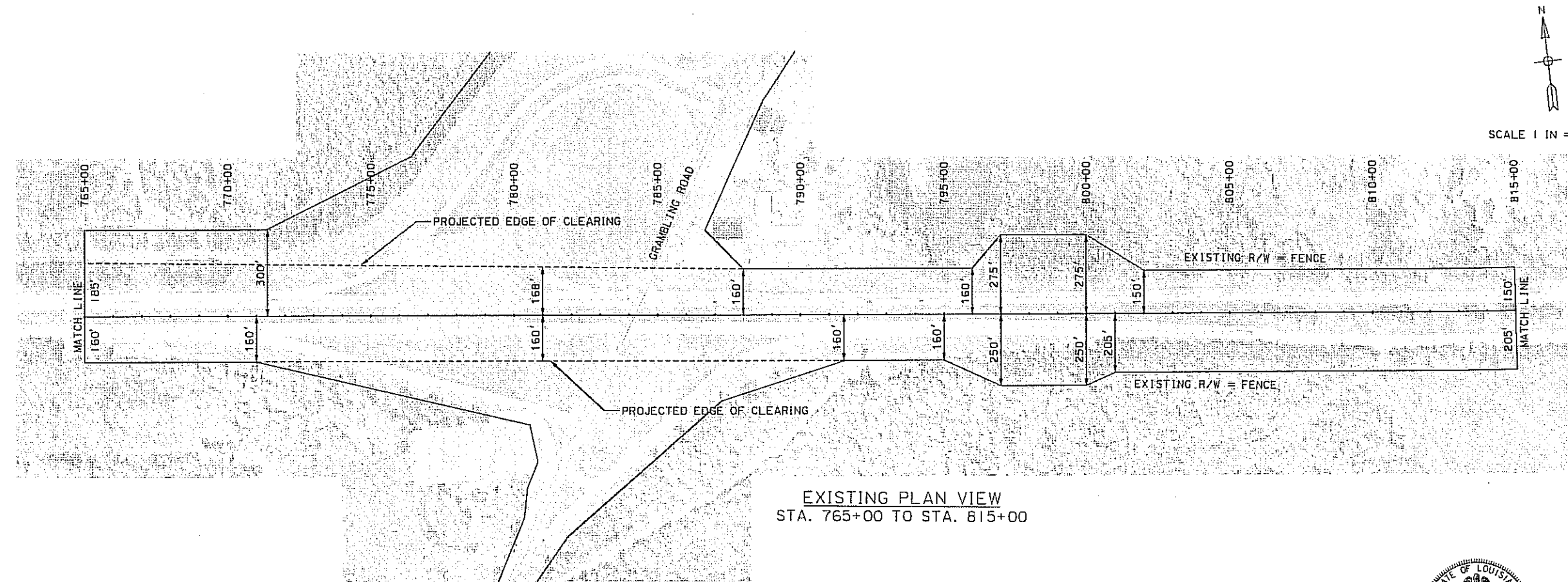
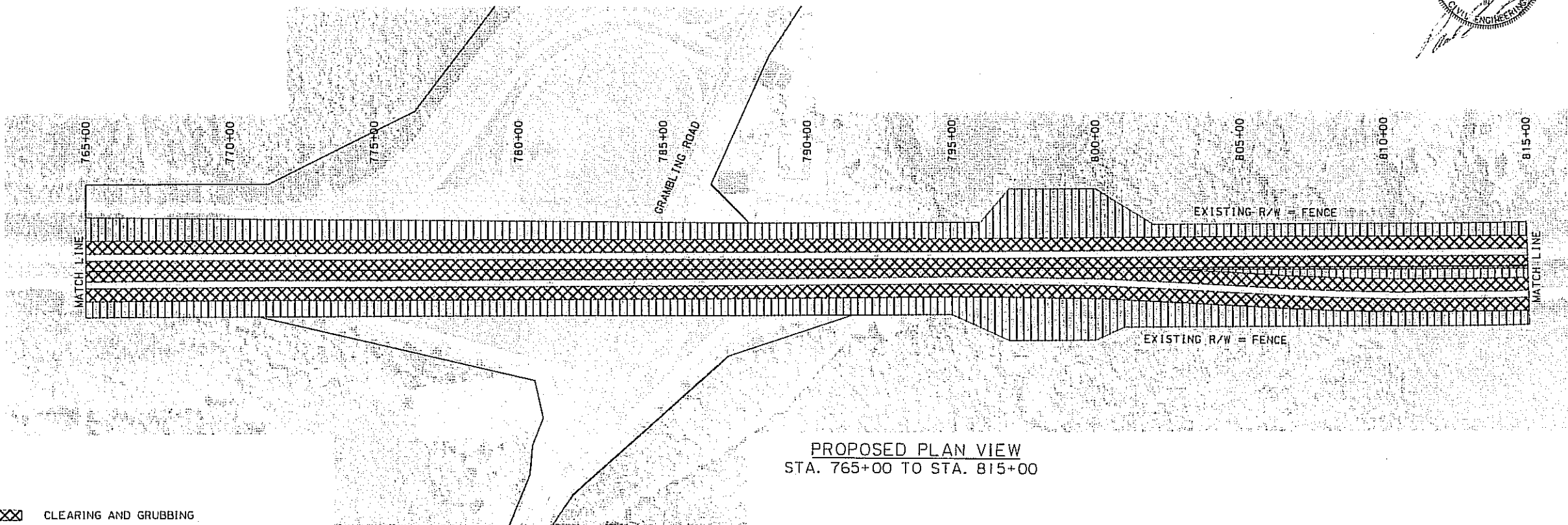
FOR INFORMATIONAL PURPOSES ONLY



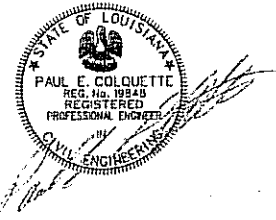
F-14

	<h1 style="text-align: center;">PLAN SHEET</h1>			<div> <div>NO.</div> <div>DATE</div> </div>	<div> <div>REVISION DESCRIPTION</div> <div>BY</div> </div>	DESIGNED: PEC	PARISH	LINCOLN	13
						CHECKED: DEP	FEDERAL PROJECT		
						DETAILS: RLW	STATE PROJECT		
						DRAWN: DEP	DATE SHEET		
JULY 2009 451-05-0119									

XXXXXX CLEARING AND GRUBBING
XXXXXX CLEARING AND GRUBBING (SELECT)



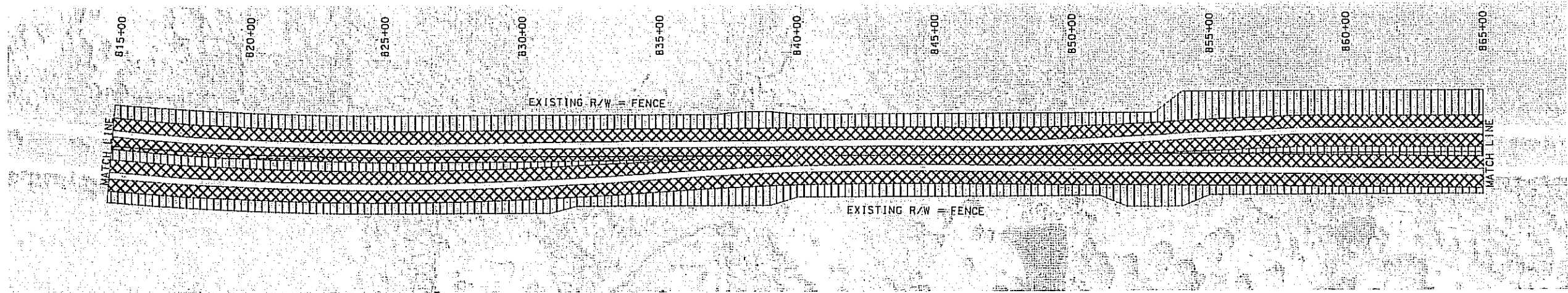
FOR INFORMATIONAL PURPOSES ONLY



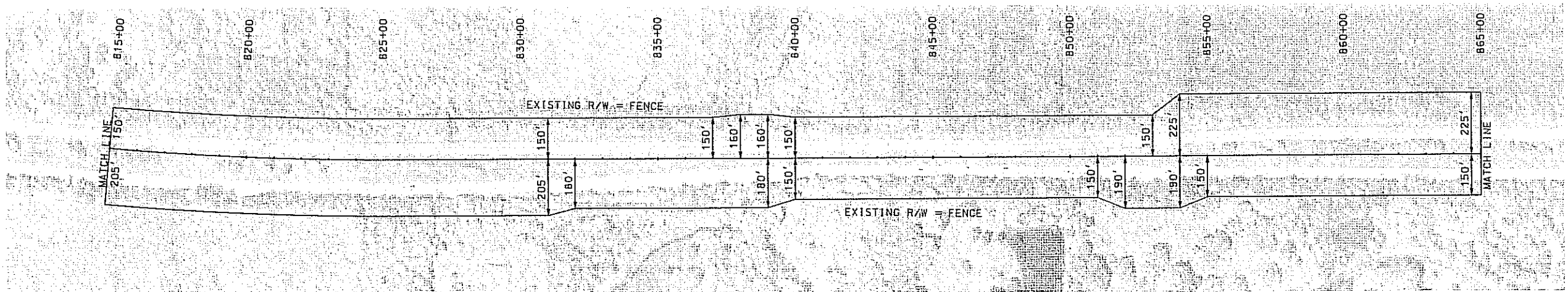
SCALE 1 IN = 500 FT

SHEET NUMBER		14
PARISH		LINCOLN
DESIGNED		DEP
CHECKED		DEP
DRAWN		DEP
DATE		JULY 2009
PROJECT		451-05-0119
REVISION DESCRIPTION		
NO.		1
DATE		
PLAN SHEET		
DISTRICT 05 DESIGN		

- XXXXX CLEARING AND GRUBBING
- ||||| CLEARING AND GRUBBING (SELECT)

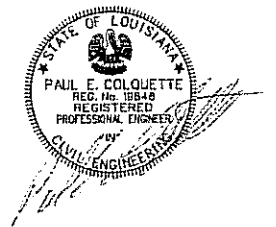


PROPOSED PLAN VIEW
STA. 815+00 TO STA. 865+00



EXISTING PLAN VIEW
STA. 815+00 TO STA. 865+00

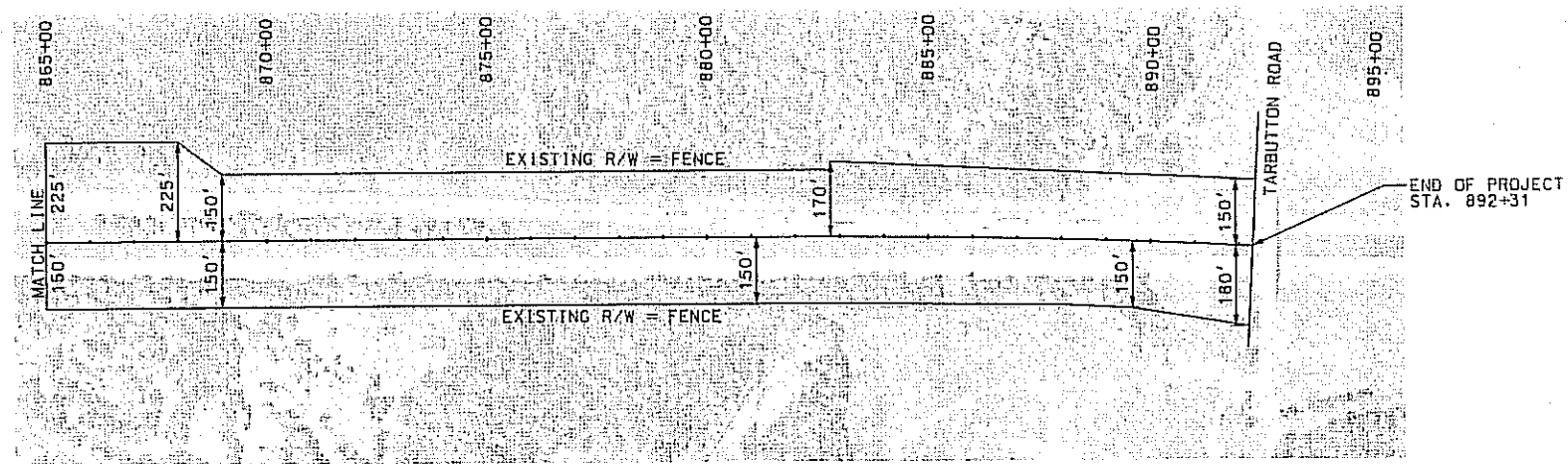
FOR INFORMATIONAL PURPOSES ONLY



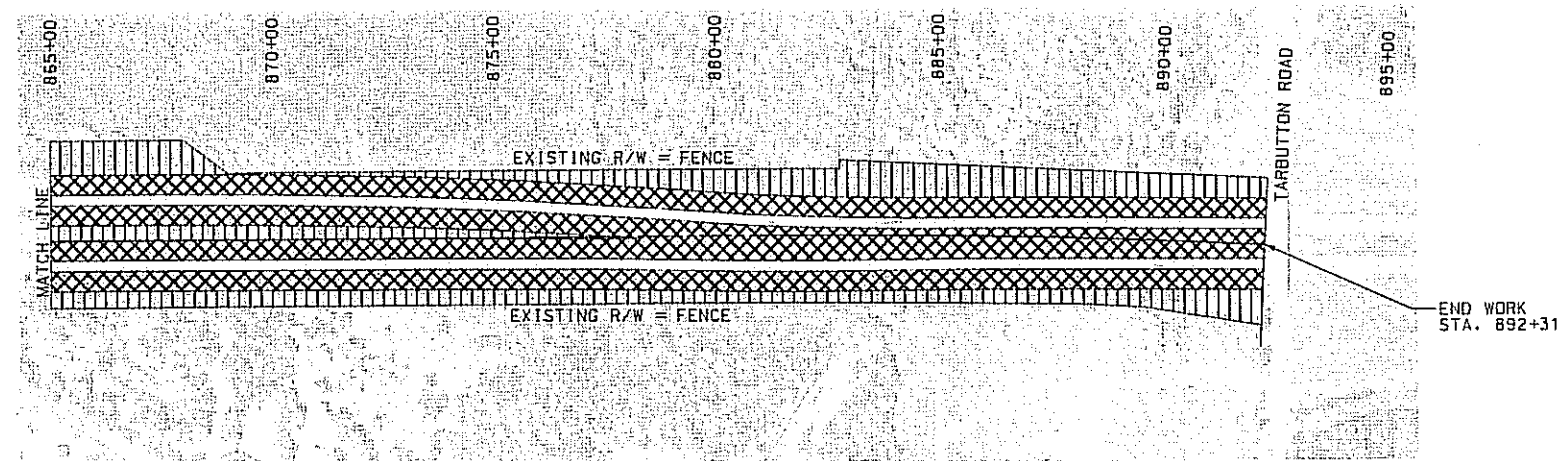
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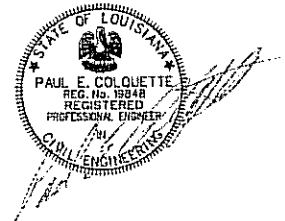
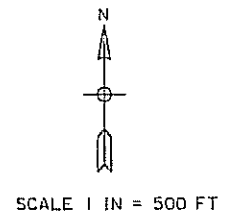
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PROJECT		LINCOLN
DESIGNED/PEC		
CHECKED/DEP		
INITIALS/RLW		
CHECKED/DEP		
DATE		JULY 2009
BY		
REVISION DESCRIPTION		
DATE		
NO.		
PLAN SHEET		
DISTRICT 05 DESIGN		
PROJECT		451-05-0119
STATE		LA
SHEET		15



FOR INFORMATIONAL PURPOSES ONLY



- CLEARING AND GRUBBING
- CLEARING AND GRUBBING (SELECT)



SHEET 15		LINCOLN		451-05-01 19	
DESIGNED BY		CHECKED BY		DATE	
DETAILS BY		CHECKED BY		DATE	
REVISION DESCRIPTION		BY		DATE	
PLAN SHEET		DISTRICT 05 DESIGN		bota	

GENERAL PROVISIONS

- All Temporary Traffic Control Devices used shall be in accordance with the LaDOTD Standard Specifications for Roads and Bridges, the Manual on Uniform Traffic Control Devices (MUTCD), and shall meet the National Cooperative Highway Research Program (NCHRP) 350 for Test Level 3 requirements.
- Materials used for Temporary Traffic Controls shall be in accordance with the LaDOTD Standard Specifications for Roads and Bridges and when applicable the LaDOTD Qualified Products List (QPL).
- No temporary traffic controls shall be erected without the approval of the Project Engineer and until work is about to begin, unless they are covered.
- No lane closures, lane shifts, diversions, or detours shall occur without the authorization of the Project Engineer.
- Responsibility is hereby placed upon the contractor for the installation, maintenance, and operation of all temporary traffic control devices called for in these plans or required by the Project Engineer for the protection of the traveling public as well as all Department and construction personnel.
- The contractor shall also be responsible for the maintenance of all permanent signs and pavement markings left in place as essential to the safe movement and guidance of traffic within the project limits.
- The District Traffic Operations Engineer (DTOE) shall serve as a technical advisor to the Project Engineer for all Traffic Control matters.
- "Road Work Next XX Miles" sign shall be required on all projects equal to or greater than 2 miles and located at the beginning of the project unless otherwise noted. The distance on the sign shall be stated to the nearest whole mile. The sign shall be a minimum 36"x60" unless otherwise noted.
- Warning signs used for lane closures or lane shifts in which the roadway shall be returned to full public use within 12 hours or less may be placed on NCHRP350 approved portable sign frames.
- If the spacing on the plans need to be altered, the new spacings need to be approved by the Project Engineer.

SPEED LIMITS

- Speed limits shall be lowered by 10 mph for any construction, maintenance, or utility operation that requires one or more of the following:
 - (A) the condition of the original highway is degraded due to milled surfaces or uneven pavements;
 - (B) work is in progress in the immediate vicinity of the travel way requiring lane closures, lane width reductions, or low speed diversions;
 - (C) workers present on the shoulder within 2' of the edge of traveled way without barrier protection.
- The reduced speed zone shall only apply to those portions of the project limits affected. The Project Engineer may allow SPEED LIMIT WHEN FLASHING signs to supplement reduced speed zones.
- At the end of the reduced speed zone, a speed limit sign displaying the original speed limit before construction shall be installed.
- If conditions warrant, the District Traffic Operations Engineer may authorize the reduction of the speed limit by more than 10 mph.

PAVEMENT MARKINGS (see QPL)

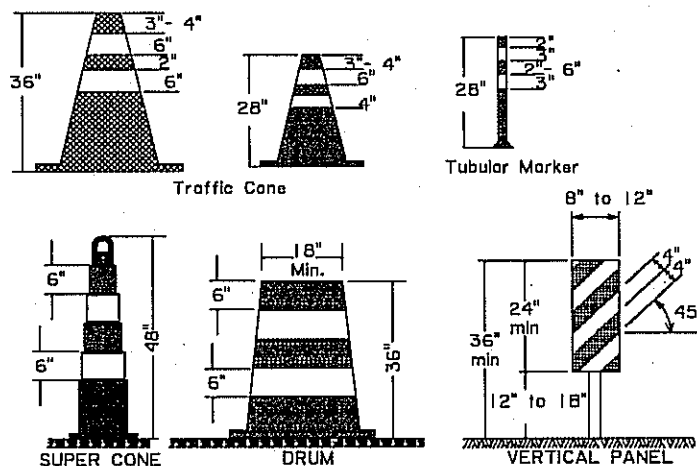
- All pavement markings within the limits of the project that are in conflict with the project signing or the required traffic movements shall be removed from the pavement by blast cleaning or grinding (Existing striping shall not be painted over with black paint or covered with tape).
- If special pavement markings are needed, they shall be reflectorized, removable, and accompanied by the proper signage.
- Temporary Raised Pavement Markers (RPMs) may be added to supplement temporary striping in areas of transition, in tapers, in detours, and in other areas of need as directed by the Project Engineer.
- Materials and placement of temporary pavement markings shall conform to section 713 of the Standard Specifications. If no pay item exists, temporary markings will be considered incidental to traffic control.

SIGNS

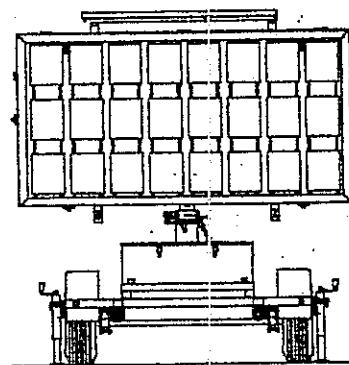
- All signs used for temporary traffic controls shall follow the Department's Traffic Control (TC) details and the MUTCD. Signs shown in the TC illustrations are typical and may vary with each specific condition.
- More appropriate signing for a specific condition may be required or substituted with the approval of the Project Engineer and reviewed by the District Traffic Operations Engineer.
- When projects are separated by less than one mile, they shall be signed as one project.
- At no time shall signs warning against a particular operation be left in place once the operation has been completed or where the obstacle has been removed.
- Signs over 10 sq ft shall be mounted on two post and signs over 20 sq ft shall be mounted on at least three post.
- Signs shall have a minimum of two bolts per post.
- Permanent signs no longer applicable or in conflict shall be removed or covered with a strong, lightweight, opaque material.
- Warning signs used for temporary traffic controls shall meet the following guidelines unless otherwise noted in the plans:
 - (A) size shall be 48" x 48", (B) see the Departments Standard Specifications and the QPL for sheeting information, (C) a minimum of a 2 lb U-Channel post shall be used driven to a minimum depth of 3', (D) sign height shall be a minimum of 5' above the roadway surface unless there is a concern for pedestrians or bicycle traffic in which it shall be a minimum of 7', (E) lateral distance of signs shall be a minimum of 6' from the edge of shoulder or edge of pavement if no shoulder exist and 2' from the back of curb in urban areas.
- Vinyl Roll Up signs will be allowed for short term (less than 12 hours) daytime work provided that they meet all size, color, retroreflectivity requirements, and NCHRP 350.
- Mesh rollup signs shall not be allowed on any project.
- All signs shall be removed or covered when no longer applicable.
- Contractor shall use caution not to damage existing signs which remain in place. Any DOTD signs damaged by work operations shall be replaced.

CHANNELIZING DEVICES

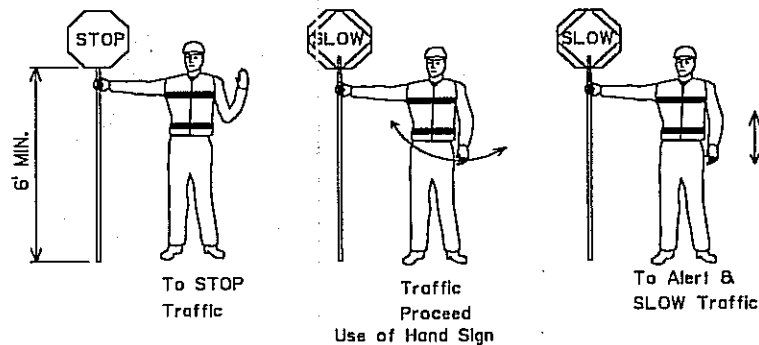
- The following devices may be used: Tubular Markers, Vertical Panels, Cones, Drums, and Super Cones. Drums (at standard spacing) and Super Cones (at 1/2 standard spacing) are the only devices allowed to be used in taper areas on the interstate system during daylight hours. Only drums can be used in tapers during night operations.
- The spacing of channelizing devices in a taper should not exceed a distance in feet equal to 1.0 times the posted speed limit in mph (with a maximum of 50 feet).
- The spacing of channelizing devices in a tangent should not exceed a distance in feet equal to 2.0 times the posted speed limit in mph (with a maximum of 100 feet) unless otherwise noted.
- Retroreflective material pattern used on super cones shall match that used on drums.
- 28" traffic cones are not allowed on: 1) Interstates, 2) Highways with speeds greater than 40 mph. During night time operations: 1) 28" and 36" cones are not allowed, 2) drums are the only device allowed in the taper.

**PORTABLE CHANGEABLE MESSAGE SIGNS**

- When working within the traveled way, including shoulders and auxiliary lanes, Changeable Message Signs (CMS) shall be used on all Interstate Highways and on all other roadways (where space is available) with an ADT greater than 20,000 and should be delineated with retroreflective TTC devices. CMS will be paid for by each.
- When used in advance of a lane closure or a lane shift, the CMS should be placed on the right hand side of the road a minimum distance of 2 miles in advance of the taper for Interstates and to be determined by the Engineer on other highways.
- If vehicles are queuing beyond the 2 mile CMS, an additional CMS should be placed on the right hand side of the road approximately 5 miles in advance of the taper for Interstates.
- CMS messages shall be approved by the District Traffic Operations Engineer (DTOE).
- When Portable Changeable Message signs are not being used, they should be removed; if not removed, they should be shielded by guardrail or barriers; or if the previous two options are not feasible, they should be delineated with retroreflective TTC devices.

**FLAGGERS**

- All flaggers must be qualified. The contractor shall be responsible for training or assuring that all flaggers are qualified to perform flagging duties. A Qualified Flagger is one that has completed courses such as those offered by the American Traffic Safety Services Association (ATSSA), The Associated General Contractors of America (AGC) or other courses approved by the Louisiana DOTD's Work Zone Task Force. The contractor shall be responsible for getting the flagger course approved.
- When utilized, a flagger shall use a minimum 18 inch octagonal shape sign on a minimum 6' stop/slow paddle and wear ANSI Class 2 Lime Green vest during day time operations and ANSI Class 3 Lime Green ensemble during night operations. In all flagging operations, the flagger must be visible from the flagger advance warning sign.

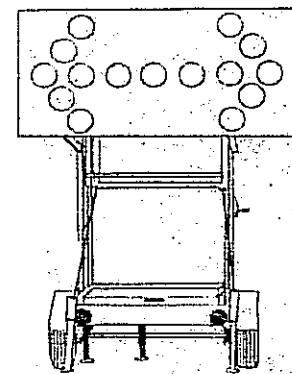
**TYPE III BARRICADES**

- All barricades shall use Type 3 High Intensity Sheeting on both sides of the barricade.
- All Type III Barricades shall be a minimum of 8 feet in length and must meet NCHRP 350 requirements.
- When signs and lights are to be mounted to a barricade, they must meet NCHRP 350 requirements.

MUTCD Website:
<http://mutcd.fhwa.dot.gov/>

FLASHING ARROW PANELS

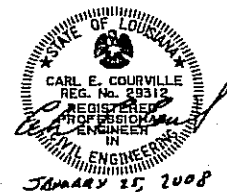
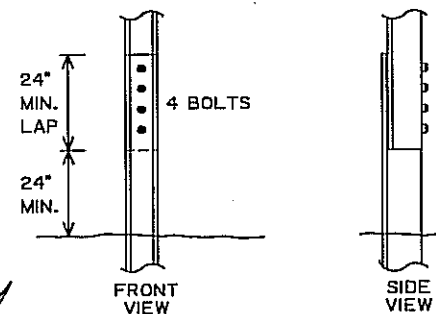
- Flashing Arrow Panels shall be used for lane closures on all facilities with 2 or more lanes in a single direction and a speed limit greater than 35 mph.
- When used, flashing arrow panels should be located on the shoulder at the beginning of the taper.
- Where the shoulder width is limited, the flashing arrow panel should be placed within the closed lane as close to the beginning of the taper as practical.
- All Flashing Arrow Panels used on high speed roadways (45 mph and greater) shall be 4' x 8' Type C.
- When Flashing Arrow Panels signs are not being used, they should be removed; if not removed, they should be shielded by guardrail or barriers; or if the previous two options are not feasible, they should be delineated with retroreflective TTC devices.

**LIGHTING (see QPL)**

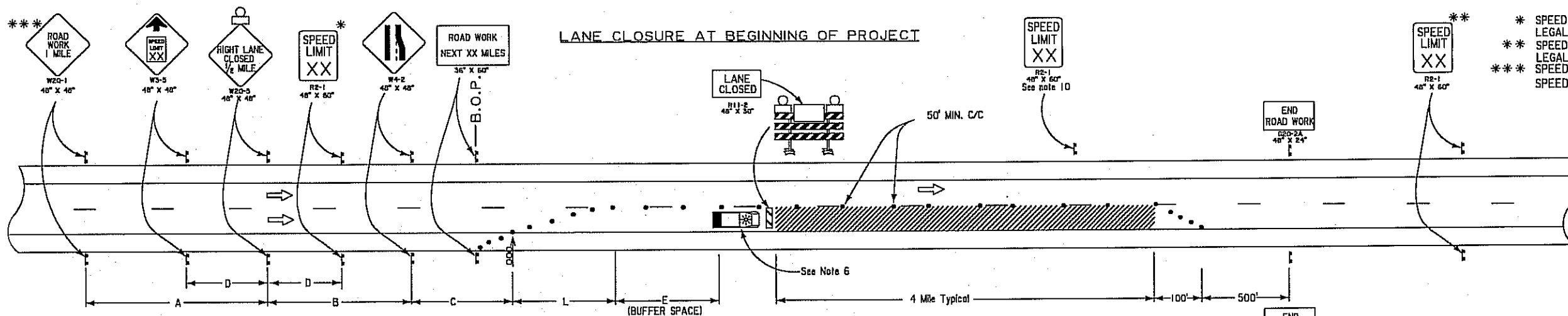
- When used for overnight closures, lighting shall supplement all barricades that are placed in a closed lane or that extend across a highway. Two Type B High Intensity lights shall be used per lane closed in rural areas. In urban areas two Type A Low Intensity Lights may be used where adequate ambient lighting is available.
- One Type B High Intensity light shall be used to supplement the first sign (or pair of signs) that gives warning about a lane closure during night time operations.
- Type C steady burn lights shall be used on all channelizing devices in the taper as well as the first two devices in the tangent, for night use.

ALLOWABLE LAP SPlice FOR U-CHANNEL POST

- U-Channel posts may be spliced where long lengths are required. The upper section shall overlap the lower section by at least 24 inches. The bottom edge of the upper section of the splice shall be a minimum of 24 inches above the ground. The spliced sections shall be secured with at least four 5/8 inch diameter hex bolts spaced equally along the splice.



SHEET NUMBER		17	
DESIGNED BY	COURVILLE, J. COLVIN	DRAWN BY	SOWARDS, J. COLVIN
CHECKED BY	J. COLVIN	CHECKED BY	J. COLVIN
DATE	01/25/2008	DATE	01/25/2008
PROJECT		451-05-0119	
SHEET		BT	
REVISION DESCRIPTION			
NO. DATE			
TEMPORARY TRAFFIC CONTROL GENERAL NOTES SHEET			
TRAFFIC ENGINEERING			

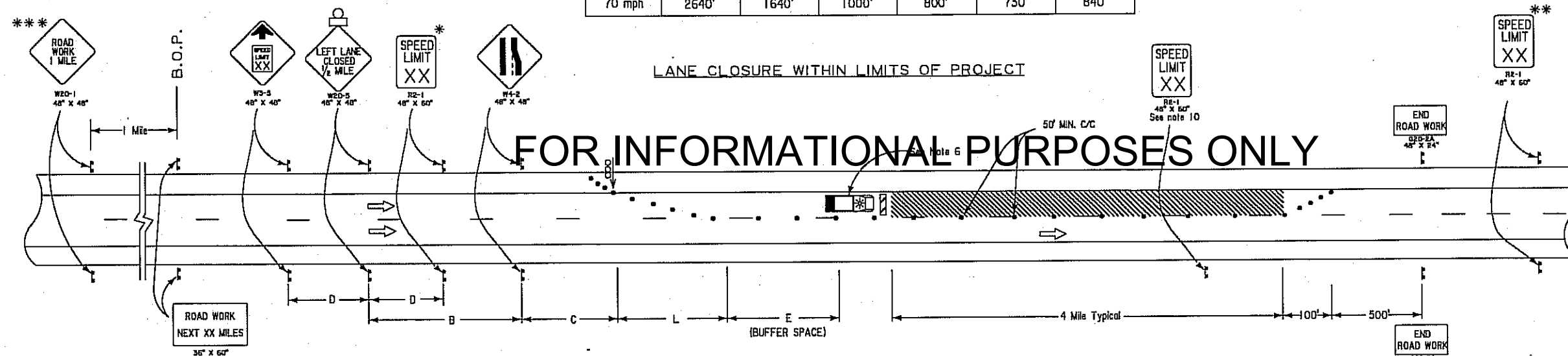


SPEED LIMIT	Spacing					
	'A'	'B'	'C'	'D'	'E'	'L'
45 mph	1140'	1000'	500'	500'	360'	540'
55 mph	2640'	1640'	1000'	800'	495'	660'
60 mph	2640'	1640'	1000'	800'	570'	720'
65 mph	2640'	1640'	1000'	800'	645'	780'
70 mph	2640'	1640'	1000'	800'	730'	840'

*** SPEED LIMIT IS TO BE 10 MPH LESS THAN LEGALLY ESTABLISHED SPEED LIMIT
 ** SPEED LIMIT IS TO BE RETURNED TO LEGALLY ESTABLISHED SPEED LIMIT
 *** SPEED LIMIT > 45 MPH USE "ROAD WORK 1 MILE"
 SPEED LIMIT ≤ 45 MPH USE "ROAD WORK AHEAD"

LEGEND

- Traffic Sign
- Channelizing Devices
- Type III Barricades
- Flashing Arrow Panel
- Work Area
- Type B Light

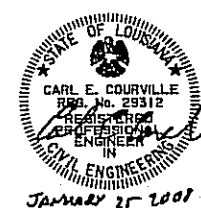


FOR INFORMATIONAL PURPOSES ONLY

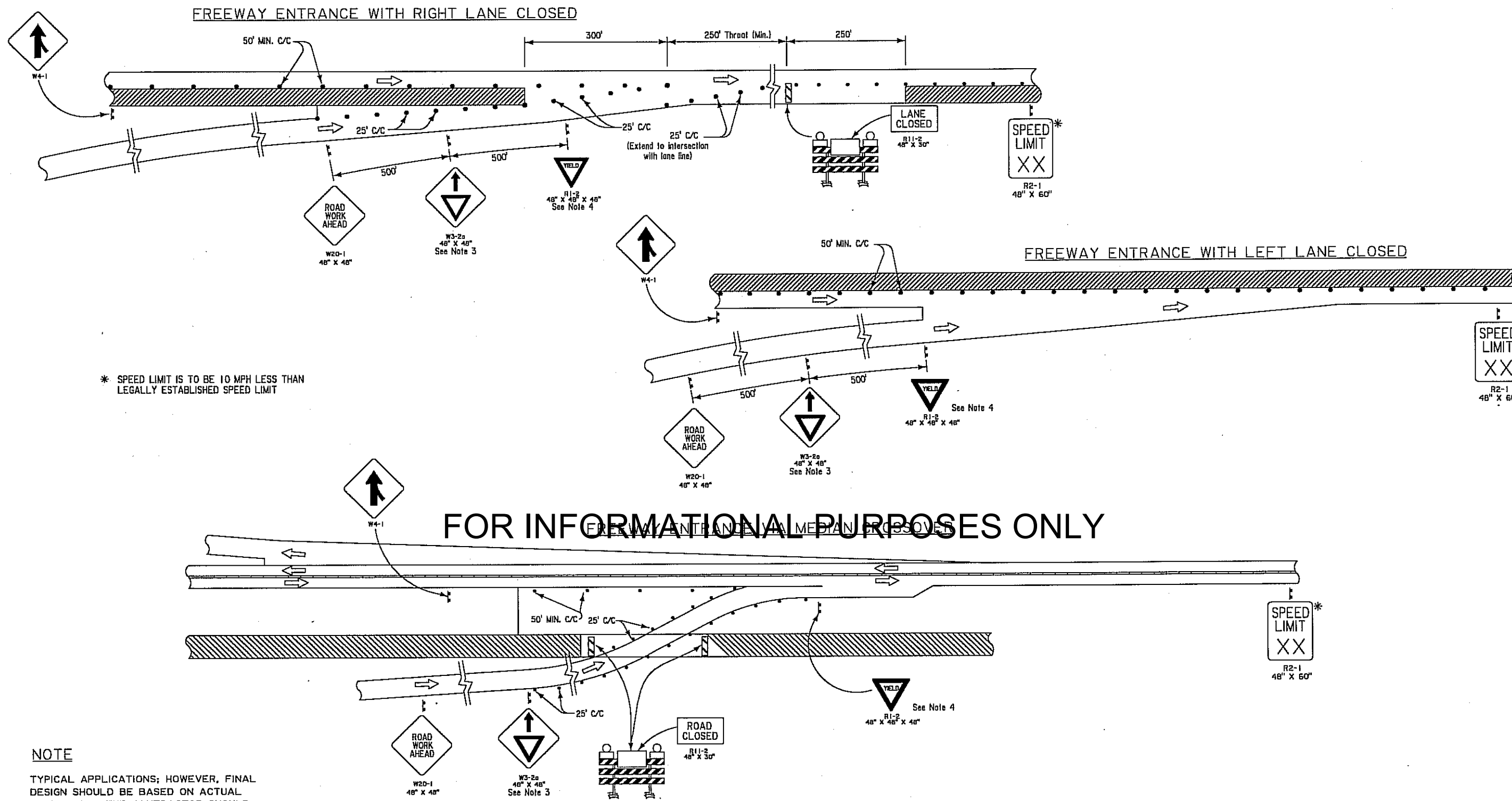
NOTES

THIS SHEET SHALL BE USED WITH THE "TEMPORARY TRAFFIC CONTROL GENERAL NOTES SHEET (TC-00)".

- SPEED LIMIT REFERS TO THE LEGALLY ESTABLISHED SPEED LIMIT BEFORE CONSTRUCTION.
- WHEN DOING ANY INTERSTATE WORK, A MINIMUM OF TWO DYNAMIC MESSAGE SIGNS PER DIRECTION SHALL BE PLACED IN ADVANCE OF THE LANE CLOSURE. GUIDANCE AS TO PLACEMENT IS SHOWN ON TC-00; HOWEVER, SPECIFIC DISTANCES TO BE SET BY THE PROJECT ENGINEER.
- DOWNSTREAM TAPERS SHALL BE 100' PER LANE WITH CHANNELIZING DEVICES SPACED AT A SPACING OF 20'.
- TYPE III BARRICADES SHALL BE PLACED IN THE CLOSED LANE AT A 1000' INTERVAL WHERE NO ACTIVE WORK IS ON GOING AND THE LANE MUST REMAIN CLOSED. TYPE III BARRICADES ARE ALSO REQUIRED BEFORE EACH OR GROUP OF UNFILLED HOLES OR HOLES FILLED WITH TEMPORARY MATERIAL, OR WHERE UNCURED CONCRETE EXISTS.
- IF A RAMP ENTRANCE OR EXIT TAPER FALLS WITHIN THE WORK AREA, REFER TO STANDARD ROAD PLANS TC-08 AND TC-09 FOR TRAFFIC CONTROL DETAILS.
- A VEHICLE WITH A FLASHING AMBER LIGHT AND A TRUCK MOUNTED ATTENUATOR SHALL BE USED IN ADVANCE OF AREAS WHERE WORKERS ARE PRESENT WITHOUT POSITIVE BARRIER PROTECTION.
- CHANNELIZING DEVICES MAY ENCROACH UP TO 2 FEET FROM CENTERLINE INTO THE OPEN LANE ONLY AT SPECIFIC LOCATIONS WHERE ACTUAL WORK ACTIVITY IS TAKING PLACE. CHANNELIZING DEVICES SHALL BE RETURNED TO TO THE CLOSED LANE WHEN THE WORK ACTIVITY HAS PASSED. IN NO CASE SHALL THE MAINLINE WIDTH OF THE TRAVEL LANE BE LESS THAN 10'.
- A FLAGGER SHALL BE USED TO ALERT MOTORISTS WHEN EQUIPMENT OR WORKERS ENCROACH WITHIN 2 FEET OF AN OPEN LANE. THE FLAGGER SHALL BE POSTED ADJACENT TO THE OPEN TRAVEL LANE AND IMMEDIATELY UPSTREAM OF EACH OPERATION. ENCROACHMENT SHALL BE HELD TO A MINIMUM.
- WHEN THE LENGTH OF CLOSURE IS GREATER THAN 1 MILE, INSTALL SPEED LIMIT SIGNS AT 1 MILE INTERVALS.
- IF CONDITIONS RESULT IN A DROPOFF OR RISE, BETWEEN LANE CLOSURE AND TRAVEL LANE, WHICH EXCEEDS 2 INCHES OVERNIGHT, THE CONTRACTOR SHALL PLACE A TEMPORARY EDGE LINE IN THE OPEN LANE, A MINIMUM OF 1 FOOT FROM THE DROPOFF OR RISE. IF THE CONTRACTOR CHOOSES TO USE DRUMS FOR THE CHANNELIZING DEVICES, THE TEMPORARY EDGE LINE MAY BE OMITTED AS LONG AS THE DEVICE SPACING IS 50' OR LESS. IN EITHER CASE, THE CHANNELIZING DEVICES SHALL BE PLACED IN THE CLOSED LANE DURING NONWORKING HOURS.
- HIGH INTENSITY FLASHING LIGHTS SHALL BE USED TO MARK THE SECOND ADVANCE WARNING SIGN (LANE CLOSED 1/2 MILE). LOW INTENSITY FLASHING LIGHTS SHALL BE USED TO MARK ALL OTHER HAZARDS OFF THE TRAVEL WAY. STEADY BURNING LIGHTS SHALL BE USED ON ALL TRAFFIC CONTROL DEVICES USED FOR MERGING TAPER, INCLUDING THE FIRST TWO DEVICES AFTER THE TAPER ENDS. FIRST LIGHT IN A MERGING TAPER SHALL BE FLASHING.
- THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A MERGING TAPER AND SHIFTING TAPER SHALL NOT BE GREATER THAN 50'.
- ANY SIGNS IN CONFLICT WITH CONSTRUCTION SIGNING SHALL BE REMOVED OR COVERED.
- MINIMUM CONSTRUCTION SIGNING: ANY ADDITIONAL SIGNS SHOWN IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND REQUIRED BY THE PROJECT ENGINEER SHALL BE INSTALLED UNDER ITEM 713-01.
- NEITHER WORK ACTIVITY NOR STORAGE OF EQUIPMENT, VEHICLES, OR MATERIALS SHALL OCCUR WITHIN THE BUFFER SPACE.



SHEET NUMBER	18
PARISH	LINCOLN
DESIGNED BY	E. COURVILLE
CHECKED BY	J. COLVIN
DATE	01/25/2008
PROJECT	451-05-0019
STATE	LA
DATE	01/25/2008
SHEET	18
REVISION DESCRIPTION	
DATE	
NO.	
TRAFFIC CONTROL LAYOUT FOR LANE CLOSURES ON DIVIDED HIGHWAYS	TC-06
TRAFFIC ENGINEERING	



NOTE

TYPICAL APPLICATIONS; HOWEVER, FINAL DESIGN SHOULD BE BASED ON ACTUAL GEOMETRICS. THE CONTRACTOR SHOULD CONSULT WITH THE PROJECT ENGINEER.

LEGEND

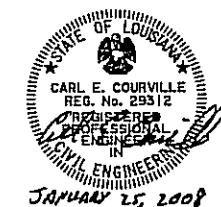
- Traffic Sign
- Channelizing Devices
- Type III Barricades
- Work Area
- Type B Light

NOTES

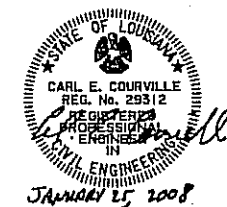
THIS SHEET SHALL BE USED WITH THE "TEMPORARY TRAFFIC CONTROL GENERAL NOTES SHEET (TC-00)".

1. FOR MAINLINE LANE CLOSURES SEE OTHER SHEETS.
2. CHANNELIZING DEVICES ON THE LANE LINE SHALL BE OF THE SAME TYPE. CHANNELIZING DEVICES IN EACH TAPER SHALL BE OF THE SAME TYPE.
3. THE "YIELD AHEAD" SIGN IS REQUIRED EXCEPT FOR SHORT TERM MAINTENANCE OPERATIONS WHERE ITS USE MAY BE AN OPTION AS DETERMINED BY THE PROJECT ENGINEER.




4. USE EXISTING "YIELD" SIGN IF PRESENT, OTHERWISE FURNISH "YIELD" SIGN. WHERE INADEQUATE ACCELERATION DISTANCE EXISTS FOR THE TEMPORARY ENTRANCE, THE YIELD SIGN SHALL BE REPLACED WITH STOP SIGNS (ONE ON EACH SIDE OF THE APPROACH), AND STOP AHEAD SIGNS SHALL REPLACE THE YIELD AHEAD SIGNS.
5. LOCATION OF CHANNELIZING DEVICES WITHIN THE GORE AREA TO BE BASED ON DRIVER SIGHT DISTANCE. TO BE DETERMINED BY THE DISTRICT TRAFFIC OPERATIONS ENGINEER.
6. ANY SIGNS IN CONFLICT WITH CONSTRUCTION SIGNING SHALL BE REMOVED OR COVERED.
7. MINIMUM CONSTRUCTION SIGNING: ANY ADDITIONAL SIGNS SHOWN IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND REQUIRED BY THE PROJECT ENGINEER SHALL BE INSTALLED UNDER ITEM 713-01.



SHEET NUMBER	19
PROJECT	451-05-0119
DATE	01/25/2008
CHECKED	J. COLVIN
DESIGNED	E. COURVILLE
PARISH	LINCOLN
TRAFFIC CONTROL LAYOUT FOR WORK AREA THROUGH RAMP ENTRANCE TAPERS	TC-08
TRAFFIC ENGINEERING	



- F-21

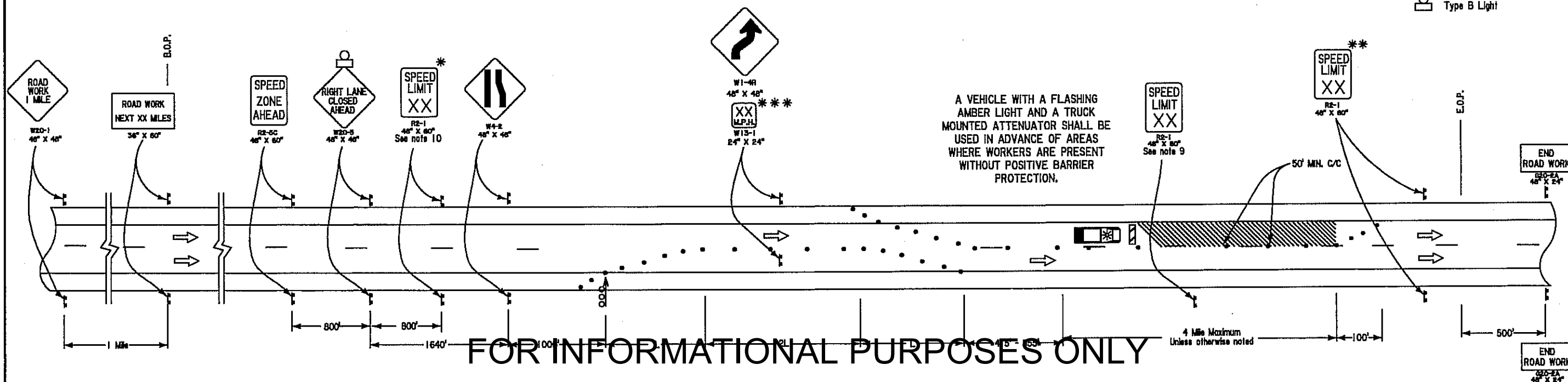
	TRAFFIC CONTROL LAYOUT FOR WORK AREA THROUGH RAMP EXIT TAPERS			NO.	DATE	REVISION DESCRIPTION	BY	DESIGNED E. COURVILLE	PARISH LINCOLN	SHEET NUMBER 20
	SPECIAL RETAIL TC-09	DETAILED D. SOWARDS						FEDERAL PROJECT	STATE PROJECT 451 - 05-0119	
	TRAFFIC ENGINEERING							CHECKED J. COLVIN		

- * SPEED LIMIT IS TO BE 10 MPH LESS THAN ORIGINAL SPEED
- ** SPEED LIMIT IS TO BE RETURNED TO ORIGINAL SPEED.
- *** MAY USE AN ADVISORY SPEED PLAQUE (W13-1) IF DEEMED NECESSARY. ADVISORY SPEED TO BE DETERMINED BY THE DISTRICT TRAFFIC OPERATIONS ENGINEER.

SPEED LIMIT	60	65	70
L =	720'	780'	840'

LEGEND

- Traffic Sign
- Channelizing Devices
- Type III Barricades
- Flashing Arrow Panel
- Work Area
- Type B Light



A VEHICLE WITH A FLASHING AMBER LIGHT AND A TRUCK MOUNTED ATTENUATOR SHALL BE USED IN ADVANCE OF AREAS WHERE WORKERS ARE PRESENT WITHOUT POSITIVE BARRIER PROTECTION.

FOR INFORMATIONAL PURPOSES ONLY

NOTES

THIS SHEET SHALL BE USED WITH THE "TEMPORARY TRAFFIC CONTROL GENERAL NOTES SHEET (TC-00)".

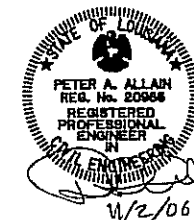
- WHEN DOING ANY INTERSTATE WORK, OR THE AVERAGE DAILY TRAFFIC (ADT) EXCEEDS 20,000 VEHICLES PER DAY OR WHEN THE TRAFFIC QUEUES BEYOND THE ADVANCED SIGNING, A MINIMUM OF TWO CMS SIGNS PER DIRECTION SHALL BE PLACED IN ADVANCE OF THE LANE CLOSURE. GUIDANCE AS TO PLACEMENT IS SHOWN ON TC-00; HOWEVER, SPECIFIC DISTANCES TO BE SET BY THE PROJECT ENGINEER.
- THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A MERGING TAPER AND SHIFTING TAPER SHALL BE APPROXIMATELY EQUAL IN FEET TO THE SPEED LIMIT BEFORE ROAD WORK.
- TYPE III BARRICADES SHALL BE PLACED IN THE CLOSED LANE AT A 1000' INTERVAL WHERE NO ACTIVE WORK IS ON GOING AND THE LANE MUST REMAIN CLOSED. TYPE III BARRICADES ARE ALSO REQUIRED BEFORE EACH OR GROUP OF UNFILLED HOLES OR HOLES FILLED WITH TEMPORARY MATERIAL, OR WHERE UNCURED CONCRETE EXISTS.
- IF A RAMP ENTRANCE OR EXIT TAPER FALLS WITHIN THE WORK AREA, REFER TO STANDARD ROAD PLANS TC-08 AND TC-09 FOR TRAFFIC CONTROL DETAILS.
- A FLAGGER SHALL BE USED TO ALERT MOTORISTS WHEN EQUIPMENT OR WORKERS ENCR OACH WITHIN 2 FEET OF AN OPEN LANE. THE FLAGGER SHALL BE POSTED ADJACENT TO THE OPEN TRAFFIC LANE AND IMMEDIATELY UPSTREAM OF EACH OPERATION. ENCR OACHMENT SHALL BE HELD TO A MINIMUM.

- A VEHICLE WITH A FLASHING AMBER LIGHT AND A TRUCK MOUNTED ATTENUATOR SHALL BE USED IN ADVANCE OF AREAS WHERE WORKERS ARE PRESENT WITHOUT POSITIVE BARRIER PROTECTION.
- UNDER NORMAL CLOSURE CONDITIONS, DEVICES SHOULD BE PLACED 2' FROM CENTERLINE INTO THE CLOSED LANE. CHANNELIZING DEVICES MAY ENCR OACH UP TO 2' FROM CENTERLINE INTO THE OPEN LANE ONLY AT SPECIFIC LOCATIONS WHERE ACTUAL WORK ACTIVITY IS TAKING PLACE. CHANNELIZING DEVICES SHALL BE RETURNED TO THE CLOSED LANE WHEN THE WORK ACTIVITY HAS PASSED. IN NO CASE SHALL THE MAINLINE WIDTH OF THE TRAVEL LANE BE LESS THAN 10'.
- WHEN THE LENGTH OF CLOSURE IS GREATER THAN 1 MILE, INSTALL SPEED LIMIT SIGNS AT 1 MILE INTERVALS.
- THE REDUCED SPEED LIMIT REPRESENTS A MAXIMUM SPEED DROP OF 10 MPH FROM THE LEGALLY ESTABLISHED SPEED LIMIT.

FOR LANE-LINE DROPOFF OR RISE:

- IF CONDITIONS RESULT IN A DROPOFF OR RISE WHICH EXCEEDS 2" OVERNIGHT, THE CONTRACTOR SHALL PLACE A TEMPORARY EDGE LINE IN THE OPEN LANE, A MINIMUM OF 1' FROM THE DROPOFF OR RISE. IF THE CONTRACTOR CHOOSES TO USE DRUMS FOR THE CHANNELIZING DEVICES, THE TEMPORARY EDGE LINE MAY BE OMITTED AS LONG AS THE DRUM SPACING IS 50'. IN EITHER CASE, THE CHANNELIZING DEVICES SHALL BE PLACED IN THE CLOSED LANE DURING NONWORKING HOURS.

- HIGH INTENSITY FLASHING LIGHTS SHALL BE USED TO MARK THE SECOND ADVANCE WARNING SIGN (RIGHT LANE CLOSED AHEAD). LOW INTENSITY FLASHING LIGHTS SHALL BE USED TO MARK ALL OTHER HAZARDS OFF THE TRAVEL WAY. STEADY BURNING LIGHTS SHALL BE USED ON ALL TRAFFIC CONTROL DEVICES USED FOR MERGING TAPER, INCLUDING THE FIRST TWO DEVICES AFTER THE TAPER ENDS. FIRST LIGHT IN A MERGING TAPER SHALL BE FLASHING.
- ANY SIGNS IN CONFLICT WITH CONSTRUCTION SIGNING SHALL BE REMOVED OR COVERED.
- MINIMUM CONSTRUCTION SIGNING: ANY ADDITIONAL SIGNS SHOWN IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND REQUIRED BY THE PROJECT ENGINEER SHALL BE INSTALLED UNDER ITEM 713-01.



4/2/06

F-22

SHEET NUMBER	21
PROJECT	451-05-0119
DATE	10/18/06
DESIGNED BY	C. ADAMS
CHECKED BY	P. ALLAIN
DRAWN BY	D. SOWARDS
CHECKED BY	J. COLVIN
DATE	10/18/06
SHEET	21
REVISION DESCRIPTION	
DATE	
NO.	
<p>TRAFFIC CONTROL LAYOUT FOR LOUISIANA LEFT ON INTERSTATE HIGHWAYS</p>	
<p>TC-14</p>	
<p>TRAFFIC ENGINEERING</p>	