

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE PROJECT REFERENCE NO. SHEET NO.

U - 4428

TCP-1

**PLAN FOR PROPOSED
TRAFFIC CONTROL, MARKING & DELINEATION
HENDERSON COUNTY**

U-4428

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS"-
PROJECT SERVICES UNIT-N.C. DEPARTMENT OF TRANSPORTATION-RALEIGH, N.C.,
DATED JULY 2006 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE
CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW PANELS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1165.01	TRUCK MOUNTED IMPACT ATTENUATOR
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS & WORD MESSAGES
1205.10	PAVEMENT MARKINGS - SCHOOL AREAS
1261.01	GUARDRAIL & BARRIER DELINEATOR SPACING
1261.02	GUARDRAIL & BARRIER DELINEATOR TYPES
1262.01	GUARDRAIL END DELINEATION

INDEX OF SHEETS

SHEET NO.	TITLE
TCP-1	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, TEMPORARY PAVEMENT MARKING SCHEDULE AND INDEX OF SHEETS
TCP-2	PROJECT NOTES
TCP-3	PHASE I PHASING, OVERVIEW & DETAIL
TCP-4	PHASE II PHASING, OVERVIEW, DETAIL & DETOUR
TCP-5	WORK ZONE ADVANCE WARNING SIGNS DETAIL

TEMPORARY PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION	PAY ITEM	QUANTITY BREAKDOWN	TOTAL QUANTITY
PA	WHITE EDGELINE (2X)	PAINT (4 INCH)	12700 LF	
PI	YELLOW DOUBLE CENTERLINE (2X)		21000 LF	34900 LF
PE	WHITE TURN LANE LINE (2X)		1200 LF	
P4	WHITE STOP BAR (2X)	PAINT (24 INCH)	1240 LF	1240 LF
PAINT MARKING SYMBOLS				
QA	LEFT TURN ARROW (2X)		18 EA	
QB	STRAIGHT ARROW (2X)		4 EA	41 EA
QC	STRAIGHT & RIGHT ARROW (2X)		17 EA	
QD	RIGHT TURN ARROW (2X)		2 EA	

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- NORTH ARROW
- PROPOSED PVMT. EXIST. PVMT.
- WORK AREA
- REMOVAL OF EXISTING PAVEMENT

TRAFFIC CONTROL DEVICES

- TYPE I BARRICADE
- TYPE II BARRICADE
- TYPE III BARRICADE
- CONE
- DRUM SKINNY DRUM
- FLASHING ARROW PANEL (TYPE C)
- STATIONARY SIGN
- PORTABLE SIGN
- STATIONARY OR PORTABLE SIGN
- CRASH CUSHION
- CHANGEABLE MESSAGE SIGN
- TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)
- POLICE
- FLAGGER

PAVEMENT MARKINGS

- CRYSTAL/CRYSTAL PAVEMENT MARKER
- YELLOW/YELLOW PAVEMENT MARKER
- CRYSTAL/RED PAVEMENT MARKER
- PAVEMENT MARKING SYMBOLS

TIP PROJECT:

FILE: n:\ncdot\U4428\Roadway\Plan\New_Alt_PSE\U4428_dby_tpr.dgn
DATE: 6/12/08 1:42:52 PM

APPROVED: DATE:	WILBUR SMITH ASSOCIATES 4135 Mendenhall Oaks Parkway Suite 160, High Point, NC 27265
SEAL 	RICH POTEMPA, P.E. TRAFFIC CONTROL ENGINEER RICH POTEMPA, P.E. TRAFFIC CONTROL PROJECT ENGINEER RICH POTEMPA, P.E. TRAFFIC CONTROL PROJECT DESIGN ENGINEER RICH POTEMPA, P.E. TRAFFIC CONTROL DESIGN ENGINEER / TECHNICIAN

PROJECT NOTES

PROJ. REFERENCE NO.	SHEET NO.
U-4428	TCP-2

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS, OR RESULT IN DUPLICATE, OR UNDESIRE OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING OR REMOVAL OF DEVICES, AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER.

TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
US 64	MONDAY THRU THURSDAY 6:30 AM TO 7:00 PM FRIDAY 6:30 AM THRU SUNDAY 7:00 PM

B) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND SPECIAL EVENTS AS FOLLOWS:

ROAD NAME	HOLIDAY
US 64	

1. FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
2. FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:30 A.M. DECEMBER 31st TO 7:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 7:00 P.M. THE FOLLOWING TUESDAY.
3. FOR EASTER, BETWEEN THE HOURS OF 6:30 A.M. THURSDAY AND 7:00 P.M. MONDAY.
4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:30 A.M. FRIDAY TO 7:00 P.M. TUESDAY.
5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:30 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE DAY AFTER INDEPENDENCE DAY.

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 6:30 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.

6. FOR LABOR DAY, BETWEEN THE HOURS OF 6:30 A.M. FRIDAY AND 7:00 P.M. TUESDAY.
7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:30 A.M. TUESDAY TO 7:00 P.M. MONDAY.
8. FOR CHRISTMAS, BETWEEN THE HOURS OF 6:30 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

C) DO NOT CLOSE ROADS AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
US 64	MONDAY THRU THURSDAY 6:00 AM TO 9:00 PM FRIDAY 6:00 AM TO MONDAY 9:00 PM

D) DO NOT STOP TRAFFIC AS FOLLOWS:

ROAD	DAY AND TIME RESTRICTIONS	DURATION AND OPERATION
US 64	MONDAY THRU THURSDAY FROM 6:30 AM TO 7:00 PM AND FROM FRIDAY 6:30 AM TO SUNDAY 7:00 PM.	15 MINUTES FOR UTILITY OR ROADWAY CONSTRUCTION

LANE AND SHOULDER CLOSURE REQUIREMENTS

E) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED, OR AS DIRECTED BY THE ENGINEER.

F) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.

G) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

H) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

I) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

J) DO NOT INSTALL MORE THAN 0.5 MILE OF LANE CLOSURE ON US 64 MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE.

K) DO NOT INSTALL MORE THAN 2 SIMULTANEOUS LANE CLOSURES, IN ANY ONE DIRECTION, ON US 64.

L) PROVIDE A MINIMUM OF 0.5 MILE BETWEEN LANE CLOSURES, MEASURED FROM THE END OF ONE CLOSURE TO THE FIRST SIGN OF THE NEXT LANE CLOSURE.

PAVEMENT EDGE DROP OFF REQUIREMENTS

M) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:

BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.

BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.

N) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

O) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

P) PROVIDE DETOUR SIGNING WITHIN AND OFF THE PROJECT LIMITS.

Q) COVER OR REMOVE ALL DETOUR SIGNS WITHIN AND OFF THE PROJECT LIMITS WHEN A DETOUR IS NOT IN OPERATION.

R) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

S) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC CONTROL DEVICES

T) SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH), EXCEPT 10 FT ON-CENTER IN RADIUS AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY, WHEN LANE CLOSURES ARE NOT IN EFFECT. WHEN SKINNY DRUMS ARE ALLOWED, REFER TO SECTION 1180 OF STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES OR AS SHOWN IN THE PLANS.

U) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

V) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

W) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING	MARKER
US 64	POLYUREA	BY OTHERS

X) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

ROAD NAME	MARKING	MARKER
US 64	PAINT	NONE

Y) PLACE TWO APPLICATIONS OF PAINT PAVEMENT MARKINGS ON THE FINAL WEARING SURFACE. PLACE THE SECOND APPLICATION OF PAINT UPON SUFFICIENT DRYING TIME OF THE FIRST.

Z) PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE SUBSEQUENT APPLICATIONS OF PAINT AS DIRECTED BY THE ENGINEER.

AA) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

BB) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

TEMPORARY / FINAL SIGNALS

CC) SHIFT AND REVISE ALL SIGNAL HEADS AS SHOWN ON THE SIGNAL PLANS.

MISCELLANEOUS

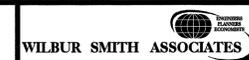
DD) POLICE MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS, AS DIRECTED BY THE ENGINEER.

EE) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAYS TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION, AS DETERMINED BY THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) 500 FT AND A MINIMUM ONE EVERY MILE IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

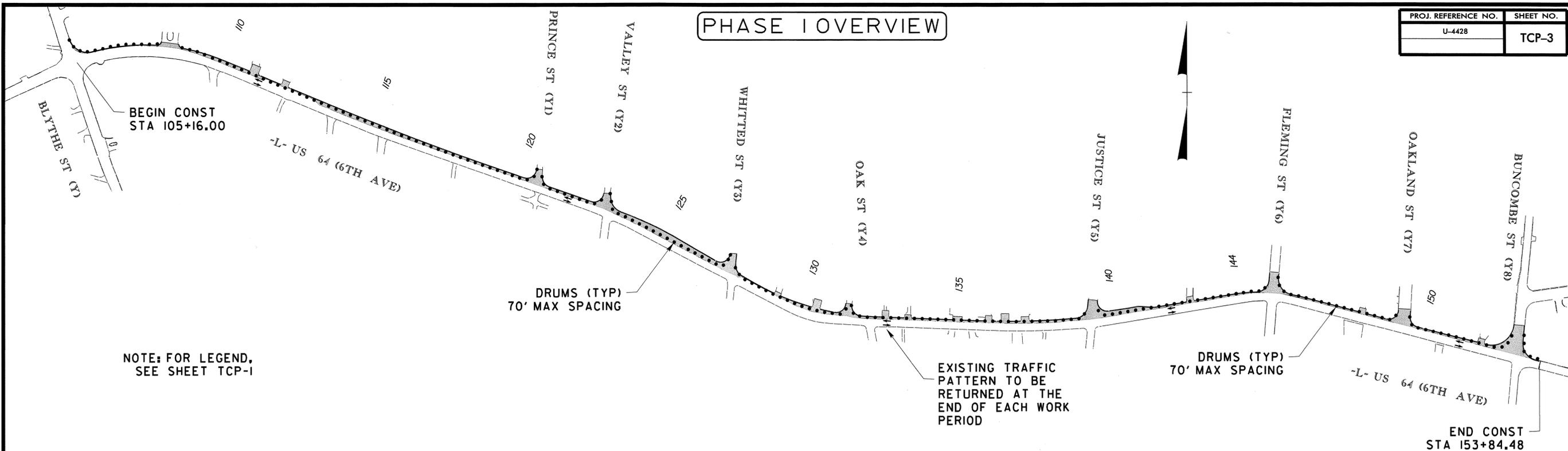
LOCAL NOTE

1) NOTIFY THE FOLLOWING 2 DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATIONS & PROVIDE DAILY UPDATES WHILE ANY ALTERED TRAFFIC PATTERNS ARE IN USE:
LESHA CORN, SHERIFF'S OFFICE DISPATCHER - 828-697-4911
EMS SUPERVISOR - 828-777-2083
MARVIN MARTIN, PARDEE HOSPITAL - 828-696-1161

2) THE CONTRACTOR SHALL PROVIDE AND MAINTAIN PEDESTRIAN SIGNAGE AT ALL INTERSECTIONS WITHIN THE LIMITS OF WORK DURING ALL PHASES OF CONSTRUCTION IN ACCORDANCE WITH MUTCD FIGURES 6H-28 AND 6H-29 OR AS DIRECTED BY THE ENGINEER. THE PEDESTRIAN TRAFFIC CONTROL PLAN SHALL BE DEVELOPED IN CONSULTATION WITH THE RESIDENT ENGINEER'S OFFICE.

APPROVED: _____	DATE: _____	PROJECT NOTES	
		 4135 Mendenhall Oaks Parkway Suite 160, High Point, NC 27265	
		SCALE: NONE	
		DATE: 4-3-08	
		DWG. BY: ML	
		DESIGN BY: RMP	
		REVIEWED BY: RMP	

PHASE I OVERVIEW



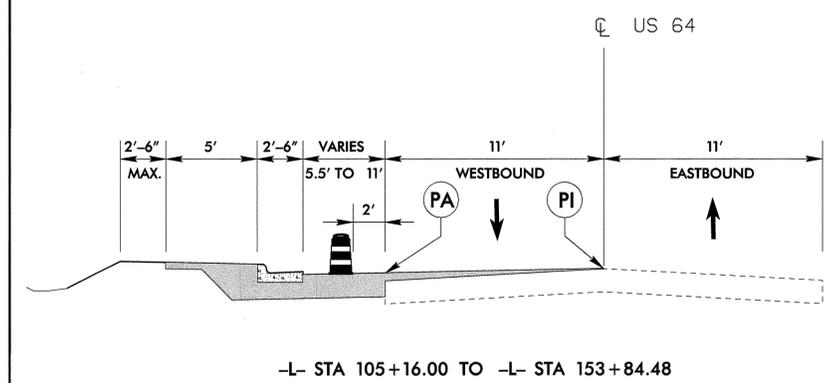
NOTE: FOR LEGEND, SEE SHEET TCP-1

PHASE I PHASING

- STEP 1 : INSTALL ALL WORK ZONE ADVANCE WARNING SIGNS AS SHOWN ON TCP-5. IF WORK IS NOT PURSUED WITHIN 3 DAYS OF SIGN INSTALLATION, COVER OR REMOVE SIGNS USING METHODS AS PRESCRIBED IN SECTION 110 OF THE STANDARD SPECIFICATIONS OR AS APPROVED BY THE ENGINEER.
- STEP 2 : USING RSD 1101.02, 1101.04 & 1101.05 AS NECESSARY, CONSTRUCT THE NORTH SIDE WIDENING OF US 64 FROM STA 105+16.00 -L- TO STA 153+84.48 (LEFT). SEE PHASE I DETAIL AND OVERVIEW ON THIS SHEET.
- BEGIN THE PROPOSED DRAINAGE ON THE NORTH SIDE OF US 64 WITHIN THE PROJECT LIMITS.
- FINAL LAYER OF SURFACE COURSE SHALL BE CONSTRUCTED AFTER PHASE II WIDENING IS COMPLETED.
- SEE SHEET TCP-2 FOR PERMISSIBLE DAYS AND TIMES FOR LANE CLOSURES. RETURN TRAFFIC TO ITS EXISTING TRAFFIC PATTERN AT THE END OF EACH WORK PERIOD.
- ADDRESS ANY SAFETY HAZARDS PRIOR TO REMOVING ALL WORK ZONE TRAFFIC CONTROL DEVICES AND WARNING SIGNS.
- STEP 3 : USING RSD 1101.03 AND OFFSITE DETOUR ON SHEET TCP-4 WHEN APPROVED, PLACE DETOUR SIGNING AND TRAFFIC CONTROL DEVICES FOR THE FIFTH AVENUE DETOUR. CONSTRUCTION USING THE PROPOSED DETOUR SHALL BE LIMITED TO WHEN REQUIRED AS APPROVED BY THE ENGINEER.
- SHIFT TRAFFIC ON TO THE PROPOSED DETOUR. CONSTRUCTION OF PHASE I WORK USING THE FIFTH AVENUE DETOUR SHALL OCCUR ON PERMISSIBLE DAYS AND TIMES FOR ROAD CLOSURES SHOWN ON SHEET TCP-2.
- FINAL LAYER OF SURFACE COURSE SHALL BE CONSTRUCTED AFTER PHASE II WIDENING IS COMPLETED.
- RETURN TRAFFIC TO ITS EXISTING TRAFFIC PATTERN AT THE END OF EACH WORK PERIOD.
- ADDRESS ANY SAFETY HAZARDS PRIOR TO REMOVING ALL WORK ZONE TRAFFIC CONTROL DEVICES.
- COVER OR REMOVE DETOUR SIGNAGE FOR PERIODS WHEN THE DETOUR ROUTE IS NOT IN OPERATION.

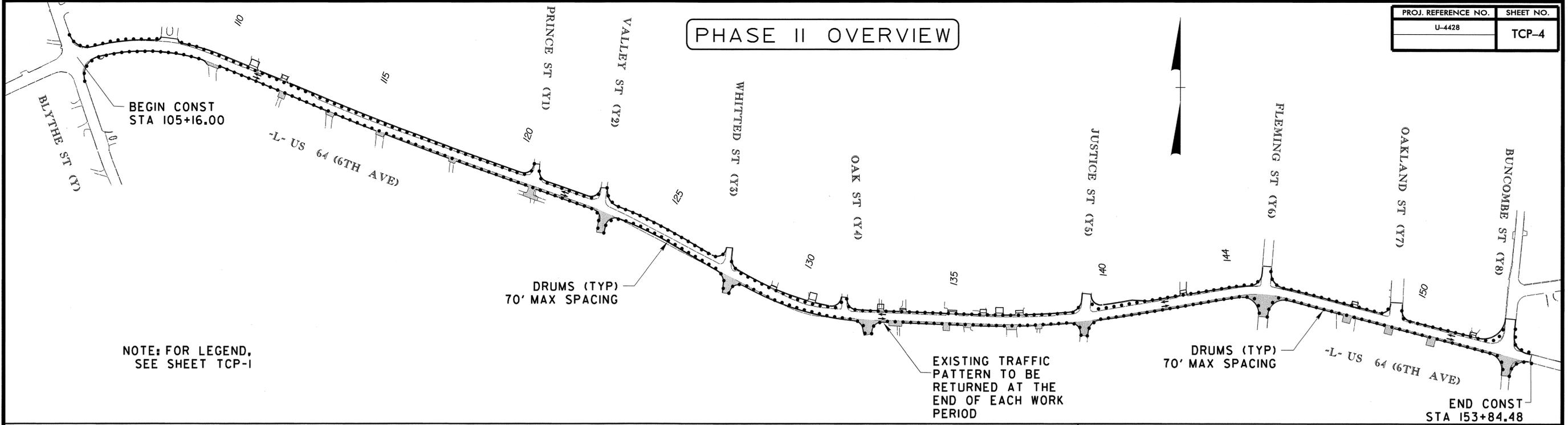
- STEP 4 : COMPLETE PROPOSED DRAINAGE, TRAFFIC SIGNALS AND UTILITY CONSTRUCTION ON THE NORTH SIDE OF US 64 CONCURRENTLY WITH PHASE I ROADWAY WORK.
- STEP 5 : COMPLETE TEMPORARY PAVEMENT MARKINGS AS NECESSARY PRIOR TO THE RETURNING TRAFFIC TO ITS EXISTING PATTERN AT THE END OF EACH WORK PERIOD.
- STEP 6 : UPON COMPLETION OF PHASE I OF THE PROJECT, ADJUST TRAFFIC CONTROL DEVICES AND WARNING SIGNS AS NECESSARY PRIOR TO BEGINNING PHASE II.

PHASE I DETAIL



- NOTES :
- USE ALTERNATING ONE LANE TRAFFIC CONTROL ON THE EXISTING EASTBOUND LANE WITH FLAGMEN AS PER RSD 1101.02 TO CONSTRUCT THE PROPOSED WIDENING SHOWN.
 - DETAIL SHOWN REFLECTS THE TRAFFIC PATTERN TO BE ESTABLISHED AT THE END OF EACH WORK PERIOD.
 - DRUM TO BE MOVED FROM ITS POSITION 1' (MIN.) LEFT OF THE CENTERLINE DURING THE ALTERNATING ONE LANE TRAFFIC PATTERN ON THE EXISTING EASTBOUND LANE TO THE POSITION SHOWN AT THE END OF EACH WORK PERIOD.

APPROVED:	DATE:	PHASE I		
	4135 Mendenhall Oaks Parkway Suite 160, High Point, NC 27265			
	SCALE: NONE	DATE: 4-3-08	REVISIONS	
	DWG. BY: ML	DESIGN BY: RMP		
REVIEWED BY: RMP	7-9-08			



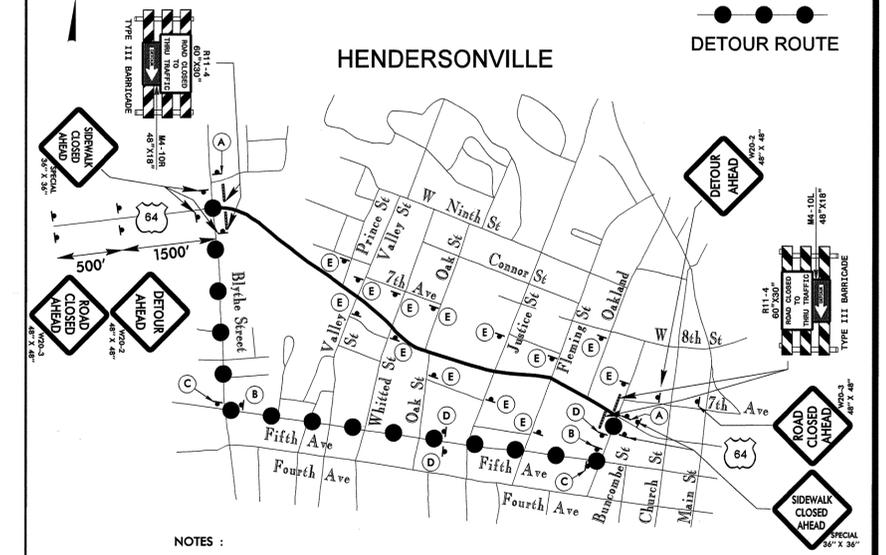
NOTE: FOR LEGEND, SEE SHEET TCP-1

PHASE II PHASING

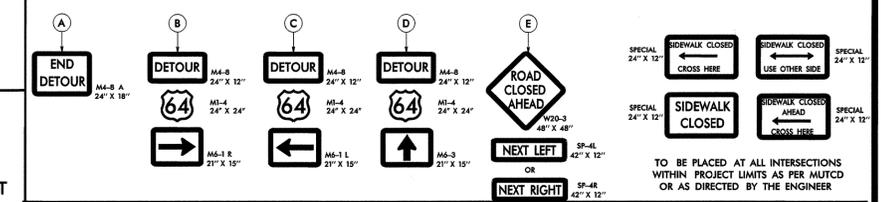
- STEP 1:** INSTALL ALL WORK ZONE ADVANCE WARNING SIGNS AS SHOWN ON TCP-5. IF WORK IS NOT PURSUED WITHIN 3 DAYS OF SIGN INSTALLATION, COVER OR REMOVE SIGNS USING METHODS AS PRESCRIBED IN SECTION III O OF THE STANDARD SPECIFICATIONS OR AS APPROVED BY THE ENGINEER.
- STEP 2:** USING RSD 1101.02, 1101.04 & 1101.05 AS NECESSARY, CONSTRUCT THE SOUTH SIDE WIDENING OF US 64 FROM STA 105+16.00 -L- TO STA 153+84.48 (RIGHT). SEE PHASE II DETAIL AND OVERVIEW ON THIS SHEET.
- BEGIN THE PROPOSED DRAINAGE ON THE SOUTH SIDE OF US 64 WITHIN THE PROJECT LIMITS.
- FINAL LAYER OF SURFACE COURSE SHALL BE CONSTRUCTED DURING STEP 6 OF PHASE II.
- SEE SHEET TCP-2 FOR PERMISSIBLE DAYS AND TIMES FOR LANE CLOSURES. RETURN TRAFFIC TO ITS EXISTING TRAFFIC PATTERN AT THE END OF EACH WORK PERIOD.
- ADDRESS ANY SAFETY HAZARDS PRIOR TO REMOVING ALL WORK ZONE TRAFFIC CONTROL DEVICES AND WARNING SIGNS.
- STEP 3:** USING RSD 1101.03 AND OFFSITE DETOUR ON THIS SHEET WHEN APPROVED, PLACE DETOUR SIGNING AND TRAFFIC CONTROL DEVICES FOR THE FIFTH AVENUE DETOUR. CONSTRUCTION USING THE PROPOSED DETOUR SHALL BE LIMITED TO WHEN REQUIRED AS APPROVED BY THE ENGINEER.
- SHIFT TRAFFIC ON TO THE PROPOSED DETOUR. CONSTRUCTION OF PHASE II WORK USING THE FIFTH AVENUE DETOUR SHALL OCCUR ON PERMISSIBLE DAYS AND TIMES FOR ROAD CLOSURES SHOWN ON SHEET TCP-2.
- FINAL LAYER OF SURFACE COURSE SHALL BE CONSTRUCTED DURING STEP 6 OF PHASE II.

- RETURN TRAFFIC TO ITS EXISTING TRAFFIC PATTERN AT THE END OF EACH WORK PERIOD.
- ADDRESS ANY SAFETY HAZARDS PRIOR TO REMOVING ALL WORK ZONE TRAFFIC CONTROL DEVICES.
- COVER OR REMOVE DETOUR SIGNAGE FOR PERIODS WHEN THE DETOUR ROUTE IS NOT IN OPERATION.
- STEP 4:** COMPLETE PROPOSED DRAINAGE, TRAFFIC SIGNALS AND UTILITY CONSTRUCTION ON THE SOUTH SIDE OF US 64 CONCURRENTLY WITH PHASE II ROADWAY WORK.
- STEP 5:** COMPLETE TEMPORARY PAVEMENT MARKINGS AS NECESSARY PRIOR TO THE RETURNING TRAFFIC TO ITS EXISTING PATTERN AT THE END OF EACH WORK PERIOD.
- STEP 6:** UPON COMPLETION OF THE PHASE II WIDENING, CONSTRUCT THE FINAL LAYER OF SURFACE COURSE FOR BOTH EASTBOUND AND WESTBOUND US 64.
- STEP 7:** INSTALL THE PERMANENT PAVEMENT MARKINGS AND SIGNING SHOWN ON SHEETS PM-1 AND PM-2 FOR BOTH EASTBOUND AND WESTBOUND US 64.
- STEP 8:** UPON COMPLETION OF THE PROJECT, REMOVE ALL TRAFFIC CONTROL DEVICES AND WARNING SIGNS.

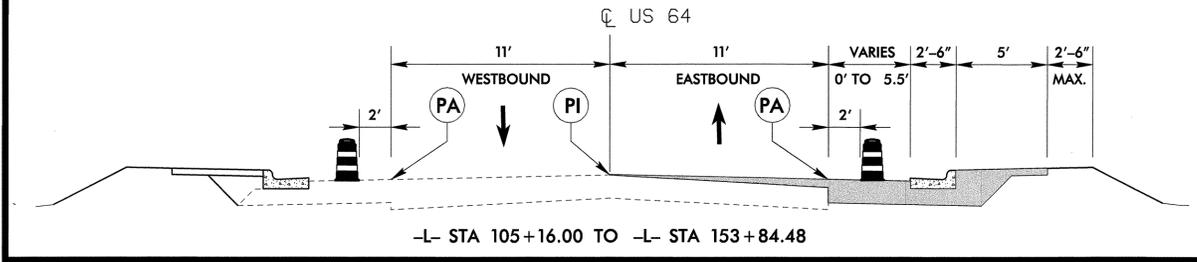
PHASE I & II FIFTH AVENUE DETOUR



- NOTES:**
- FURNISH AND ERECT ADDITIONAL TYPE III BARRICADES WITH ROAD CLOSED SIGNS AND ADDITIONAL ADVANCED WARNINGS AS PER RSD 1101.03, SHEETS 1 OR 2 OF 9, BASED ON THE LOCATION AND LENGTH OF THE WORK AREA (0.5 MILE MAX.) FOR EACH WORK PERIOD.
 - A PAY ITEM FOR POLICE IS INCLUDED IN THE CONTRACT FOR USE AS DIRECTED BY THE ENGINEER.



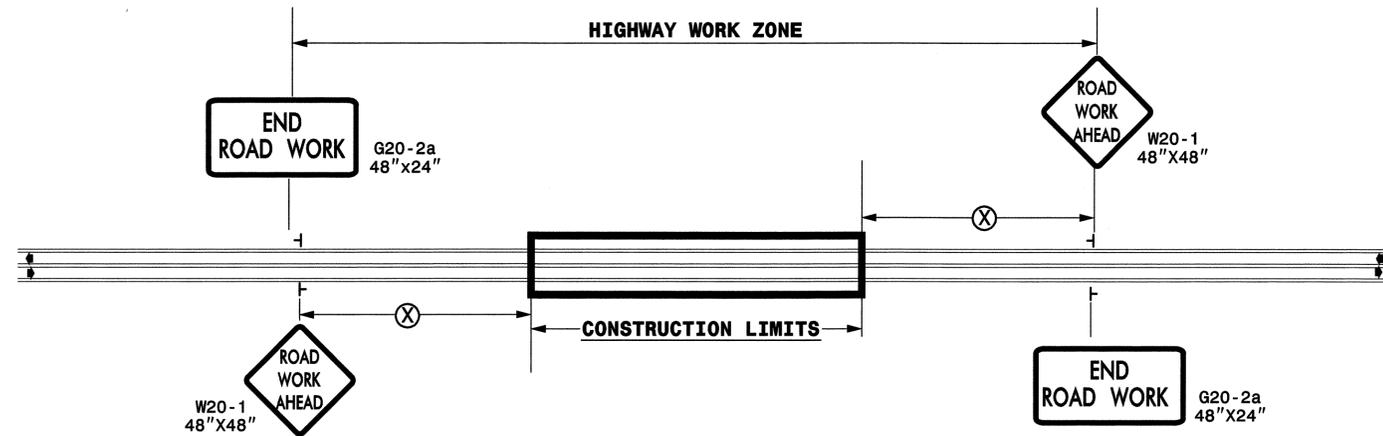
PHASE II DETAIL



- NOTES:**
- USE ALTERNATING ONE LANE TRAFFIC CONTROL ON THE EXISTING WESTBOUND LANE WITH FLAGMEN AS PER RSD 1101.02 TO CONSTRUCT THE PROPOSED WIDENING SHOWN.
 - DETAIL SHOWN REFLECTS THE TRAFFIC PATTERN TO BE ESTABLISHED AT THE END OF EACH WORK PERIOD.
 - DRUM ON EASTBOUND SIDE TO BE MOVED FROM ITS POSITION 1' (MIN.) RIGHT OF THE CENTERLINE DURING THE ALTERNATING ONE LANE TRAFFIC PATTERN ON THE EXISTING WESTBOUND LANE TO THE POSITION SHOWN AT THE END OF EACH WORK PERIOD.

APPROVED: _____	DATE: _____	PHASE II AND OFFSITE DETOUR	
		WILBUR SMITH ASSOCIATES 4135 Mendenhall Oaks Parkway Suite 160, High Point, NC 27265	
		SCALE: NONE	REVISIONS:
DATE: 4-3-08	DWG. BY: ML	DESIGN BY: RMP	REVIEWED BY: RMP

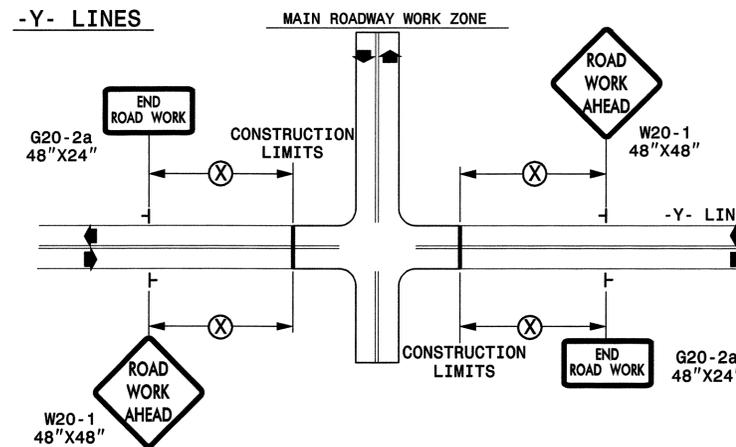
TWO-WAY UNDIVIDED ** (L-LINES)



POSTED SPEED LIMIT (M.P.H.)	RECOMMENDED MINIMUM SIGN SPACING
≤ 50	500'
≥ 55	1000'

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAYS INTERSECTING ALONG 2 WAY UNDIVIDED WORK ZONE (Y-LINES)



DETAIL DRAWING FOR
TWO-WAY UNDIVIDED
WORK ZONE WARNING SIGNS

GENERAL NOTES

- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCED WORK ZONE SIGNS.
- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- SIGNS SHOWN ARE REQUIRED FOR WORK ZONES THAT WILL REMAIN IN EFFECT OVERNIGHT. FOR SHORT-TERM DAILY MAINTENANCE TYPE OPERATIONS, THIS SIGNING APPLICATION IS OPTIONAL; MAY USE ONLY APPLICABLE ROADWAY STANDARD DRAWINGS INSTEAD. HOWEVER, IF THIS SIGNING APPLICATION IS USED, SIGNS MAY BE PORTABLE MOUNTED.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- USE 3LB STEEL U-CHANNEL POST OR 4" X 4" WOOD POST FOR ALL WORK ZONE SIGNS. 3LB STEEL U-CHANNEL POSTS MUST MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 1094-1(B), MAY BE GALVANIZED STEEL, OR MAY BE PAINTED GREEN BY THE POST MANUFACTURER. SQUARE STEEL TUBING POSTS HAVING EQUIVALENT STRENGTH OF THE 3 LB STEEL U-CHANNEL POST ARE ALSO ACCEPTABLE FOR USE. ERECT SIGNS PER ROADWAY STANDARD DRAWING 1110.01. PAYMENT FOR WOOD POSTS, 3LB STEEL U-CHANNEL AND SQUARE STEEL TUBING POSTS WITH SIGNS WILL BE MADE ACCORDING TO STANDARD SPECIFICATION "WORK ZONE SIGNS" SECTION 1110.
- WHEN NECESSARY, USE SPLICING IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1110.01. REMOVE ENTIRE POST WHEN REMOVING SIGNS WITH SPLICED POSTS.
- DO NOT BACK BRACE SIGN SUPPORTS.
- ** TWO-WAY UNDIVIDED ADVANCE WARNING SIGN CONFIGURATION MAY BE USED ON URBAN MULTI-LANE FACILITIES WHERE CONDITIONS LIMIT THE USE OF DUAL MOUNTED SIGNS AS DETERMINED BY THE ENGINEER.

LEGEND

└	STATIONARY SIGN
◀	DIRECTION OF TRAFFIC FLOW

SHEET 1 OF 1

APPROVED: _____ DATE: _____	DETAIL DRAWING FOR TWO-WAY UNDIVIDED AND URBAN FREEWAYS ADVANCED WORK ZONE WARNING SIGNS		
	SCALE: NONE		
	DATE: _____		REVISIONS
	DWG. BY: _____		7-98 10/01
	DESIGN BY: _____		10-98 03/04
REVIEWED BY: _____	01/01 11/04	CADD FILE	