PERFORMANCE ACTIVITY 603

SIGNS

WORK DESCRIPTION 3  New Install
WORK DESCRIPTION 4  Maintenance / Replace
WORK DESCRIPTION 6  Temporary
ACTIVITY DESCRIPTION

Install new signs and maintain and replace existing signs.

WORK DESCRIPTION 3  New Install
WORK DESCRIPTION 4  Maintenance / Replace
WORK DESCRIPTION 6  Temporary

TRAFFIC CONTROL

TWO-LANE TWO-WAY ROADWAYS

Utilize intermittent mobile operations for these work activities under the following conditions:

**Condition 1** - The maximum time duration of a stop is 15 minutes if the work vehicle and/or the shadow vehicle encroach upon a travel lane more than 2 feet.

**Condition 2** - The maximum time duration of a stop is 30 minutes if the work vehicle and/or the shadow vehicle encroach upon a travel lane 2 feet or less.

During intermittent mobile operations, utilize a shadow vehicle when the stopping sight distance interval between the work vehicle or road machinery and an approaching motorist is unavailable based upon the posted regulatory speed limit of the work location.

Flagging operations are required for work activities that cannot be conducted under the conditions required for intermittent mobile operations.

TYPICAL DRAWING APPLICATIONS

FLAGGING OPERATIONS

**DRAWING 405-01-A** -  FLAGGING OPERATIONS
MULTIPLE FLAGGERS
TWO-LANE TWO-WAY ROADWAYS
PRIMARY & SECONDARY ROUTES

**DRAWING 405-01-B(1)** -  FLAGGING OPERATIONS
MULTIPLE FLAGGERS
TWO-LANE TWO-WAY ROADWAYS
PRIMARY & SECONDARY ROUTES
STOP SIGN CONTROLLED SIDE ROADS

**DRAWING 405-01-B(2)** -  FLAGGING OPERATIONS
MULTIPLE FLAGGERS
TWO-LANE TWO-WAY ROADWAYS
PRIMARY & SECONDARY ROUTES
4-WAY STOP CONTROLLED INTERSECTION

**DRAWING 405-01-C(1)** -  FLAGGING OPERATIONS
MULTIPLE FLAGGERS
TWO-LANE TWO-WAY ROADWAYS
PRIMARY & SECONDARY ROUTES
TRAFFIC SIGNAL CONTROLLED INTERSECTION
LAW ENFORCEMENT OFFICER(S)

**DRAWING 405-01-C(2)** -  FLAGGING OPERATIONS
MULTIPLE FLAGGERS
TWO-LANE TWO-WAY ROADWAYS
PRIMARY & SECONDARY ROUTES
TRAFFIC SIGNAL CONTROLLED INTERSECTION
FLAGGERS
DRAWING 405-01-D(1) - FLAGGING OPERATIONS
MULTIPLE FLAGGERS
TWO-LANE TWO-WAY ROADWAYS
PRIMARY & SECONDARY ROUTES
WORK ACTIVITY AREA
BEGINNING at an
INTERSECTION with a
TWO-LANE TWO-WAY ROADWAY
DEPARTURE LANE

DRAWING 405-01-D(2) - FLAGGING OPERATIONS
MULTIPLE FLAGGERS
TWO-LANE TWO-WAY ROADWAYS
PRIMARY & SECONDARY ROUTES
WORK ACTIVITY AREA
TERMINATING at an
INTERSECTION with a
TWO-LANE TWO-WAY ROADWAY
APPROACH LANE

DRAWING 405-01-E(1)
DRAWING 405-01-E(2) - FLAGGING OPERATIONS
MULTIPLE FLAGGERS
TWO-LANE TWO-WAY ROADWAYS
PRIMARY & SECONDARY ROUTES
WORK ACTIVITY AREA
INTERSECTIONS with
LOW SPEED
< / = 35 MPH
MULTILANE ROADWAYS

DRAWING 405-01-F(1)
DRAWING 405-01-F(2) - FLAGGING OPERATIONS
MULTIPLE FLAGGERS
TWO-LANE TWO-WAY ROADWAYS
PRIMARY & SECONDARY ROUTES
WORK ACTIVITY AREA
INTERSECTIONS with
INTERMEDIATE SPEED to HIGH SPEED
40 MPH - 60 MPH
MULTILANE ROADWAYS

DRAWING 405-02 - FLAGGING OPERATIONS
SINGLE FLAGGER OPERATION
LOW VOLUME
LOW SPEED TO INTERMEDIATE SPEED
TWO-LANE TWO-WAY ROADWAYS
PRIMARY & SECONDARY ROUTES

MOBILE OPERATIONS – INTERMITTENT

DRAWING 535-01-A - MOBILE OPERATIONS – INTERMITTENT
STOPPING SIGHT DISTANCE
VEHICLE TRAIN REQUIREMENTS
VERTICAL CURVE (HILL)

DRAWING 535-01-B - MOBILE OPERATIONS – INTERMITTENT
STOPPING SIGHT DISTANCE
VEHICLE TRAIN REQUIREMENTS
HORIZONTAL CURVE (CURVE)

DRAWING 535-02-A - MOBILE OPERATIONS – INTERMITTENT
LOW VOLUME
LOW SPEED
PRIMARY & SECONDARY ROUTES
MULTILANE SECONDARY AND PRIMARY ROADWAYS

Utilize intermittent mobile operations for these work activities under the following conditions:

Condition 1 - The maximum time duration of a stop is 15 minutes if the work vehicle and/or the shadow vehicle encroach upon a travel lane more than 2 feet.

Condition 2 - The maximum time duration of a stop is 30 minutes if the work vehicle and/or the shadow vehicle encroach upon a travel lane 2 feet or less.

During intermittent mobile operations, utilize a shadow vehicle when the stopping sight distance interval between the work vehicle or road machinery and an approaching motorist is unavailable based upon the posted regulatory speed limit of the work location.

Lane closures are required for work activities that cannot be conducted under the conditions required for intermittent mobile operations as stated above.

TYPICAL DRAWING APPLICATIONS

LANE CLOSURES

DRAWING 505-01 - LANE CLOSURE
LOW SPEED MULTILANE
< / = 35 MPH
PRIMARY & SECONDARY ROUTES

DRAWING 505-03-A - LANE CLOSURE
INTERMEDIATE SPEED TO HIGH SPEED
40 MPH - 60 MPH
MULTILANE
PRIMARY & SECONDARY ROUTES
MOBILE OPERATIONS - INTERMITTENT

DRAWING 535-01-A - MOBILE OPERATIONS - INTERMITTENT STOPPING SIGHT DISTANCE VEHICLE TRAIN REQUIREMENTS VERTICAL CURVE (HILL)

DRAWING 535-01-B - MOBILE OPERATIONS - INTERMITTENT STOPPING SIGHT DISTANCE VEHICLE TRAIN REQUIREMENTS HORIZONTAL CURVE (CURVE)

DRAWING 535-03-A - MOBILE OPERATIONS - INTERMITTENT INTERMEDIATE VOLUME LOW SPEED PRIMARY & SECONDARY ROUTES

DRAWING 535-03-B - MOBILE OPERATIONS - INTERMITTENT INTERMEDIATE VOLUME INTERMEDIATE SPEED TO HIGH SPEED PRIMARY & SECONDARY ROUTES

DRAWING 535-04-A - MOBILE OPERATIONS - INTERMITTENT HIGH VOLUME LOW SPEED PRIMARY & SECONDARY ROUTES

DRAWING 535-04-B - MOBILE OPERATIONS - INTERMITTENT HIGH VOLUME LOW SPEED INTERIOR TRAVEL LANE OPERATIONS PRIMARY & SECONDARY ROUTES

DRAWING 535-04-C - MOBILE OPERATIONS - INTERMITTENT HIGH VOLUME INTERMEDIATE SPEED TO HIGH SPEED PRIMARY & SECONDARY ROUTES

INTERSTATE ROADWAYS

Utilize intermittent mobile operations for these work activities under the following conditions:

**Condition 1** - The maximum time duration of a stop is 5 minutes if the work vehicle and/or the shadow vehicle encroach upon an adjacent travel lane due to a shoulder area inadequate to accommodate a vehicle in its entirety due to the presence of a concrete median barrier wall or a bridge parapet wall.

**Condition 2** - The maximum time duration of a stop is 30 minutes if the vehicles remain in the shoulder areas in their entirety with no encroachment upon an adjacent travel lane.

During intermittent mobile operations, utilize a shadow vehicle when the stopping sight distance interval between the work vehicle or road machinery and an approaching motorist is unavailable based upon the posted regulatory speed limit of the work location.

Standard shoulder closures may be used for work activities that cannot be conducted under the conditions required for intermittent mobile operations when the work may be performed without the necessity for equipment, personnel, materials, or vehicles to encroach within 10 feet of the adjacent travel or without creating a hazard to passing motorists.

Lane closures are required for work activities that cannot be conducted under the conditions required for intermittent mobile operations or standard shoulder closures. Lane closures are required for work activities that require equipment, personnel, materials, or any vehicles to encroach upon a travel lane or within 10 feet of a travel lane.

( Brief periodic encroachments upon the adjacent travel lane for the equipment to relocate or bypass structures such as guardrail locations or bridge structures are acceptable. )

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TYPICAL DRAWING APPLICATIONS

LANE CLOSURES

DRAWING 510-01-A - LANE CLOSURE
INTERSTATE ROUTES

DRAWING 510-01-B - LANE CLOSURE
EXIT / ENTRANCE RAMPS
INTERSTATE ROUTES

SHOULDER CLOSURES

DRAWING 520-01 - RIGHT SHOULDER CLOSURE
CASE I / CASE II
INTERSTATE ROUTES

DRAWING 520-02 - LEFT SHOULDER CLOSURE
CASE I / CASE I
NARROW MEDIAN
INTERSTATE ROUTES

DRAWING 520-03 - LEFT SHOULDER CLOSURE
CASE I / CASE I
WIDE MEDIAN
INTERSTATE ROUTES

DRAWING 520-04 - LEFT SHOULDER CLOSURE
CASE I / CASE II
WIDE MEDIAN
INTERSTATE ROUTES

DRAWING 520-05 - LEFT SHOULDER CLOSURE
CASE II / CASE II
WIDE MEDIAN
INTERSTATE ROUTES

DRAWING 520-06 - SHOULDER CLOSURE
GORE AREA
INTERSTATE ROUTES

MOBILE OPERATIONS - INTERMITTENT

DRAWING 535-01-A - MOBILE OPERATIONS - INTERMITTENT
STOPPING SIGHT DISTANCE
VEHICLE TRAIN REQUIREMENTS
VERTICAL CURVE (HILL)

DRAWING 535-01-B - MOBILE OPERATIONS - INTERMITTENT
STOPPING SIGHT DISTANCE
VEHICLE TRAIN REQUIREMENTS
HORIZONTAL CURVE (CURVE)

DRAWING 535-04-D(1) - MOBILE OPERATIONS - INTERMITTENT
HIGH VOLUME
HIGH SPEED
INTERSTATE ROUTES

DRAWING 535-04-E - MOBILE OPERATIONS - INTERMITTENT
HIGH VOLUME
HIGH SPEED
INTERIOR TRAVEL LANE OPERATIONS
INTERSTATE ROUTES