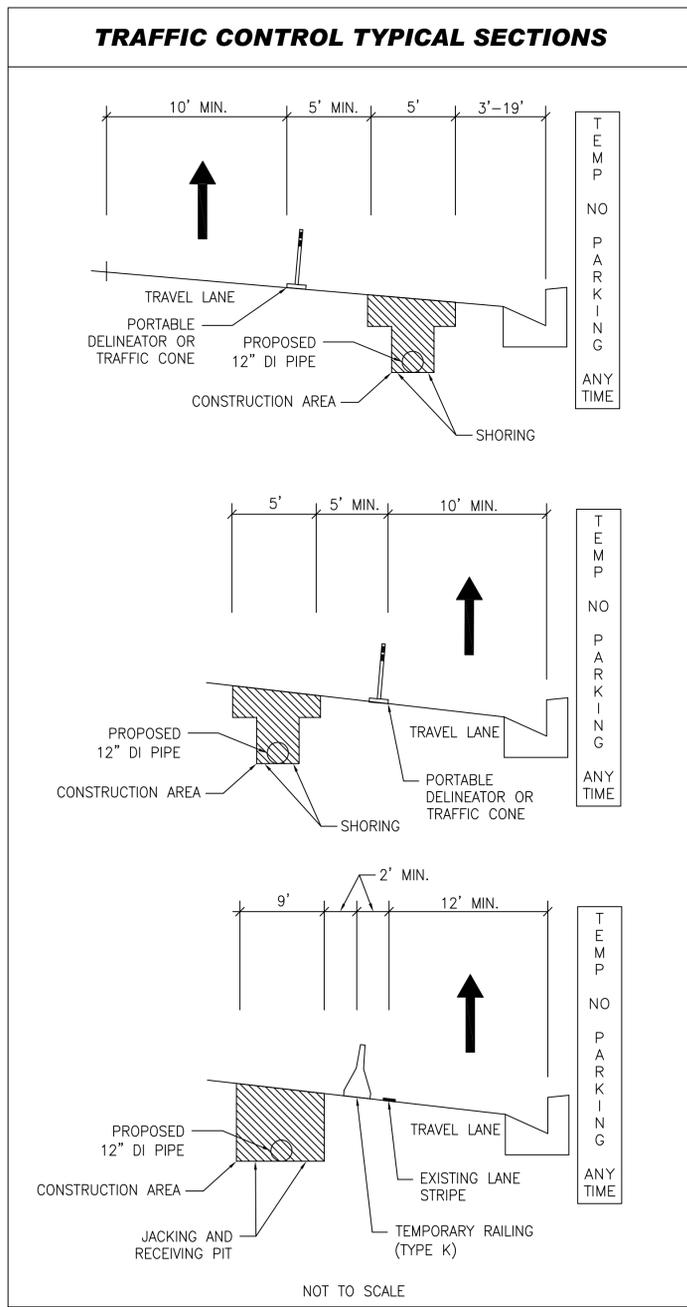
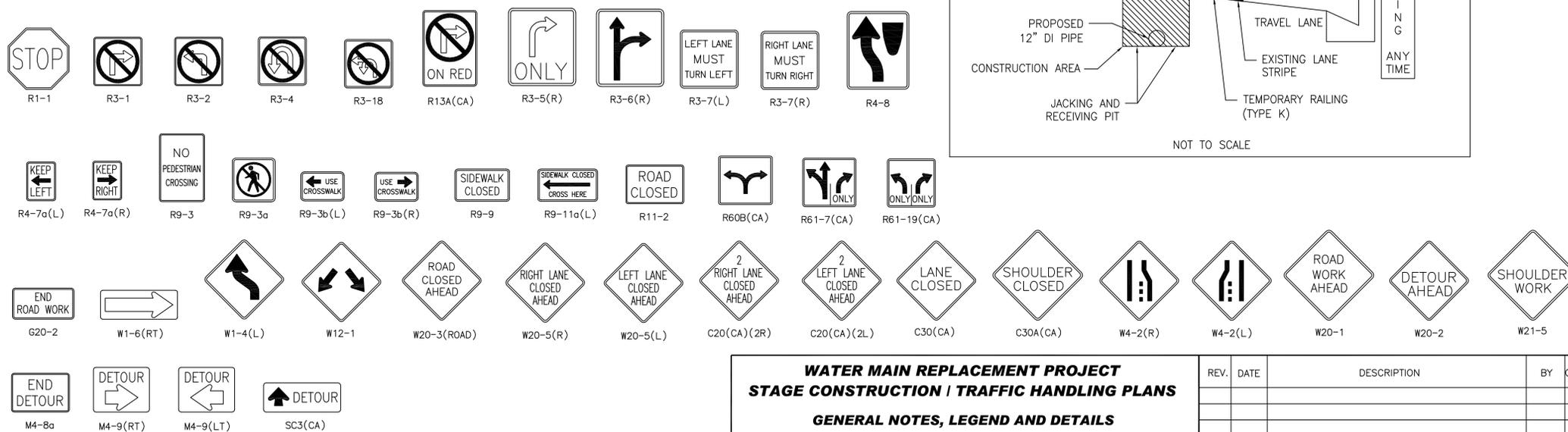


TRAFFIC CONTROL GENERAL NOTES:

- ALL TRAFFIC CONTROL, SIGNING, AND STRIPING WORK FOR CONSTRUCTION SHALL CONFORM TO CALTRANS STANDARD PLANS (DATED MAY 2006) AND SPECIFICATIONS (DATED MAY 2006), AND CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) (DATED SEPTEMBER 2006).
- EXACT LOCATION OF ALL TRAFFIC CONTROL DEVICES SHALL BE AS DIRECTED BY ENGINEER BASED ON CONSTRUCTION CONDITIONS. ADDITIONAL WARNING OR CONSTRUCTION SIGNS MAY BE REQUIRED BY THE ENGINEER.
- ALL NIGHT TIME WORK SHALL BE APPROVED IN ADVANCE BY THE ENGINEER.
- STREET CLOSURES SHALL BE APPROVED BY THE ENGINEER AND CALTRANS WHENEVER APPLICABLE. DETOUR PLANS SHALL BE SUBMITTED AND APPROVED BY THE CITY AND CALTRANS WHENEVER APPLICABLE. RESIDENTS/BUSINESSES SHALL BE NOTIFIED ONE WEEK PRIOR TO CONSTRUCTION.
- PRESSURE SENSITIVE DETOUR GRADE TRAFFIC MARKING TAPE AND/OR TEMPORARY FLEXIBLE RAISED PAVEMENT MARKERS MAY BE REQUIRED TO SUPPLEMENT THE CHANNELIZING DEVICES, DRUMS, REFLECTORIZED SIGNS, PAINT, AND BARRICADES AS DIRECTED BY THE ENGINEER.
- ALL CONFLICTING STRIPES, PAVEMENT MARKINGS, AND LEGENDS SHALL BE COMPLETELY REMOVED BY WET SANDBLASTING OR GRINDING PRIOR TO ANY CHANGE IN THE TRAFFIC PATTERN. NO CONFLICTING STRIPES, PAVEMENT MARKINGS OR LEGENDS SHALL BE BLACKED OUT WITH PAINT.
- ALL ADVANCE WARNING SIGN INSTALLATIONS SHALL BE EQUIPPED WITH FLAGS FOR DAYTIME CLOSURES.
- ALL SIGNS SHALL BE REFLECTORIZED AND STANDARD SIZE, UNLESS NOTED OTHERWISE. ALL W20-1, W20-5, AND W4-2 SIGNS SHALL BE 48" x 48".
- ALL DELINEATORS (MINIMUM 36" HEIGHT) AND CONES (28" HEIGHT) SHALL BE PORTABLE, RETROREFLECTORIZED WITH WHITE SLEEVES, WITH WEIGHTED BASES OR BALLAST RINGS. DELINEATORS AND CONES SHALL BE KEPT IN THEIR PROPER POSITION AT ALL TIMES, AND SHALL BE REPAIRED, REPLACED OR CLEANED AS NECESSARY TO PRESERVE THEIR APPEARANCE AND CONTINUITY.
- TYPE II BARRICADES MAY BE USED IN ADDITION TO THE PORTABLE DELINEATORS AND TRAFFIC CONES, AT THE DISCRETION OF THE CONTRACTOR, WHEN THEY ARE INTENDED TO PROVIDE ADDITIONAL EMPHASIS IN AREAS WHERE WORKERS ARE PRESENT.
- USE AND PLACEMENT OF FLASHING ARROW BOARD(S) AND CHANGEABLE MESSAGE SIGN(S) SHALL BE AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL MAINTAIN, ON A 24-HOUR BASIS, ALL SIGNS, DELINEATORS, CONES, BARRICADES, ETC., TO ENSURE PROPER FLOW AND SAFETY OF TRAFFIC.
- THE CONTRACTOR SHALL UTILIZE FLAGGERS DURING WORK HOURS AS DEEMED NECESSARY BY THE ENGINEER.
- THE CONTRACTOR SHALL HAVE ALL SIGNS, DELINEATORS, CONES, BARRICADES, ETC., PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION AND BEFORE ATTEMPTING TO SWITCH TO A SUBSEQUENT PHASE DURING WORK HOURS.
- CONSTRUCTION OPERATIONS SHALL BE CONDUCTED IN SUCH A MANNER AS TO CAUSE AS LITTLE INCONVENIENCE AS POSSIBLE TO ADJUTING BUSINESSES AND PROPERTY OWNERS.
- CONSTRUCTION TRUCK TRAFFIC MERGING INTO TRAFFIC LANES SHALL BE DONE BY USE OF FLAGGER AND APPROPRIATE SIGNAGE AS DIRECTED BY ENGINEER.
- FLASHING ARROW SIGNS (F.A.S.) AND PORTABLE CHANGEABLE MESSAGE SIGNS (P.C.M.S.) SHALL CONFORM TO THE SPECIAL PROVISIONS AND BE EITHER SOLAR OR BATTERY OPERATED. GASOLINE AND DIESEL POWERED F.A.S. AND P.C.M.S. ARE PROHIBITED.
- ALL STRIPING AND PAVEMENT MARKINGS SHALL BE REFLECTORIZED PER CALTRANS SPECIFICATIONS UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL BE REQUIRED TO REPLACE STRIPING AND MARKINGS IN KIND AFTER THE COMPLETION OF EACH PHASE OF CONSTRUCTION.
- DAYTIME WATER MAIN CONSTRUCTION ACTIVITY ALONG WESTERN AVENUE SHALL BE LIMITED TO THE HOURS BETWEEN 9:00 am - 3:00 pm FOR ALL WORK OF INTERSECTIONS UNLESS PERMITTED OTHERWISE BY THE CITY AND CALTRANS. DAYTIME WATER MAIN CONSTRUCTION ACTIVITY ALONG ROLLING HILLS ROAD SHALL BE LIMITED TO HOURS BETWEEN 8:30 am - 3:00 pm UNLESS PERMITTED OTHERWISE BY THE CITY.
- NIGHT TIME WATER MAIN CONSTRUCTION ACTIVITY ALONG WESTERN AVENUE SHALL BE LIMITED TO THE HOURS BETWEEN 9:00 pm - 5:00 am FOR WORK WITHIN INTERSECTIONS AND THE BORING/JACKING OPERATIONS IN STAGE 2A UNLESS PERMITTED OTHERWISE BY THE CITY AND CALTRANS. NIGHTTIME PAVEMENT CONSTRUCTION ACTIVITY ALONG WESTERN AVENUE SHALL BE LIMITED TO HOURS BETWEEN 7:00 pm - 5:30 am UNLESS PERMITTED OTHERWISE BY THE CITY AND CALTRANS.
- ALL TRENCH EXCAVATION WITHIN THIS AREA SHALL BE COVERED WITH STEEL PLATES DURING NON-WORKING HOURS.
- CONTRACTOR SHALL MAINTAIN A MINIMUM 4:1 SLOPE AT EDGE OF EXCAVATIONS NEAR TRAFFIC DURING NON-CONSTRUCTION HOURS UNLESS AN ALTERNATE METHOD IS APPROVED BY THE ENGINEER.
- NO TWO CONSECUTIVE CROSS STREETS SHALL BE CLOSED FOR CONSTRUCTION SIMULTANEOUSLY.
- THE CONTRACTOR SHALL PROVIDE A MINIMUM OF TWO PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) TO BE IN USE FOR THE DURATION OF WATER MAIN REPLACEMENT WORK. USE, PLACEMENT AND FLASHING MESSAGE TEXT SHALL BE AS DIRECTED BY THE ENGINEER. PAYMENT IS INCLUDED IN THE UNIT PRICE FOR "PORTABLE CHANGEABLE MESSAGE SIGNS".
- SINGLE LANE CLOSURE SHALL CONFORM TO CITY OF TORRANCE STANDARD PLANS.
- EXISTING TRAFFIC SIGNALS SHALL BE IN OPERATION AT ALL TIMES AT SIGNALIZED INTERSECTIONS.

CONSTRUCTION SIGNS LEGEND:



LEGEND:

- ++ TYPE II BARRICADE (WITH SIGN AS NOTED ON PLAN)
- +++ TYPE III BARRICADE (WITH SIGN AS NOTED ON PLAN)
- ▲- TEMPORARY SIGN (AS NOTED ON PLAN)
- EXISTING SIGN (ONE POST) (AS NOTED ON PLAN)
- EXISTING SIGN (TWO POST) (AS NOTED ON PLAN)
- 28" CONSTRUCTION CONES OR 36" PORTABLE DELINEATORS
- ← DIRECTION OF TRAVEL
- ⚡ FLASHING ARROW BOARD SIGN (FAS)
- Y FLAG TREE (SIGN AS NOTED ON PLAN)
- △ TEMPORARY SIGNING AND STRIPING ANGLE POINT
- 12' CONSTRUCTION LANE DIMENSION
- (12') EXISTING LANE DIMENSION
- 🚧 FLAGGER
- ▨ WATER MAIN CONSTRUCTION WORK AREA
- ▩ WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT CONSTRUCTION WORK AREA
- ▧ PAVEMENT CONSTRUCTION WORK AREA

CONSTRUCTION NOTES:

- EXISTING SIGN AND/OR STRIPING TO REMAIN.
- PROVIDE TEMPORARY STRIPING, CONSTRUCTION SIGN, BARRICADES, CONSTRUCTION CONES, PORTABLE DELINEATORS, FLASHING ARROW SIGN, TEMPORARY K-RAIL OR TEMPORARY CRASH CUSHIONS MODULE (ARRAY PER PLAN).
- CONTRACTOR SHALL MAINTAIN ACCESS FOR PEDESTRIAN CROSSING AT ALL TIMES.
- CONTRACTOR SHALL CONTACT TRANSIT AGENCY A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF ANY TRAFFIC CONTROL AFFECTING A BUS STOP OR SERVICE.
- CONSTRUCT WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT PER SINGLE LANE CLOSURE. SINGLE LANE CLOSURE SHALL CONFORM TO CITY OF TORRANCE STANDARD PLANS.
- CONTRACTOR SHALL MAINTAIN DAYTIME DRIVEWAY ACCESS.
- REMOVE (GRIND) EXISTING DETAIL 40 PAVEMENT MARKING. RESTORE IN KIND WITH THERMOPLASTIC PAINT AFTER COMPLETION OF WORK.
- CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS AT ALL TIMES.
- TEMPORARY "NO PARKING-TOW AWAY" SIGNS SHALL BE POSTED WITHIN AFFECTED CONSTRUCTION AREAS A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
- COVER SIGN DURING CONSTRUCTION.

SC-01

WATER MAIN REPLACEMENT PROJECT
STAGE CONSTRUCTION / TRAFFIC HANDLING PLANS
GENERAL NOTES, LEGEND AND DETAILS

REV. DATE DESCRIPTION BY CHECKED

DIGALERT
 DIAL TOLL FREE 1-800-227-2600
 AT LEAST TWO DAYS BEFORE YOU DIG
 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

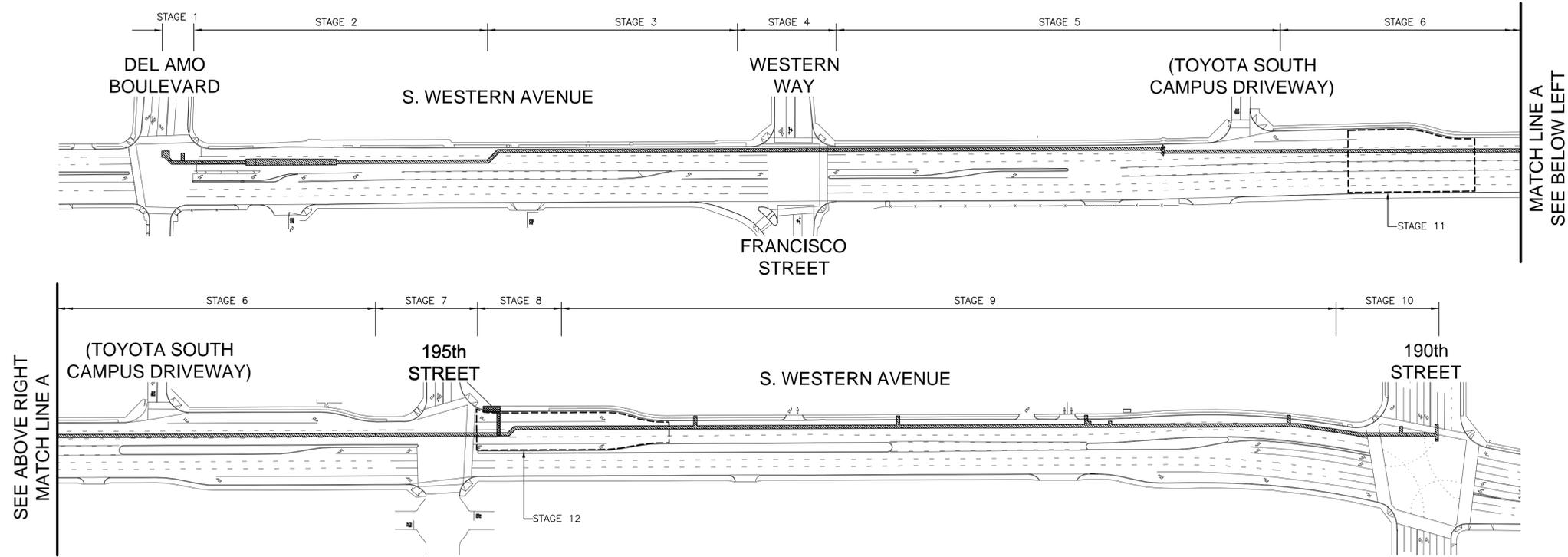
RBF CONSULTING
 PLANNING ■ DESIGN ■ CONSTRUCTION
 14725 ALTON PARKWAY
 IRVINE, CALIFORNIA 92618-2027
 949.472.3505 • FAX 949.472.8373 • www.RBF.com

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: CM
 DESIGNED: CM

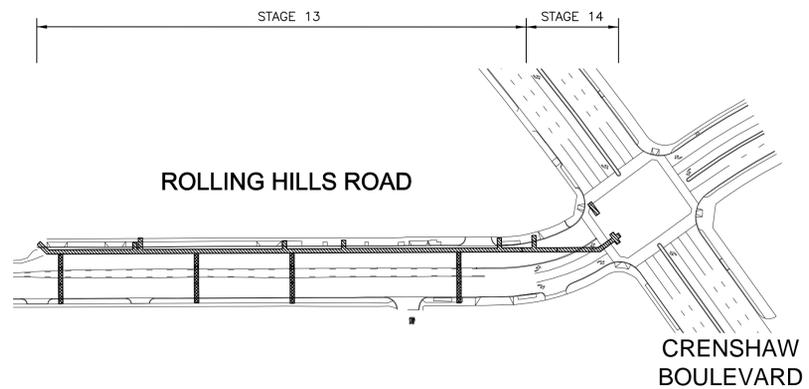
APPROVED: _____
 JOHN C. DETTLE DATE
 ACTING CITY ENGINEER
 R.C.E. NO. 51438 EXP. 06/30/12

SCALE: AS SHOWN SHEET 11 OF 40
 PLAN NO. **WP-291**



SEE ABOVE RIGHT
MATCH LINE A

MATCH LINE A
SEE BELOW LEFT



CONSTRUCTION STAGING SEQUENCE:

- STAGE 1: CONSTRUCT WATER MAIN ALONG THE WEST SIDE OF S. WESTERN AVENUE AT DEL AMO BOULEVARD/S. WESTERN AVENUE INTERSECTION.
 - STAGE 2: CONSTRUCT WATER MAIN ALONG THE WEST SIDE OF S. WESTERN AVENUE FROM STA 10+60 TO STA 15+00.
 - STAGE 3: CONSTRUCT WATER MAIN ALONG THE WEST SIDE OF S. WESTERN AVENUE FROM STA 15+00 TO STA 18+80.
 - STAGE 4: CONSTRUCT WATER MAIN ALONG THE WEST SIDE OF S. WESTERN AVENUE AT FRANCISCO STREET/S. WESTERN AVENUE INTERSECTION.
 - STAGE 5: CONSTRUCT WATER MAIN ALONG THE WEST SIDE OF S. WESTERN AVENUE FROM STA 20+35 TO STA 27+20.
 - STAGE 6: CONSTRUCT WATER MAIN ALONG THE WEST SIDE OF S. WESTERN AVENUE FROM STA 27+20 TO STA 35+80.
 - STAGE 7: CONSTRUCT WATER MAIN ALONG THE WEST SIDE OF S. WESTERN AVENUE AT 195th STREET/S. WESTERN AVENUE INTERSECTION.
 - STAGE 8: CONSTRUCT WATER MAIN ALONG THE WEST SIDE OF S. WESTERN AVENUE FROM STA 37+35 TO STA 38+65.
 - STAGE 9: CONSTRUCT WATER MAIN ALONG THE WEST SIDE OF S. WESTERN AVENUE FROM STA 38+65 TO STA 50+50.
 - STAGE 10: CONSTRUCT WATER MAIN ALONG THE WEST SIDE OF S. WESTERN AVENUE AT 190th STREET/S. WESTERN AVENUE INTERSECTION.
 - STAGE 11: RECONSTRUCT STRUCTURAL PAVEMENT SECTION ALONG S. WESTERN AVENUE FROM STA 28+25 TO STA 30+20.
 - STAGE 12: GRIND AND OVERLAY PAVEMENT SECTION ALONG S. WESTERN AVENUE FROM STA 37+35 TO STA 40+30.
 - STAGE 13: CONSTRUCT WATER MAIN AND LATERALS ALONG ROLLING HILLS ROAD FROM STA 92+75 TO STA 98+50.
 - STAGE 14: CONSTRUCT WATER MAIN ALONG ROLLING HILLS ROAD FROM STA 98+50 TO STA 99+65.
- NOTE: THE FINAL TYPE 2 SLURRY SEAL LANE LINE TO LANE LINE WITH 2.5% LATEX ADDITIVE COATING REQUIRED IN EACH CONSTRUCTION STAGE SHALL BE APPLIED ONLY AFTER ALL STAGES ARE COMPLETED. SEE NOTE 3B IN THE CITY OF TORRANCE STANDARD PLAN NO. T116-2 FOR DETAILS.



TRAFFIC CONTROL NOTES (THIS SHEET):

- 1. FOR TRAFFIC CONTROL GENERAL NOTES, CONSTRUCTION NOTES, LEGENDS AND DETAILS SEE SHEET SC-01.

SC-02

**WATER MAIN REPLACEMENT PROJECT
STAGE CONSTRUCTION / TRAFFIC HANDLING PLANS
CONSTRUCTION STAGING SEQUENCE PLAN**

REV.	DATE	DESCRIPTION	BY	CHECKED

**CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT**

APPROVED:	
DRAWN: CM	
DESIGNED: CM	
PROJECT ENGINEER: _____	JOHN C. DETTLE DATE ACTING CITY ENGINEER R.C.E. NO. 51438 EXP. 06/30/12
ENGINEERING MANAGER: _____	SCALE: AS SHOWN SHEET 12 OF 40 PLAN NO. WP-291



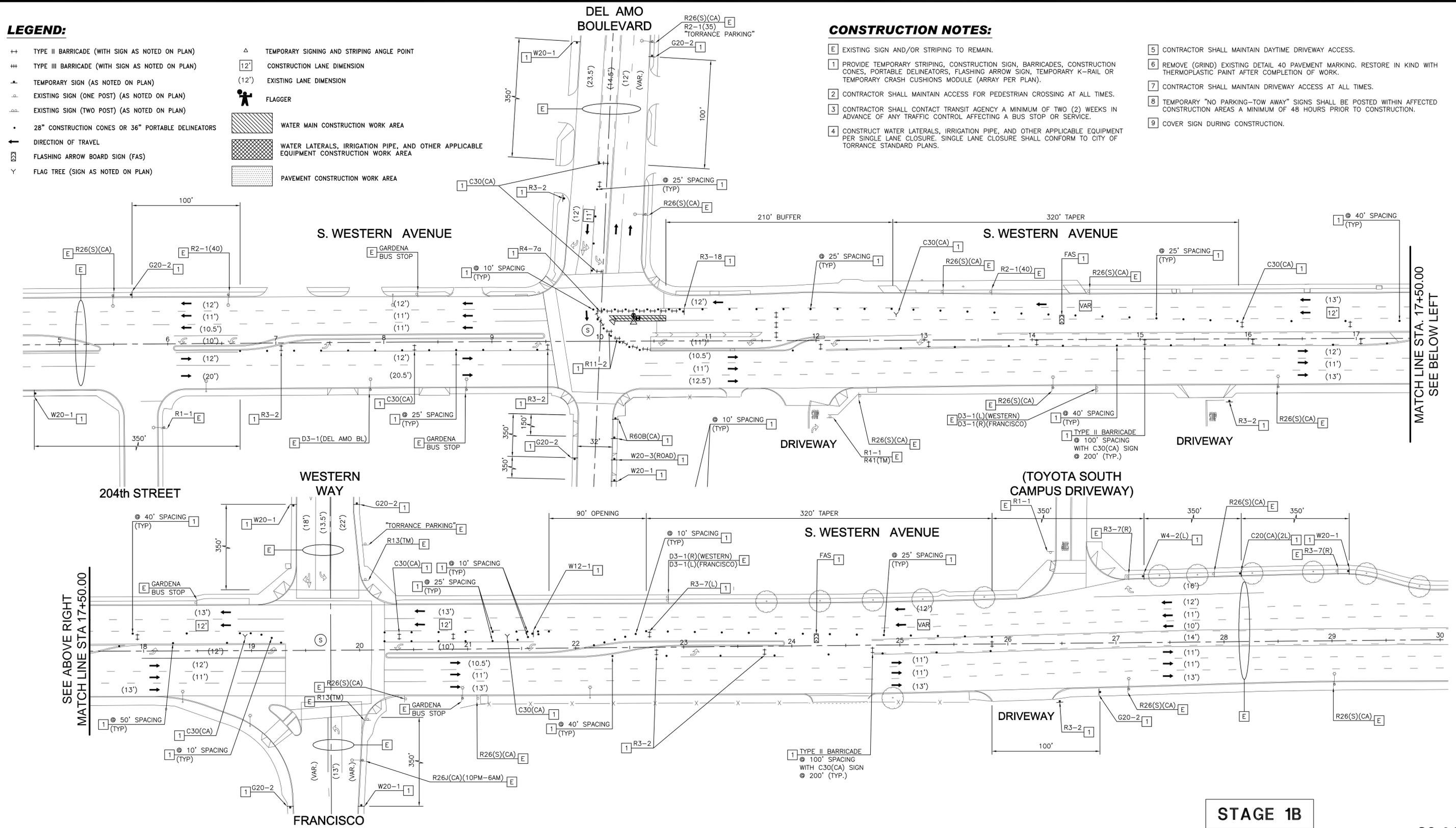
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LEGEND:

- ⇄ TYPE II BARRICADE (WITH SIGN AS NOTED ON PLAN)
- ⇄⇄ TYPE III BARRICADE (WITH SIGN AS NOTED ON PLAN)
- △ TEMPORARY SIGN (AS NOTED ON PLAN)
- △ EXISTING SIGN (ONE POST) (AS NOTED ON PLAN)
- △ EXISTING SIGN (TWO POST) (AS NOTED ON PLAN)
- 28" CONSTRUCTION CONES OR 36" PORTABLE DELINEATORS
- DIRECTION OF TRAVEL
- ↔ FLASHING ARROW BOARD SIGN (FAS)
- Y FLAG TREE (SIGN AS NOTED ON PLAN)
- △ TEMPORARY SIGNING AND STRIPING ANGLE POINT
- 12' CONSTRUCTION LANE DIMENSION
- (12') EXISTING LANE DIMENSION
- FLAGGER
- Water Main Construction Work Area
- Water Laterals, Irrigation Pipe, and Other Applicable Equipment Construction Work Area
- Pavement Construction Work Area

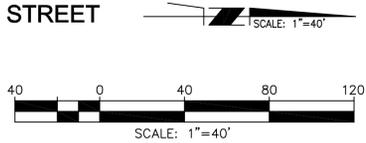
CONSTRUCTION NOTES:

- E EXISTING SIGN AND/OR STRIPING TO REMAIN.
- 1 PROVIDE TEMPORARY STRIPING, CONSTRUCTION SIGN, BARRICADES, CONSTRUCTION CONES, PORTABLE DELINEATORS, FLASHING ARROW SIGN, TEMPORARY K-RAIL OR TEMPORARY CRASH CUSHIONS MODULE (ARRAY PER PLAN).
- 2 CONTRACTOR SHALL MAINTAIN ACCESS FOR PEDESTRIAN CROSSING AT ALL TIMES.
- 3 CONTRACTOR SHALL CONTACT TRANSIT AGENCY A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF ANY TRAFFIC CONTROL AFFECTING A BUS STOP OR SERVICE.
- 4 CONSTRUCT WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT PER SINGLE LANE CLOSURE. SINGLE LANE CLOSURE SHALL CONFORM TO CITY OF TORRANCE STANDARD PLANS.
- 5 CONTRACTOR SHALL MAINTAIN DAYTIME DRIVEWAY ACCESS.
- 6 REMOVE (GRIND) EXISTING DETAIL 40 PAVEMENT MARKING. RESTORE IN KIND WITH THERMOPLASTIC PAINT AFTER COMPLETION OF WORK.
- 7 CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS AT ALL TIMES.
- 8 TEMPORARY "NO PARKING-TOW AWAY" SIGNS SHALL BE POSTED WITHIN AFFECTED CONSTRUCTION AREAS A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
- 9 COVER SIGN DURING CONSTRUCTION.



TRAFFIC CONTROL NOTES (THIS SHEET):

- FOR TRAFFIC CONTROL GENERAL NOTES AND DETAILS SEE SHEET SC-01.
- FOR PROJECT CONSTRUCTION SEQUENCE PLAN SEE SHEET SC-02.
- TRAFFIC CONTROL ON WESTERN AVENUE IS SUBJECT TO CONDITIONS LISTED ON CALTRANS PERMIT.
- CONTRACTOR SHALL NOTIFY ENGINEER AT LEAST TWO DAYS IN ADVANCE OF START OF WORK AT SIGNALIZED INTERSECTIONS.
- CONTRACTOR SHALL CONTACT THE STATE TRAFFIC SIGNAL OPERATIONS ENGINEER, ROMÉY SALVADOR, AT (213) 897-0296 (OFFICE) OR (213) 761-2868 (MOBILE) TO INQUIRE ON AND COORDINATE ANY MODIFICATIONS TO THE TRAFFIC SIGNAL TIMINGS ON WESTERN AVE.
- CONSTRUCTION THIS STAGE SHALL BE COMPLETED ON WEEKDAYS BETWEEN 9:00 PM AND 5:00 AM. STEEL PLATES AND "STEEL PLATES AHEAD" SIGNS SHALL BE INSTALLED DURING NON-WORKING HOURS AND ALL TRAVEL LANES OPEN.



**WATER MAIN REPLACEMENT PROJECT
STAGE CONSTRUCTION / TRAFFIC HANDLING PLANS
WESTERN AVENUE
STAGE 1B**

RBF CONSULTING PLANNING ■ DESIGN ■ CONSTRUCTION
14725 ALTON PARKWAY
IRVINE, CALIFORNIA 92618-2027
949.472.3505 • FAX 949.472.8373 • www.RBF.com

REV.	DATE	DESCRIPTION	BY	CHECKED

STAGE 1B

WESTERN AVENUE DESIGN SPEED (POSTED): 40 MPH

SC-04

**CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT**

APPROVED:

DRAWN: CM
DESIGNED: CM

PROJECT ENGINEER: _____
ENGINEERING MANAGER: _____

JOHN C. DETTLE
ACTING CITY ENGINEER
R.C.E. NO. 51438 EXP. 06/30/12

DATE: _____
SCALE: AS SHOWN SHEET 14 OF 40
PLAN NO. **WP-291**

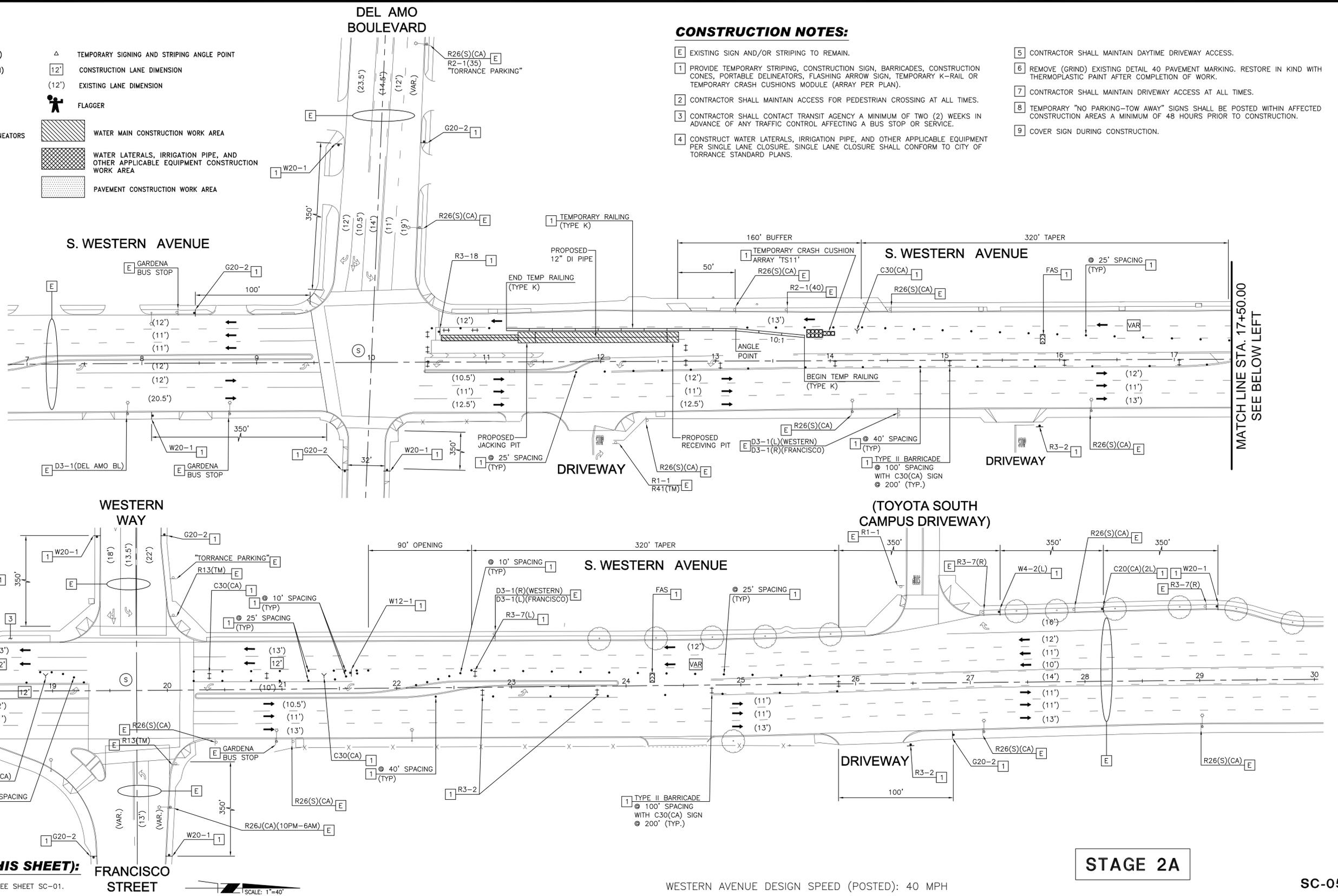
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LEGEND:

- ⇄ TYPE II BARRICADE (WITH SIGN AS NOTED ON PLAN)
- ⇄⇄ TYPE III BARRICADE (WITH SIGN AS NOTED ON PLAN)
- △ TEMPORARY SIGN (AS NOTED ON PLAN)
- △ EXISTING SIGN (ONE POST) (AS NOTED ON PLAN)
- △ EXISTING SIGN (TWO POST) (AS NOTED ON PLAN)
- 28" CONSTRUCTION CONES OR 36" PORTABLE DELINEATORS
- DIRECTION OF TRAVEL
- ↔ FLASHING ARROW BOARD SIGN (FAS)
- Y FLAG TREE (SIGN AS NOTED ON PLAN)
- △ TEMPORARY SIGNING AND STRIPING ANGLE POINT
- 12' CONSTRUCTION LANE DIMENSION
- (12') EXISTING LANE DIMENSION
- FLAGGER
- WATER MAIN CONSTRUCTION WORK AREA
- WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT CONSTRUCTION WORK AREA
- PAVEMENT CONSTRUCTION WORK AREA

CONSTRUCTION NOTES:

- E EXISTING SIGN AND/OR STRIPING TO REMAIN.
- 1 PROVIDE TEMPORARY STRIPING, CONSTRUCTION SIGN, BARRICADES, CONSTRUCTION CONES, PORTABLE DELINEATORS, FLASHING ARROW SIGN, TEMPORARY K-RAIL OR TEMPORARY CRASH CUSHIONS MODULE (ARRAY PER PLAN).
- 2 CONTRACTOR SHALL MAINTAIN ACCESS FOR PEDESTRIAN CROSSING AT ALL TIMES.
- 3 CONTRACTOR SHALL CONTACT TRANSIT AGENCY A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF ANY TRAFFIC CONTROL AFFECTING A BUS STOP OR SERVICE.
- 4 CONSTRUCT WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT PER SINGLE LANE CLOSURE. SINGLE LANE CLOSURE SHALL CONFORM TO CITY OF TORRANCE STANDARD PLANS.
- 5 CONTRACTOR SHALL MAINTAIN DAYTIME DRIVEWAY ACCESS.
- 6 REMOVE (GRIND) EXISTING DETAIL 40 PAVEMENT MARKING. RESTORE IN KIND WITH THERMOPLASTIC PAINT AFTER COMPLETION OF WORK.
- 7 CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS AT ALL TIMES.
- 8 TEMPORARY "NO PARKING-TOW AWAY" SIGNS SHALL BE POSTED WITHIN AFFECTED CONSTRUCTION AREAS A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
- 9 COVER SIGN DURING CONSTRUCTION.

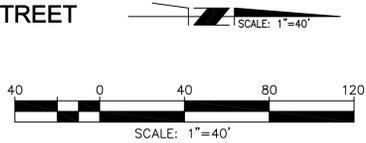


SEE ABOVE RIGHT
MATCH LINE STA. 17+50.00

MATCH LINE STA. 17+50.00
SEE BELOW LEFT

TRAFFIC CONTROL NOTES (THIS SHEET):

1. FOR TRAFFIC CONTROL GENERAL NOTES AND DETAILS SEE SHEET SC-01.
2. FOR PROJECT CONSTRUCTION SEQUENCE PLAN SEE SHEET SC-02.
3. TRAFFIC CONTROL ON WESTERN AVENUE IS SUBJECT TO CONDITIONS LISTED ON CALTRANS PERMIT.
4. CONTRACTOR SHALL NOTIFY ENGINEER AT LEAST TWO DAYS IN ADVANCE OF START OF WORK AT SIGNALIZED INTERSECTIONS.
5. CONTRACTOR SHALL CONTACT THE STATE TRAFFIC SIGNAL OPERATIONS ENGINEER, ROMÉY SALVADOR, AT (213) 897-0296 (OFFICE) OR (213) 761-2868 (MOBILE) TO INQUIRE ON AND COORDINATE ANY MODIFICATIONS TO THE TRAFFIC SIGNAL TIMINGS ON WESTERN AVE.
6. CONSTRUCTION THIS STAGE SHALL BE COMPLETED ON WEEKDAYS BETWEEN 9:00 pm AND 5:00 am. STEEL PLATES AND "STELL PLATES AHEAD" SIGNS SHALL BE INSTALLED DURING NON-WORKING HOURS AND ALL TRAVEL LANES OPEN.
7. CONTRACTOR SHALL NOTIFY CALTRANS INSPECTOR 10 DAYS PRIOR TO BORING/JACKING OPERATIONS.



WATER MAIN REPLACEMENT PROJECT
STAGE CONSTRUCTION / TRAFFIC HANDLING PLANS
WESTERN AVENUE
STAGE 2A

PLANNING ■ DESIGN ■ CONSTRUCTION

14725 ALTON PARKWAY
IRVINE, CALIFORNIA 92618-2027
949.472.3505 • FAX 949.472.8373 • www.RBF.com

REV.	DATE	DESCRIPTION	BY	CHECKED

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

WESTERN AVENUE DESIGN SPEED (POSTED): 40 MPH

SC-05

DRAWN: CM	APPROVED:
DESIGNED: CM	JOHN C. DETTLE DATE
PROJECT ENGINEER:	ACTING CITY ENGINEER
ENGINEERING MANAGER:	R.C.E. NO. 51438 EXP. 06/30/12
SCALE: AS SHOWN SHEET 15 OF 40	
PLAN NO. WP-291	

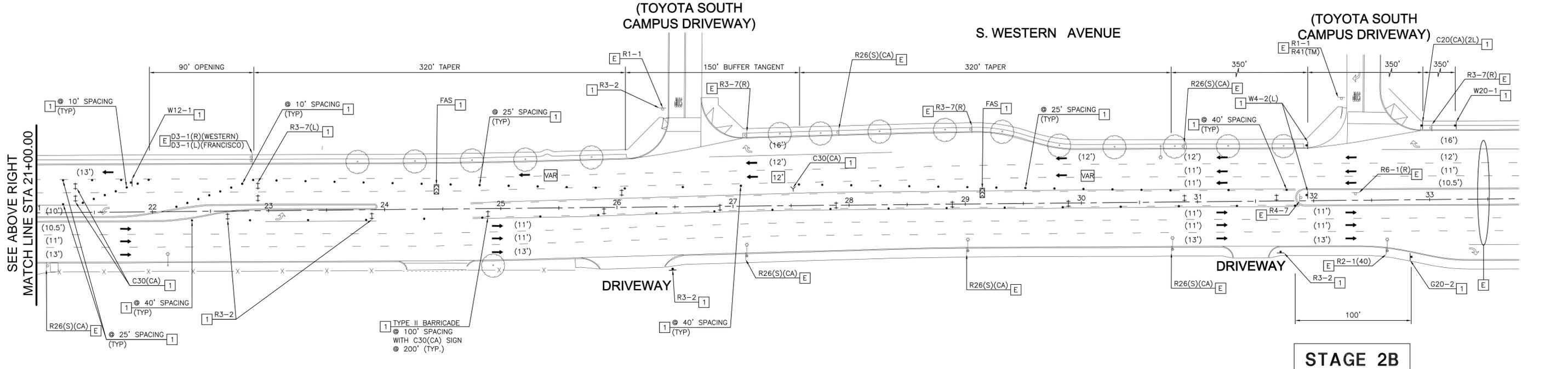
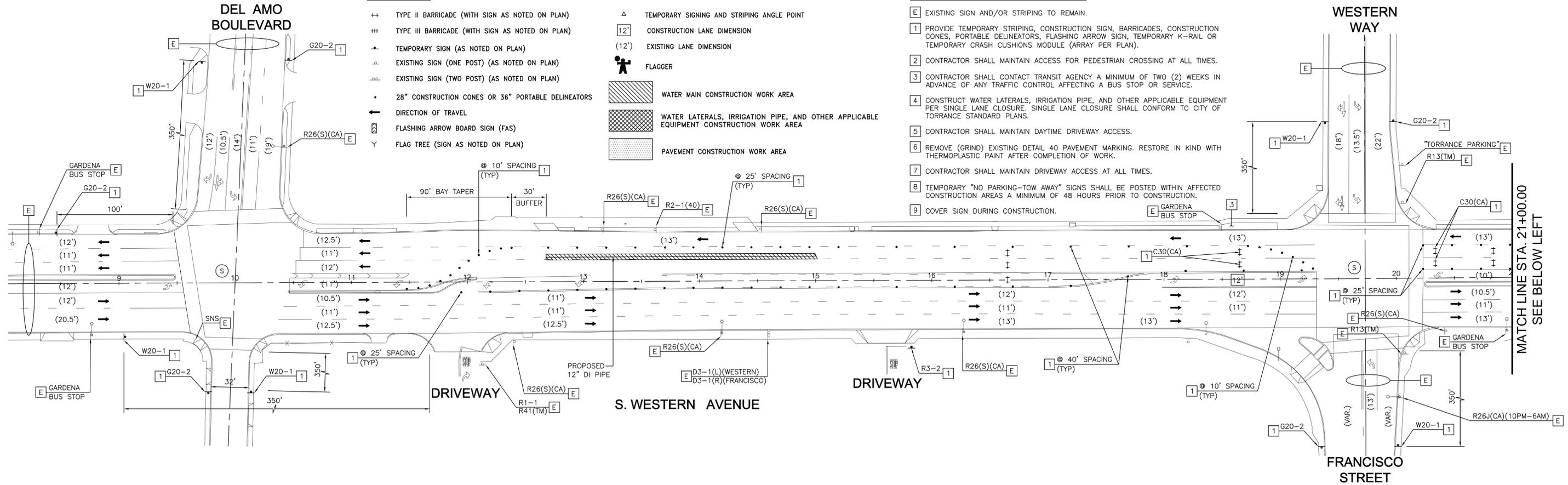
H:\PDATA\10107269\CADD\TRANSPW\DLV\STAGE\TC7269-05.DWG JMCNEILL 1/20/12 9:41 am

LEGEND:

- ++ TYPE II BARRICADE (WITH SIGN AS NOTED ON PLAN)
- +++ TYPE III BARRICADE (WITH SIGN AS NOTED ON PLAN)
- △ TEMPORARY SIGNING AND STRIPING ANGLE POINT
- ① 12' CONSTRUCTION LANE DIMENSION
- ① 12' EXISTING LANE DIMENSION
- ⊙ TEMPORARY SIGN (AS NOTED ON PLAN)
- ⊙ EXISTING SIGN (ONE POST) (AS NOTED ON PLAN)
- ⊙ EXISTING SIGN (TWO POST) (AS NOTED ON PLAN)
- 28" CONSTRUCTION CONES OR 36" PORTABLE DELINEATORS
- DIRECTION OF TRAVEL
- ⊙ FLASHING ARROW BOARD SIGN (FAS)
- ⊙ FLAG TREE (SIGN AS NOTED ON PLAN)
- ▨ WATER MAIN CONSTRUCTION WORK AREA
- ▨ WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT CONSTRUCTION WORK AREA
- ▨ PAVEMENT CONSTRUCTION WORK AREA
- ⊙ 10' SPACING (TYP)
- ⊙ 25' SPACING (TYP)
- ⊙ 40' SPACING (TYP)

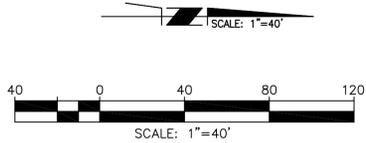
CONSTRUCTION NOTES:

- ① EXISTING SIGN AND/OR STRIPING TO REMAIN.
- ① PROVIDE TEMPORARY STRIPING, CONSTRUCTION SIGN, BARRICADES, CONSTRUCTION CONES, PORTABLE DELINEATORS, FLASHING ARROW SIGN, TEMPORARY K-RAIL OR TEMPORARY CRASH CUSHIONS MODULE (ARRAY PER PLAN).
- ② CONTRACTOR SHALL MAINTAIN ACCESS FOR PEDESTRIAN CROSSING AT ALL TIMES.
- ③ CONTRACTOR SHALL CONTACT TRANSIT AGENCY A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF ANY TRAFFIC CONTROL AFFECTING A BUS STOP OR SERVICE.
- ④ CONSTRUCT WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT PER SINGLE LANE CLOSURE. SINGLE LANE CLOSURE SHALL CONFORM TO CITY OF TORRANCE STANDARD PLANS.
- ⑤ CONTRACTOR SHALL MAINTAIN DAYTIME DRIVEWAY ACCESS.
- ⑥ REMOVE (GRIND) EXISTING DETAIL 40 PAVEMENT MARKING. RESTORE IN KIND WITH THERMOPLASTIC PAINT AFTER COMPLETION OF WORK.
- ⑦ CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS AT ALL TIMES.
- ⑧ TEMPORARY "NO PARKING-TOW AWAY" SIGNS SHALL BE POSTED WITHIN AFFECTED CONSTRUCTION AREAS A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
- ⑨ COVER SIGN DURING CONSTRUCTION.



TRAFFIC CONTROL NOTES (THIS SHEET):

1. FOR TRAFFIC CONTROL GENERAL NOTES AND DETAILS SEE SHEET SC-01.
2. FOR PROJECT CONSTRUCTION SEQUENCE PLAN SEE SHEET SC-02.
3. TRAFFIC CONTROL ON WESTERN AVENUE IS SUBJECT TO CONDITIONS LISTED ON CALTRANS PERMIT.
4. CONTRACTOR SHALL NOTIFY ENGINEER AT LEAST TWO DAYS IN ADVANCE OF START OF WORK AT SIGNALIZED INTERSECTIONS.
5. CONTRACTOR SHALL CONTACT THE STATE TRAFFIC SIGNAL OPERATIONS ENGINEER, ROMÉY SALVADOR, AT (213) 897-0296 (OFFICE) OR (213) 761-2868 (MOBILE) TO INQUIRE ON AND COORDINATE ANY MODIFICATIONS TO THE TRAFFIC SIGNAL TIMINGS ON WESTERN AVE.
6. CONSTRUCTION THIS STAGE SHALL BE COMPLETED ON WEEKDAYS BETWEEN 9:00 am AND 3:00 pm. STEEL PLATES AND "STEEL PLATES AHEAD" SIGNS SHALL BE INSTALLED DURING NON-WORKING HOURS AND ALL TRAVEL LANES OPEN.



WATER MAIN REPLACEMENT PROJECT
STAGE CONSTRUCTION / TRAFFIC HANDLING PLANS
WESTERN AVENUE
STAGE 2B

CARLOS A. ARTIZ
57525
12/31/13
CIVIL
STATE OF CALIFORNIA

PLANNING ■ DESIGN ■ CONSTRUCTION

RBF
CONSULTING

14725 ALTON PARKWAY
IRVINE, CALIFORNIA 92618-2027
949.472.3505 • FAX 949.472.8373 • www.RBF.com

WESTERN AVENUE DESIGN SPEED (POSTED): 40 MPH

REV.	DATE	DESCRIPTION	BY	CHECKED

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: CM
DESIGNED: CM
PROJECT ENGINEER: _____
ENGINEERING MANAGER: _____

APPROVED: _____
DATE: _____
JOHN C. DETTLE
ACTING CITY ENGINEER
R.C.E. NO. 51438 EXP. 06/30/12

SCALE: AS SHOWN SHEET 16 OF 40
PLAN NO. **WP-291**

SC-06

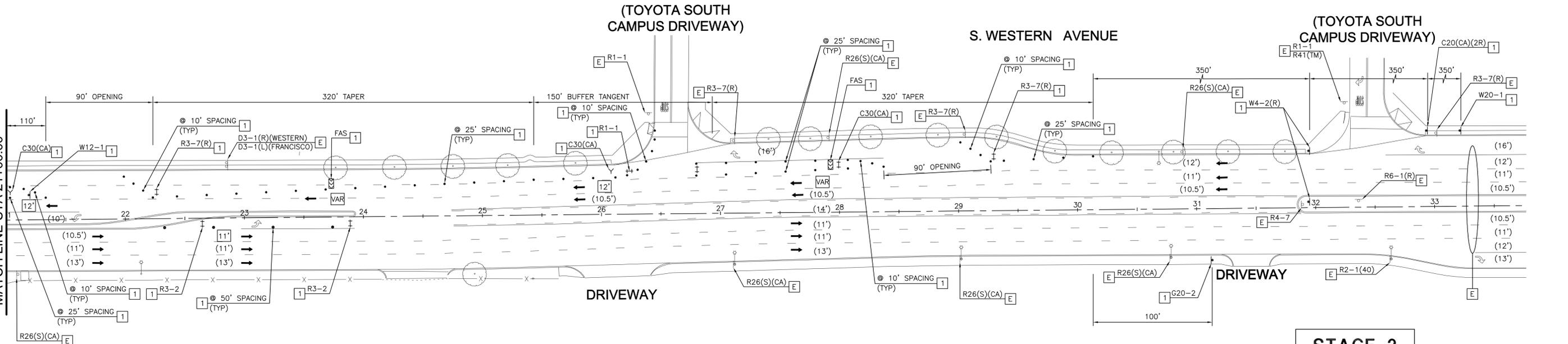
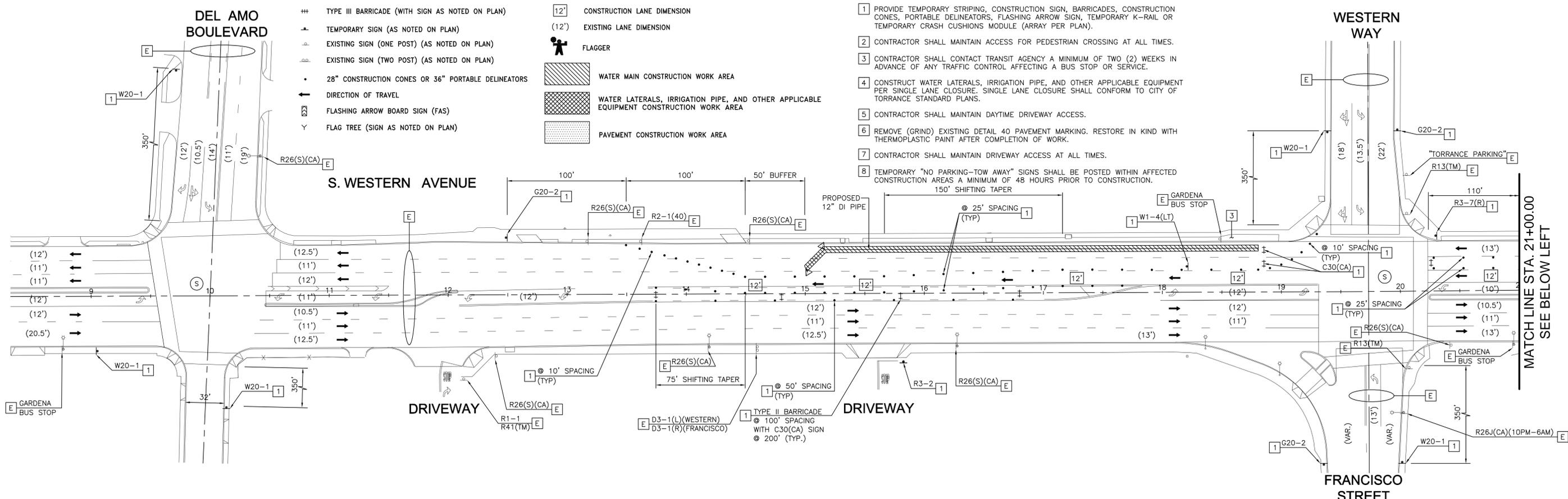
H:\PDATA\10107269\CADD\TRANSPW\DLV\STAGE\TC269-06.DWG JMCNEILL 1/20/12 9:43 am

LEGEND:

- ++ TYPE II BARRICADE (WITH SIGN AS NOTED ON PLAN)
- +++ TYPE III BARRICADE (WITH SIGN AS NOTED ON PLAN)
- ▲ TEMPORARY SIGN (AS NOTED ON PLAN)
- ▲ EXISTING SIGN (ONE POST) (AS NOTED ON PLAN)
- ▲ EXISTING SIGN (TWO POST) (AS NOTED ON PLAN)
- 28" CONSTRUCTION CONES OR 36" PORTABLE DELINEATORS
- DIRECTION OF TRAVEL
- Ⓜ FLASHING ARROW BOARD SIGN (FAS)
- Y FLAG TREE (SIGN AS NOTED ON PLAN)
- △ TEMPORARY SIGNING AND STRIPING ANGLE POINT
- 12' CONSTRUCTION LANE DIMENSION
- (12') EXISTING LANE DIMENSION
- FLAGGER
- WATER MAIN CONSTRUCTION WORK AREA
- WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT CONSTRUCTION WORK AREA
- PAVEMENT CONSTRUCTION WORK AREA

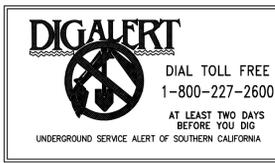
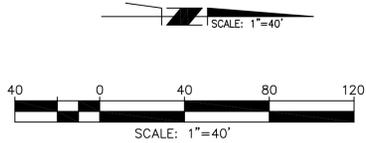
CONSTRUCTION NOTES:

- EXISTING SIGN AND/OR STRIPING TO REMAIN.
- PROVIDE TEMPORARY STRIPING, CONSTRUCTION SIGN, BARRICADES, CONSTRUCTION CONES, PORTABLE DELINEATORS, FLASHING ARROW SIGN, TEMPORARY K-RAIL OR TEMPORARY CRASH CUSHIONS MODULE (ARRAY PER PLAN).
- CONTRACTOR SHALL MAINTAIN ACCESS FOR PEDESTRIAN CROSSING AT ALL TIMES.
- CONTRACTOR SHALL CONTACT TRANSIT AGENCY A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF ANY TRAFFIC CONTROL AFFECTING A BUS STOP OR SERVICE.
- CONSTRUCT WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT PER SINGLE LANE CLOSURE. SINGLE LANE CLOSURE SHALL CONFORM TO CITY OF TORRANCE STANDARD PLANS.
- CONTRACTOR SHALL MAINTAIN DAYTIME DRIVEWAY ACCESS.
- REMOVE (GRIND) EXISTING DETAIL 40 PAVEMENT MARKING. RESTORE IN KIND WITH THERMOPLASTIC PAINT AFTER COMPLETION OF WORK.
- CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS AT ALL TIMES.
- TEMPORARY "NO PARKING-TOW AWAY" SIGNS SHALL BE POSTED WITHIN AFFECTED CONSTRUCTION AREAS A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
- COVER SIGN DURING CONSTRUCTION.



TRAFFIC CONTROL NOTES (THIS SHEET):

1. FOR TRAFFIC CONTROL GENERAL NOTES AND DETAILS SEE SHEET SC-01.
2. FOR PROJECT CONSTRUCTION SEQUENCE PLAN SEE SHEET SC-02.
3. TRAFFIC CONTROL ON WESTERN AVENUE IS SUBJECT TO CONDITIONS LISTED ON CALTRANS PERMIT.
4. CONTRACTOR SHALL NOTIFY ENGINEER AT LEAST TWO DAYS IN ADVANCE OF START OF WORK AT SIGNALIZED INTERSECTIONS.
5. CONTRACTOR SHALL CONTACT THE STATE TRAFFIC SIGNAL OPERATIONS ENGINEER, ROMÉY SALVADOR, AT (213) 897-0296 (OFFICE) OR (213) 761-2868 (MOBILE) TO INQUIRE ON AND COORDINATE ANY MODIFICATIONS TO THE TRAFFIC SIGNAL TIMINGS ON WESTERN AVE.
6. CONSTRUCTION THIS STAGE SHALL BE COMPLETED ON WEEKDAYS BETWEEN 9:00 am AND 3:00 pm. STEEL PLATES AND "STEEL PLATES AHEAD" SIGNS SHALL BE INSTALLED DURING NON-WORKING HOURS AND ALL TRAVEL LANES OPEN.



WATER MAIN REPLACEMENT PROJECT
STAGE CONSTRUCTION / TRAFFIC HANDLING PLANS
WESTERN AVENUE
STAGE 3

PLANNING ■ DESIGN ■ CONSTRUCTION

14725 ALTON PARKWAY
 IRVINE, CALIFORNIA 92618-2027
 949.472.3505 • FAX 949.472.8373 • www.RBF.com

REV.	DATE	DESCRIPTION	BY	CHECKED

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: CM
 DESIGNED: CM

PROJECT ENGINEER: _____
 ENGINEERING MANAGER: _____

APPROVED: _____
 JOHN C. DETTLE, ACTING CITY ENGINEER, R.C.E. NO. 51438, DATE EXP. 06/30/12

SCALE: AS SHOWN SHEET 17 OF 40
 PLAN NO. **WP-291**

WESTERN AVENUE DESIGN SPEED (POSTED): 40 MPH

SC-07

H:\PDATA\10107269\CADD\TRANSPW\DLV\STAGE\TC7269-07.DWG JMCNEILL 1/20/12 9:44 am

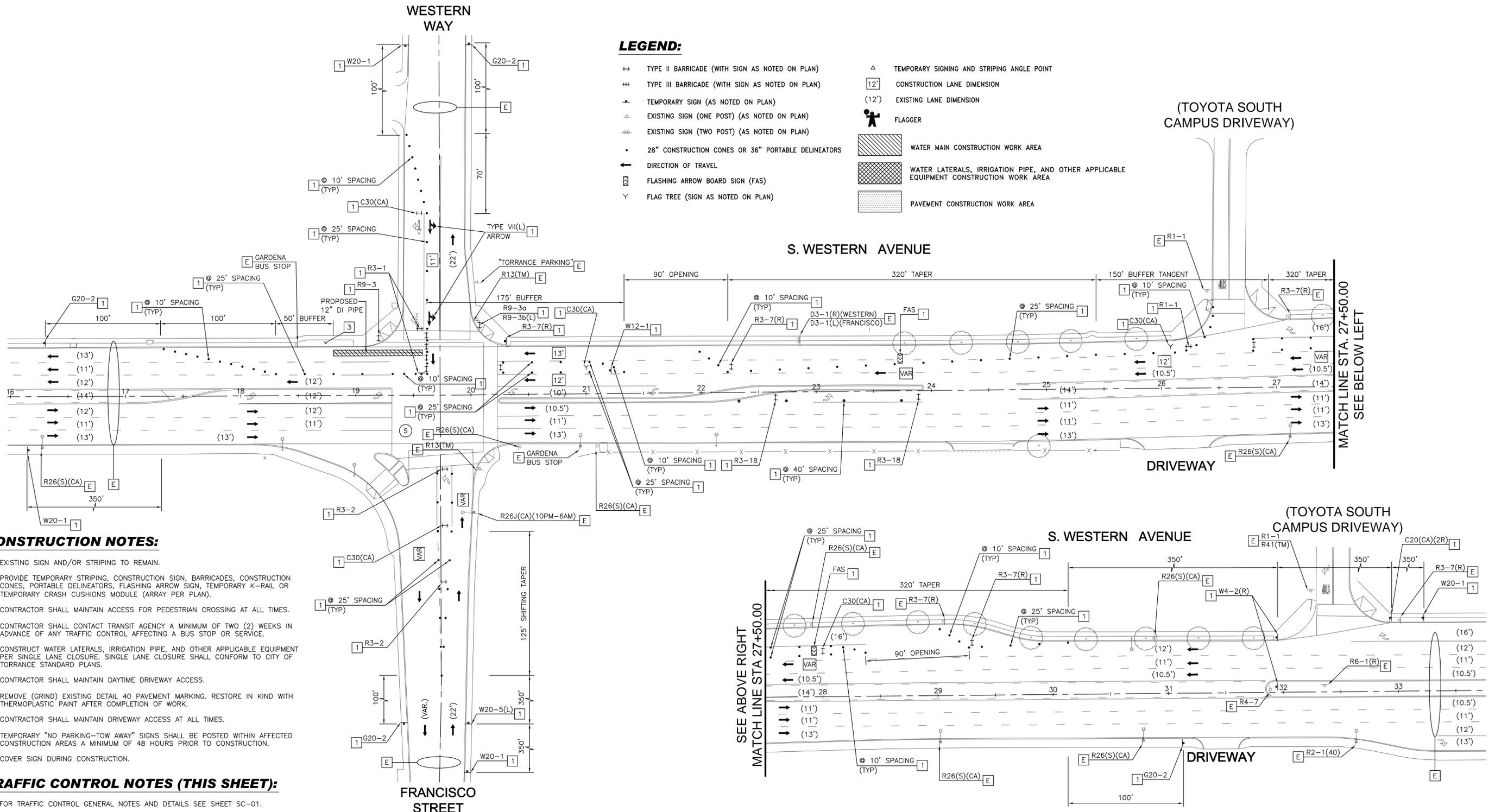
WESTERN WAY

LEGEND:

- ++ TYPE II BARRICADE (WITH SIGN AS NOTED ON PLAN)
- +++ TYPE III BARRICADE (WITH SIGN AS NOTED ON PLAN)
- ▲ TEMPORARY SIGN (AS NOTED ON PLAN)
- ▲ EXISTING SIGN (ONE POST) (AS NOTED ON PLAN)
- ▲ EXISTING SIGN (TWO POST) (AS NOTED ON PLAN)
- 28" CONSTRUCTION CONES OR 36" PORTABLE DELINEATORS
- ← DIRECTION OF TRAVEL
- ↔ FLASHING ARROW BOARD SIGN (FAS)
- Y FLAG TREE (SIGN AS NOTED ON PLAN)
- △ TEMPORARY SIGNING AND STRIPING ANGLE POINT
- 12' CONSTRUCTION LANE DIMENSION
- (12') EXISTING LANE DIMENSION
- FLAGGER
- WATER MAIN CONSTRUCTION WORK AREA
- WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT CONSTRUCTION WORK AREA
- PAVEMENT CONSTRUCTION WORK AREA

(TOYOTA SOUTH CAMPUS DRIVEWAY)

S. WESTERN AVENUE

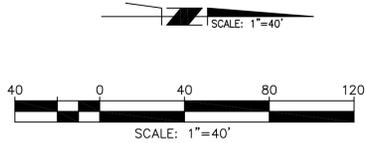


CONSTRUCTION NOTES:

- E EXISTING SIGN AND/OR STRIPING TO REMAIN.
- 1 PROVIDE TEMPORARY STRIPING, CONSTRUCTION SIGN, BARRICADES, CONSTRUCTION CONES, PORTABLE DELINEATORS, FLASHING ARROW SIGN, TEMPORARY K-RAIL OR TEMPORARY CRASH CUSHIONS MODULE (ARRAY PER PLAN).
- 2 CONTRACTOR SHALL MAINTAIN ACCESS FOR PEDESTRIAN CROSSING AT ALL TIMES.
- 3 CONTRACTOR SHALL CONTACT TRANSIT AGENCY A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF ANY TRAFFIC CONTROL AFFECTING A BUS STOP OR SERVICE.
- 4 CONSTRUCT WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT PER SINGLE LANE CLOSURE. SINGLE LANE CLOSURE SHALL CONFORM TO CITY OF TORRANCE STANDARD PLANS.
- 5 CONTRACTOR SHALL MAINTAIN DAYTIME DRIVEWAY ACCESS.
- 6 REMOVE (GRIND) EXISTING DETAIL 40 PAVEMENT MARKING. RESTORE IN KIND WITH THERMOPLASTIC PAINT AFTER COMPLETION OF WORK.
- 7 CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS AT ALL TIMES.
- 8 TEMPORARY "NO PARKING-TOW AWAY" SIGNS SHALL BE POSTED WITHIN AFFECTED CONSTRUCTION AREAS A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
- 9 COVER SIGN DURING CONSTRUCTION.

TRAFFIC CONTROL NOTES (THIS SHEET):

- 1. FOR TRAFFIC CONTROL GENERAL NOTES AND DETAILS SEE SHEET SC-01.
- 2. FOR PROJECT CONSTRUCTION SEQUENCE PLAN SEE SHEET SC-02.
- 3. TRAFFIC CONTROL ON WESTERN AVENUE IS SUBJECT TO CONDITIONS LISTED ON CALTRANS PERMIT.
- 4. CONTRACTOR SHALL NOTIFY ENGINEER AT LEAST TWO DAYS IN ADVANCE OF START OF WORK AT SIGNALIZED INTERSECTIONS.
- 5. CONTRACTOR SHALL CONTACT THE STATE TRAFFIC SIGNAL OPERATIONS ENGINEER, ROMÉY SALVADOR, AT (213) 897-0296 (OFFICE) OR (213) 761-2868 (MOBILE) TO INQUIRE ON AND COORDINATE ANY MODIFICATIONS TO THE TRAFFIC SIGNAL TIMINGS ON WESTERN AVE.
- 6. CONSTRUCTION THIS STAGE SHALL BE COMPLETED ON WEEKDAYS BETWEEN 9:00 PM AND 5:00 AM. STEEL PLATES AND "STEEL PLATES AHEAD" SIGNS SHALL BE INSTALLED DURING NON-WORKING HOURS AND ALL TRAVEL LANES OPEN.
- 7. CONTRACTOR SHALL OBTAIN ALL NECESSARY LANE CLOSURE PERMITS FROM THE CITY OF LOS ANGELES PUBLIC WORKS DEPARTMENT INCLUDING BUT NOT LIMITED TO THE BUREAU OF STREET SERVICES AND BUREAU OF ENGINEERING IN ADVANCE OF START OF ALL LANE CLOSURE WORK IN CITY OF LOS ANGELES RIGHT-OF-WAY.
- 8. CONTRACTOR SHALL CONTACT LADOT AT (213) 485-2298 TEN DAYS PRIOR OF START OF WORK TO POST TEMPORARY TOW AWAY / NO STOPPING SIGNS (WHERE APPROPRIATE) WITHIN CITY OF LOS ANGELES RIGHT-OF-WAY ON WEEKDAYS DURING THE CONSTRUCTION HOURS OF 9:00 PM TO 5:00 AM.



WATER MAIN REPLACEMENT PROJECT
STAGE CONSTRUCTION / TRAFFIC HANDLING PLANS
WESTERN AVENUE
STAGE 4A

CARLOS A. CORTÉZ
CIVIL ENGINEER
No. 57525
Exp. 12/31/13

RBF CONSULTING
PLANNING ■ DESIGN ■ CONSTRUCTION
14725 ALTON PARKWAY
IRVINE, CALIFORNIA 92618-2027
949.472.3505 • FAX 949.472.8373 • www.RBF.com

WESTERN AVENUE DESIGN SPEED (POSTED): 40 MPH

STAGE 4A

SC-08

REV.	DATE	DESCRIPTION	BY	CHECKED

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: CM	APPROVED:
DESIGNED: CM	
PROJECT ENGINEER:	JOHN C. DETTLE DATE ACTING CITY ENGINEER R.C.E. NO. 51438 EXP. 06/30/12
ENGINEERING MANAGER:	SCALE: AS SHOWN SHEET 18 OF 40 PLAN NO. WP-291

H:\PDATA\10107269\CADD\TRANSFW\DLV\STAGE\TC7269-08.DWG JMCNEILL 1/20/12 9:45 am

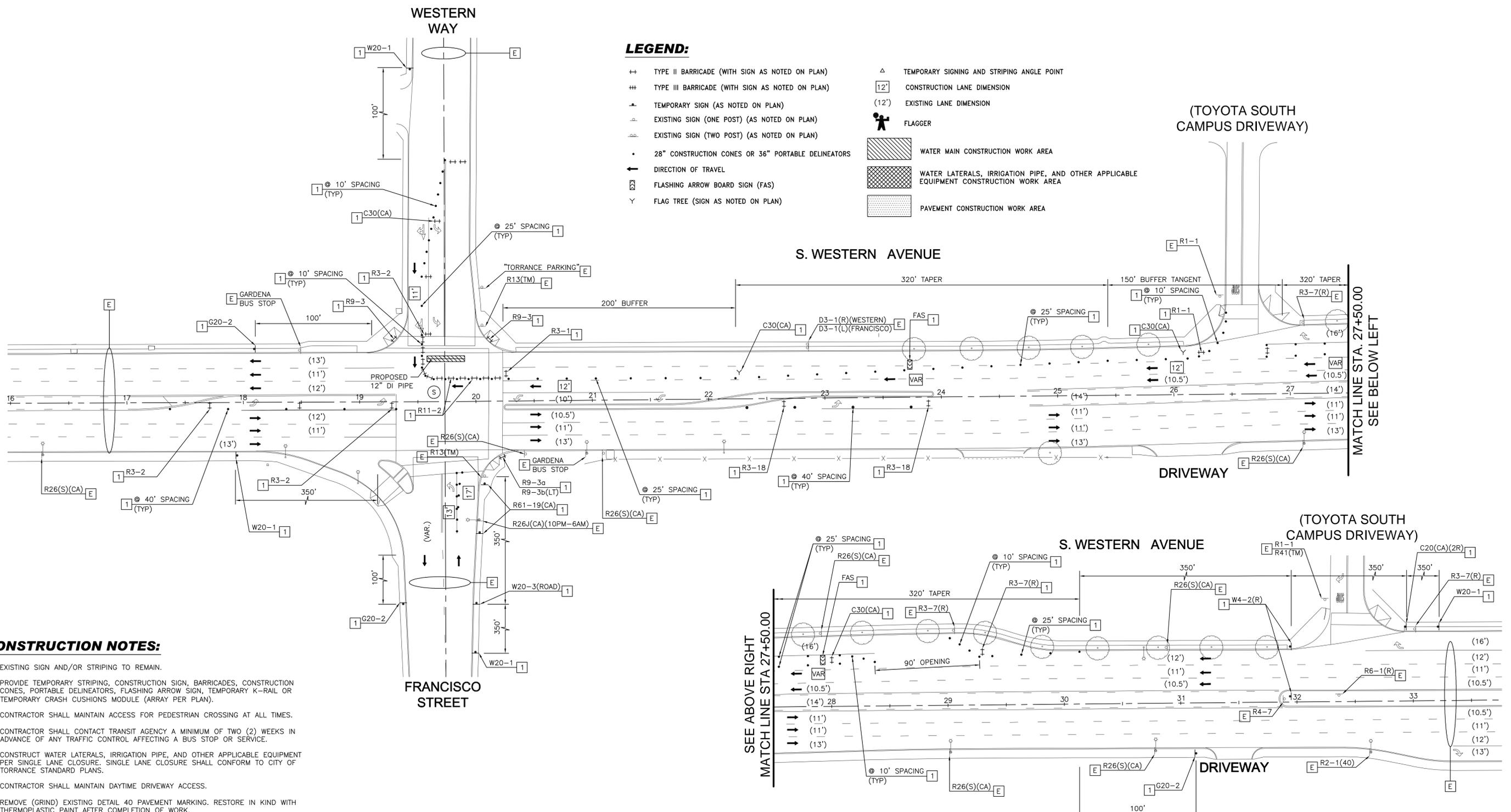
WESTERN WAY

LEGEND:

- ++ TYPE II BARRICADE (WITH SIGN AS NOTED ON PLAN)
- +++ TYPE III BARRICADE (WITH SIGN AS NOTED ON PLAN)
- ▲ TEMPORARY SIGN (AS NOTED ON PLAN)
- △ EXISTING SIGN (ONE POST) (AS NOTED ON PLAN)
- △ EXISTING SIGN (TWO POST) (AS NOTED ON PLAN)
- 28" CONSTRUCTION CONES OR 36" PORTABLE DELINEATORS
- ← DIRECTION OF TRAVEL
- ↔ FLASHING ARROW BOARD SIGN (FAS)
- Y FLAG TREE (SIGN AS NOTED ON PLAN)
- △ TEMPORARY SIGNING AND STRIPING ANGLE POINT
- 12' CONSTRUCTION LANE DIMENSION
- (12') EXISTING LANE DIMENSION
- FLAGGER
- WATER MAIN CONSTRUCTION WORK AREA
- WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT CONSTRUCTION WORK AREA
- PAVEMENT CONSTRUCTION WORK AREA

(TOYOTA SOUTH CAMPUS DRIVEWAY)

S. WESTERN AVENUE



MATCH LINE STA. 27+50.00
SEE BELOW LEFT

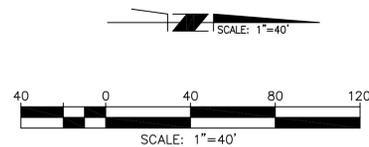
SEE ABOVE RIGHT
MATCH LINE STA 27+50.00

CONSTRUCTION NOTES:

- E EXISTING SIGN AND/OR STRIPING TO REMAIN.
- 1 PROVIDE TEMPORARY STRIPING, CONSTRUCTION SIGN, BARRICADES, CONSTRUCTION CONES, PORTABLE DELINEATORS, FLASHING ARROW SIGN, TEMPORARY K-RAIL OR TEMPORARY CRASH CUSHIONS MODULE (ARRAY PER PLAN).
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- 3 CONTRACTOR SHALL CONTACT TRANSIT AGENCY A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF ANY TRAFFIC CONTROL AFFECTING A BUS STOP OR SERVICE.
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- 5 CONTRACTOR SHALL MAINTAIN DAYTIME DRIVEWAY ACCESS.
- 6 REMOVE (GRIND) EXISTING DETAIL 40 PAVEMENT MARKING. RESTORE IN KIND WITH THERMOPLASTIC PAINT AFTER COMPLETION OF WORK.
- 7 CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS AT ALL TIMES.
- 8 TEMPORARY "NO PARKING-TOW AWAY" SIGNS SHALL BE POSTED WITHIN AFFECTED CONSTRUCTION AREAS A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
- 9 COVER SIGN DURING CONSTRUCTION.

TRAFFIC CONTROL NOTES (THIS SHEET):

- 1. FOR TRAFFIC CONTROL GENERAL NOTES AND DETAILS SEE SHEET SC-01.
- 2. FOR PROJECT CONSTRUCTION SEQUENCE PLAN SEE SHEET SC-02.
- 3. TRAFFIC CONTROL ON WESTERN AVENUE IS SUBJECT TO CONDITIONS LISTED ON CALTRANS PERMIT.
- 4. CONTRACTOR SHALL NOTIFY ENGINEER AT LEAST TWO DAYS IN ADVANCE OF START OF WORK AT SIGNALIZED INTERSECTIONS.
- 5. CONTRACTOR SHALL CONTACT THE STATE TRAFFIC SIGNAL OPERATIONS ENGINEER, ROMÉY SALVADOR, AT (213) 897-0296 (OFFICE) OR (213) 761-2868 (MOBILE) TO INQUIRE ON AND COORDINATE ANY MODIFICATIONS TO THE TRAFFIC SIGNAL TIMINGS ON WESTERN AVE.
- 6. CONSTRUCTION THIS STAGE SHALL BE COMPLETED ON WEEKDAYS BETWEEN 9:00 PM AND 5:00 AM. STEEL PLATES AND "STEEL PLATES AHEAD" SIGNS SHALL BE INSTALLED DURING NON-WORKING HOURS AND ALL TRAVEL LANES OPEN.



WATER MAIN REPLACEMENT PROJECT
STAGE CONSTRUCTION / TRAFFIC HANDLING PLANS
WESTERN AVENUE
STAGE 4B

CARLOS A. CORTIZ
No. 57525
Exp. 12/31/13
CIVIL

RBF
CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

14725 ALTON PARKWAY
IRVINE, CALIFORNIA 92618-2027
949.472.3505 • FAX 949.472.8373 • www.RBF.com

WESTERN AVENUE DESIGN SPEED (POSTED): 40 MPH

SC-09

STAGE 4B

REV.	DATE	DESCRIPTION	BY	CHECKED

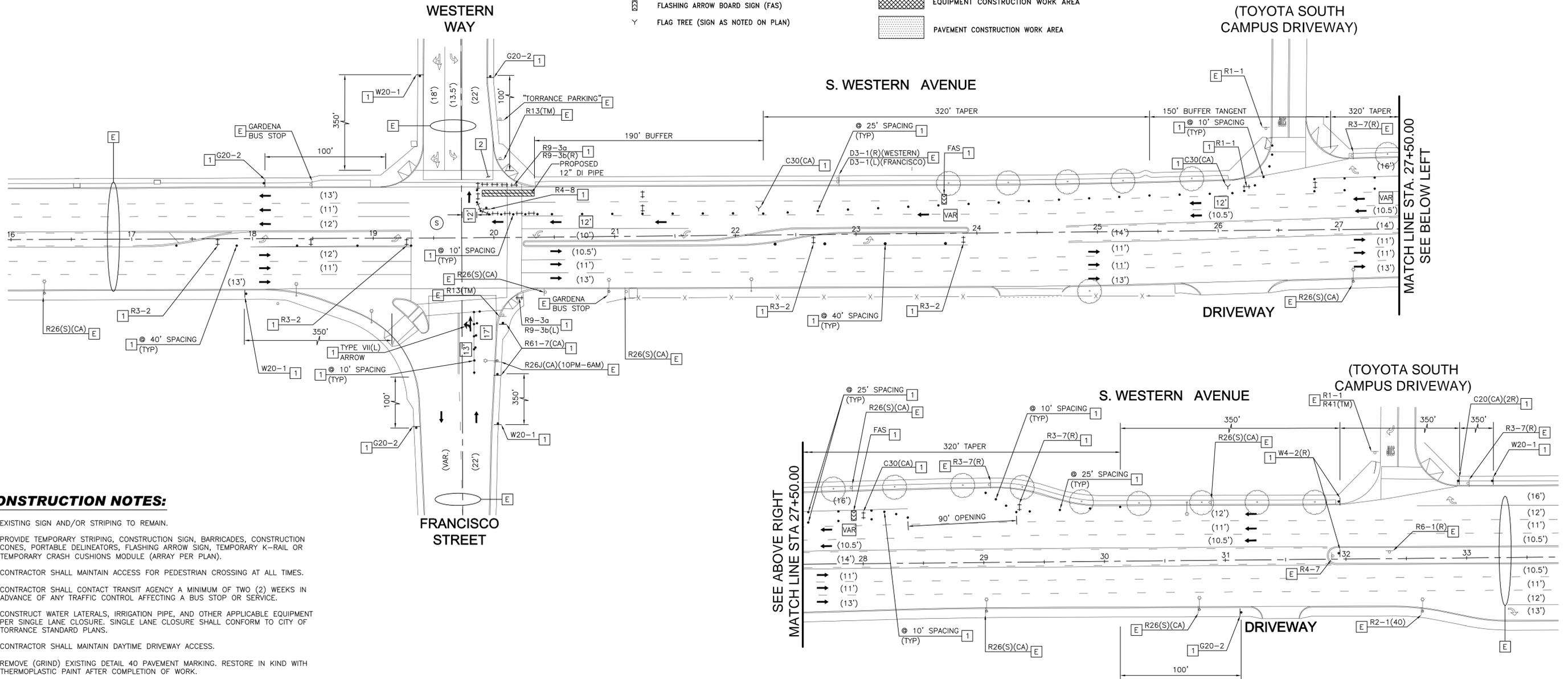
CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: CM	APPROVED:
DESIGNED: CM	JOHN C. DETTLE DATE
PROJECT ENGINEER:	ACTING CITY ENGINEER
ENGINEERING MANAGER:	R.C.E. NO. 51438 EXP. 06/30/12
SCALE: AS SHOWN SHEET 19 OF 40	
PLAN NO. WP-291	

H:\PDATA\10107269\CADD\TRANSPW\DLV\STAGE\TC7269-09.DWG JMCNEILL 1/20/12 9:46 am

LEGEND:

- ⇄ TYPE II BARRICADE (WITH SIGN AS NOTED ON PLAN)
- ⇄⇄ TYPE III BARRICADE (WITH SIGN AS NOTED ON PLAN)
- △ TEMPORARY SIGN (AS NOTED ON PLAN)
- △ EXISTING SIGN (ONE POST) (AS NOTED ON PLAN)
- △ EXISTING SIGN (TWO POST) (AS NOTED ON PLAN)
- 28" CONSTRUCTION CONES OR 36" PORTABLE DELINEATORS
- DIRECTION OF TRAVEL
- ⇄ FLASHING ARROW BOARD SIGN (FAS)
- Y FLAG TREE (SIGN AS NOTED ON PLAN)
- △ TEMPORARY SIGNING AND STRIPING ANGLE POINT
- 12' CONSTRUCTION LANE DIMENSION
- (12') EXISTING LANE DIMENSION
- FLAGGER
- Water Main Construction Work Area
- Water Laterals, Irrigation Pipe, and Other Applicable Equipment Construction Work Area
- Pavement Construction Work Area

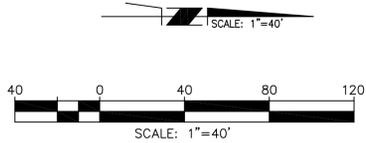


CONSTRUCTION NOTES:

- E EXISTING SIGN AND/OR STRIPING TO REMAIN.
- 1 PROVIDE TEMPORARY STRIPING, CONSTRUCTION SIGN, BARRICADES, CONSTRUCTION CONES, PORTABLE DELINEATORS, FLASHING ARROW SIGN, TEMPORARY K-RAIL OR TEMPORARY CRASH CUSHIONS MODULE (ARRAY PER PLAN).
- 2 CONTRACTOR SHALL MAINTAIN ACCESS FOR PEDESTRIAN CROSSING AT ALL TIMES.
- 3 CONTRACTOR SHALL CONTACT TRANSIT AGENCY A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF ANY TRAFFIC CONTROL AFFECTING A BUS STOP OR SERVICE.
- 4 CONSTRUCT WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT PER SINGLE LANE CLOSURE. SINGLE LANE CLOSURE SHALL CONFORM TO CITY OF TORRANCE STANDARD PLANS.
- 5 CONTRACTOR SHALL MAINTAIN DAYTIME DRIVEWAY ACCESS.
- 6 REMOVE (GRIND) EXISTING DETAIL 40 PAVEMENT MARKING. RESTORE IN KIND WITH THERMOPLASTIC PAINT AFTER COMPLETION OF WORK.
- 7 CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS AT ALL TIMES.
- 8 TEMPORARY "NO PARKING-TOW AWAY" SIGNS SHALL BE POSTED WITHIN AFFECTED CONSTRUCTION AREAS A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
- 9 COVER SIGN DURING CONSTRUCTION.

TRAFFIC CONTROL NOTES (THIS SHEET):

- 1. FOR TRAFFIC CONTROL GENERAL NOTES AND DETAILS SEE SHEET SC-01.
- 2. FOR PROJECT CONSTRUCTION SEQUENCE PLAN SEE SHEET SC-02.
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- 6. CONSTRUCTION THIS STAGE SHALL BE COMPLETED ON WEEKDAYS BETWEEN 9:00 PM AND 5:00 AM. STEEL PLATES AND "STEEL PLATES AHEAD" SIGNS SHALL BE INSTALLED DURING NON-WORKING HOURS AND ALL TRAVEL LANES OPEN.



WATER MAIN REPLACEMENT PROJECT
STAGE CONSTRUCTION / TRAFFIC HANDLING PLANS
WESTERN AVENUE
STAGE 4C

RBF
CONSULTING

14725 ALTON PARKWAY
IRVINE, CALIFORNIA 92618-2027
949.472.3505 • FAX 949.472.8373 • www.RBF.com

PLANNING ■ DESIGN ■ CONSTRUCTION

WESTERN AVENUE DESIGN SPEED (POSTED): 40 MPH

SC-10

STAGE 4C

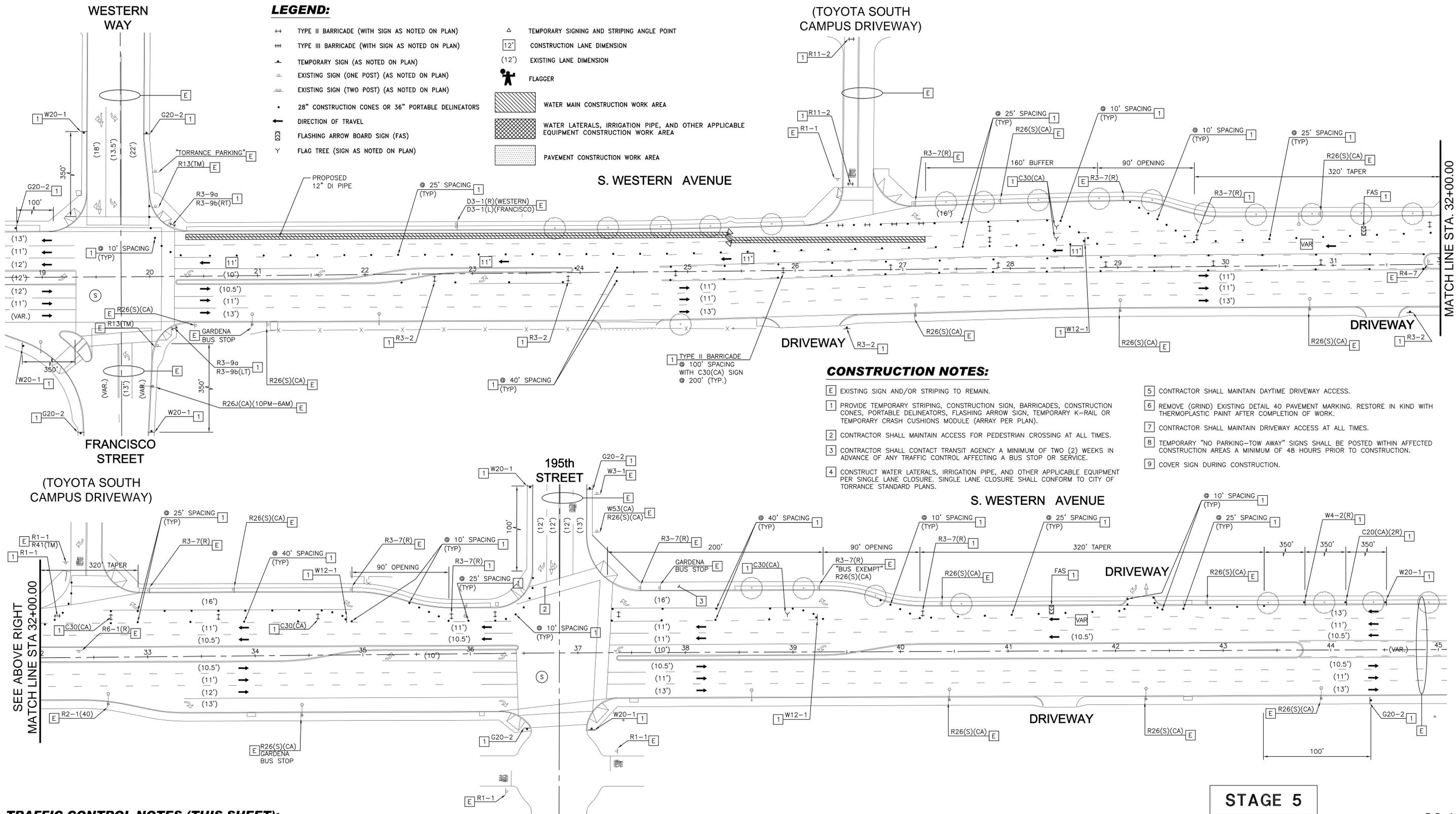
REV.	DATE	DESCRIPTION	BY	CHECKED

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: CM	APPROVED:
DESIGNED: CM	JOHN C. DETTLE DATE
PROJECT ENGINEER:	ACTING CITY ENGINEER R.C.E. NO. 51438 EXP. 06/30/12
ENGINEERING MANAGER:	SCALE: AS SHOWN SHEET 20 OF 40
	PLAN NO. WP-291

H:\PDATA\10107269\CADD\TRANSPW\DLV\STAGE\TC7269-10.DWG JMCNEILL 1/20/12 9:48 am

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LEGEND:

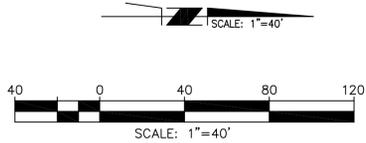
- ++ TYPE II BARRICADE (WITH SIGN AS NOTED ON PLAN)
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- ▲ TEMPORARY SIGN (AS NOTED ON PLAN)
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- DIRECTION OF TRAVEL
- ↔ FLASHING ARROW BOARD SIGN (FAS)
- Y FLAG TREE (SIGN AS NOTED ON PLAN)
- △ TEMPORARY SIGNING AND STRIPING ANGLE POINT
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- (12') EXISTING LANE DIMENSION
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- Water Laterals, Irrigation Pipe, and Other Applicable Equipment Construction Work Area
- Pavement Construction Work Area

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- 5 CONTRACTOR SHALL MAINTAIN DAYTIME DRIVEWAY ACCESS.
- 6 REMOVE (GRIND) EXISTING DETAIL 40 PAVEMENT MARKING. RESTORE IN KIND WITH THERMOPLASTIC PAINT AFTER COMPLETION OF WORK.
- 7 CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS AT ALL TIMES.
- 8 TEMPORARY "NO PARKING-TOW AWAY" SIGNS SHALL BE POSTED WITHIN AFFECTED CONSTRUCTION AREAS A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
- 9 COVER SIGN DURING CONSTRUCTION.

TRAFFIC CONTROL NOTES (THIS SHEET):

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WATER MAIN REPLACEMENT PROJECT
STAGE CONSTRUCTION / TRAFFIC HANDLING PLANS
WESTERN AVENUE
STAGE 5

CARLOS A. ORTIZ
 LICENSED PROFESSIONAL ENGINEER
 CIVIL
 No. 57525
 Exp. 12/31/13

RBF CONSULTING
 PLANNING ■ DESIGN ■ CONSTRUCTION
 14725 ALTON PARKWAY
 IRVINE, CALIFORNIA 92618-2027
 949.472.3505 • FAX 949.472.8373 • www.RBF.com

REV.	DATE	DESCRIPTION	BY	CHECKED

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: CM	APPROVED:
DESIGNED: CM	JOHN C. DETTLE DATE
PROJECT ENGINEER:	ACTING CITY ENGINEER
ENGINEERING MANAGER:	R.C.E. NO. 51438 EXP. 06/30/12
SCALE: AS SHOWN SHEET 21 OF 40	
PLAN NO. WP-291	

SC-11

WESTERN AVENUE DESIGN SPEED (POSTED): 40 MPH

STAGE 5

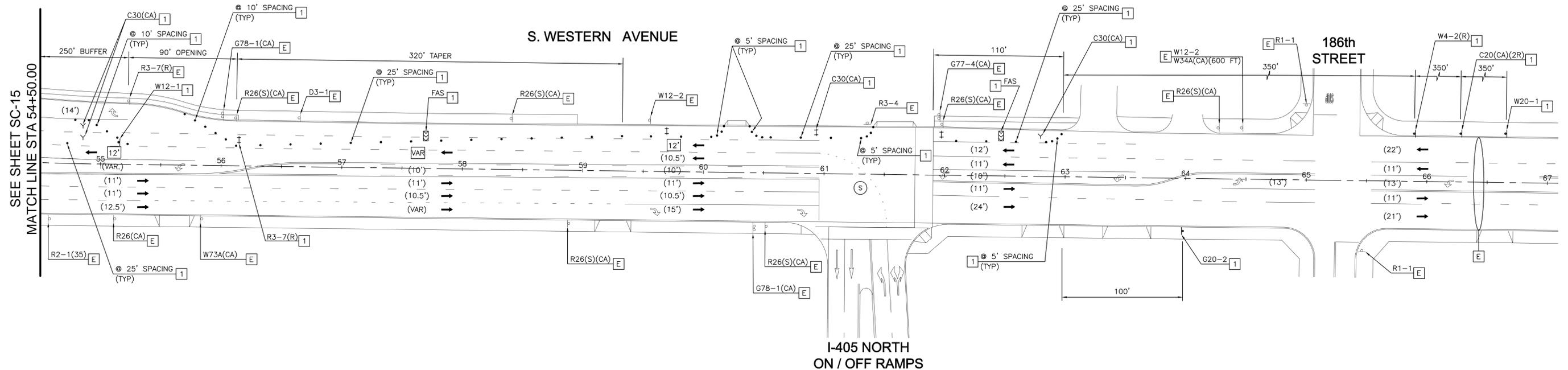
MATCH LINE STA. 32+00.00
SEE BELOW LEFT

LEGEND:

- ++ TYPE II BARRICADE (WITH SIGN AS NOTED ON PLAN)
- ++ TYPE III BARRICADE (WITH SIGN AS NOTED ON PLAN)
- ▲ TEMPORARY SIGN (AS NOTED ON PLAN)
- ▲ EXISTING SIGN (ONE POST) (AS NOTED ON PLAN)
- ▲ EXISTING SIGN (TWO POST) (AS NOTED ON PLAN)
- 28" CONSTRUCTION CONES OR 36" PORTABLE DELINEATORS
- ↑ DIRECTION OF TRAVEL
- ↔ FLASHING ARROW BOARD SIGN (FAS)
- Y FLAG TREE (SIGN AS NOTED ON PLAN)
- △ TEMPORARY SIGNING AND STRIPING ANGLE POINT
- 12' CONSTRUCTION LANE DIMENSION
- (12') EXISTING LANE DIMENSION
- FLAGGER
- WATER MAIN CONSTRUCTION WORK AREA
- WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT CONSTRUCTION WORK AREA
- PAVEMENT CONSTRUCTION WORK AREA

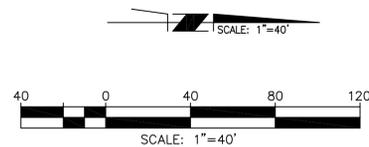
CONSTRUCTION NOTES:

- E EXISTING SIGN AND/OR STRIPING TO REMAIN.
- 1 PROVIDE TEMPORARY STRIPING, CONSTRUCTION SIGN, BARRICADES, CONSTRUCTION CONES, PORTABLE DELINEATORS, FLASHING ARROW SIGN, TEMPORARY K-RAIL OR TEMPORARY CRASH CUSHIONS MODULE (ARRAY PER PLAN).
- 2 CONTRACTOR SHALL MAINTAIN ACCESS FOR PEDESTRIAN CROSSING AT ALL TIMES.
- 3 CONTRACTOR SHALL CONTACT TRANSIT AGENCY A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF ANY TRAFFIC CONTROL AFFECTING A BUS STOP OR SERVICE.
- 4 CONSTRUCT WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT PER SINGLE LANE CLOSURE. SINGLE LANE CLOSURE SHALL CONFORM TO CITY OF TORRANCE STANDARD PLANS.
- 5 CONTRACTOR SHALL MAINTAIN DAYTIME DRIVEWAY ACCESS.
- 6 REMOVE (GRIND) EXISTING DETAIL 40 PAVEMENT MARKING. RESTORE IN KIND WITH THERMOPLASTIC PAINT AFTER COMPLETION OF WORK.
- 7 CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS AT ALL TIMES.
- 8 TEMPORARY "NO PARKING-TOW AWAY" SIGNS SHALL BE POSTED WITHIN AFFECTED CONSTRUCTION AREAS A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
- 9 COVER SIGN DURING CONSTRUCTION.



TRAFFIC CONTROL NOTES (THIS SHEET):

1. FOR TRAFFIC CONTROL GENERAL NOTES AND DETAILS SEE SHEET SC-01.
2. FOR PROJECT CONSTRUCTION SEQUENCE PLAN SEE SHEET SC-02.
3. TRAFFIC CONTROL ON WESTERN AVENUE IS SUBJECT TO CONDITIONS LISTED ON CALTRANS PERMIT.
4. CONTRACTOR SHALL NOTIFY ENGINEER AT LEAST TWO DAYS IN ADVANCE OF START OF WORK AT SIGNALIZED INTERSECTIONS.
5. CONTRACTOR SHALL CONTACT THE STATE TRAFFIC SIGNAL OPERATIONS ENGINEER, ROMÉY SALVADOR, AT (213) 897-0296 (OFFICE) OR (213) 761-2868 (MOBILE) TO INQUIRE ON AND COORDINATE ANY MODIFICATIONS TO THE TRAFFIC SIGNAL TIMINGS ON WESTERN AVE.
6. CONSTRUCTION THIS STAGE SHALL BE COMPLETED ON WEEKDAYS BETWEEN 9:00 PM AND 5:00 AM. STEEL PLATES AND "STEEL PLATES AHEAD" SIGNS SHALL BE INSTALLED DURING NON-WORKING HOURS AND ALL TRAVEL LANES OPEN.



WATER MAIN REPLACEMENT PROJECT
STAGE CONSTRUCTION / TRAFFIC HANDLING PLANS
WESTERN AVENUE
STAGE 9

PLANNING ■ DESIGN ■ CONSTRUCTION

14725 ALTON PARKWAY
 IRVINE, CALIFORNIA 92618-2027
 949.472.3505 • FAX 949.472.8373 • www.RBF.com

WESTERN AVENUE DESIGN SPEED (POSTED): 35 MPH

REV.	DATE	DESCRIPTION	BY	CHECKED

STAGE 9

SC-16

CITY OF TORRANCE	
PUBLIC WORKS DEPARTMENT	
DRAWN: CM	APPROVED:
DESIGNED: CM	JOHN C. DETTLE DATE
PROJECT ENGINEER:	ACTING CITY ENGINEER R.C.E. NO. 51438 EXP. 06/30/12
ENGINEERING MANAGER:	SCALE: AS SHOWN SHEET 26 OF 40
	PLAN NO. WP-291

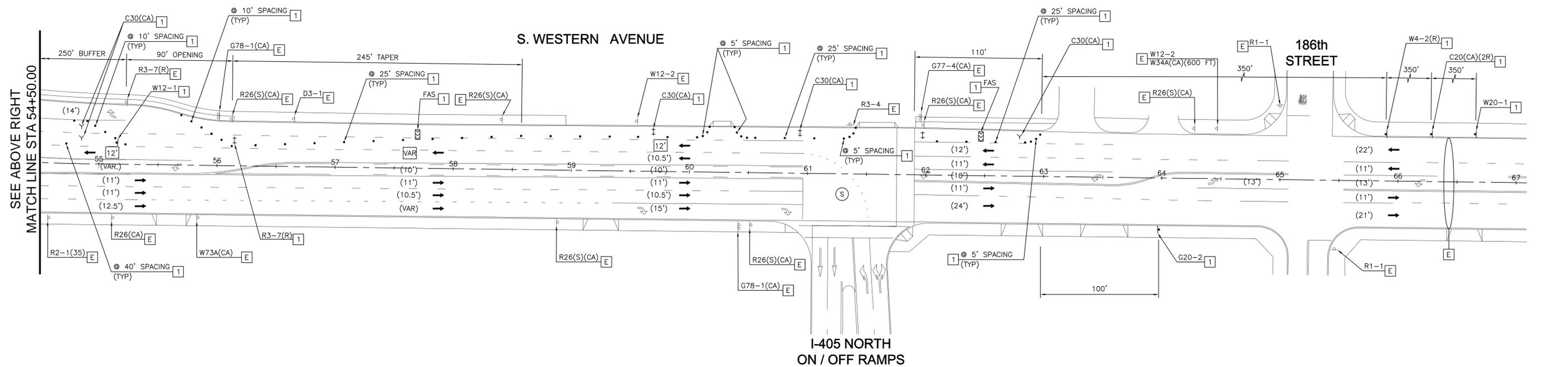
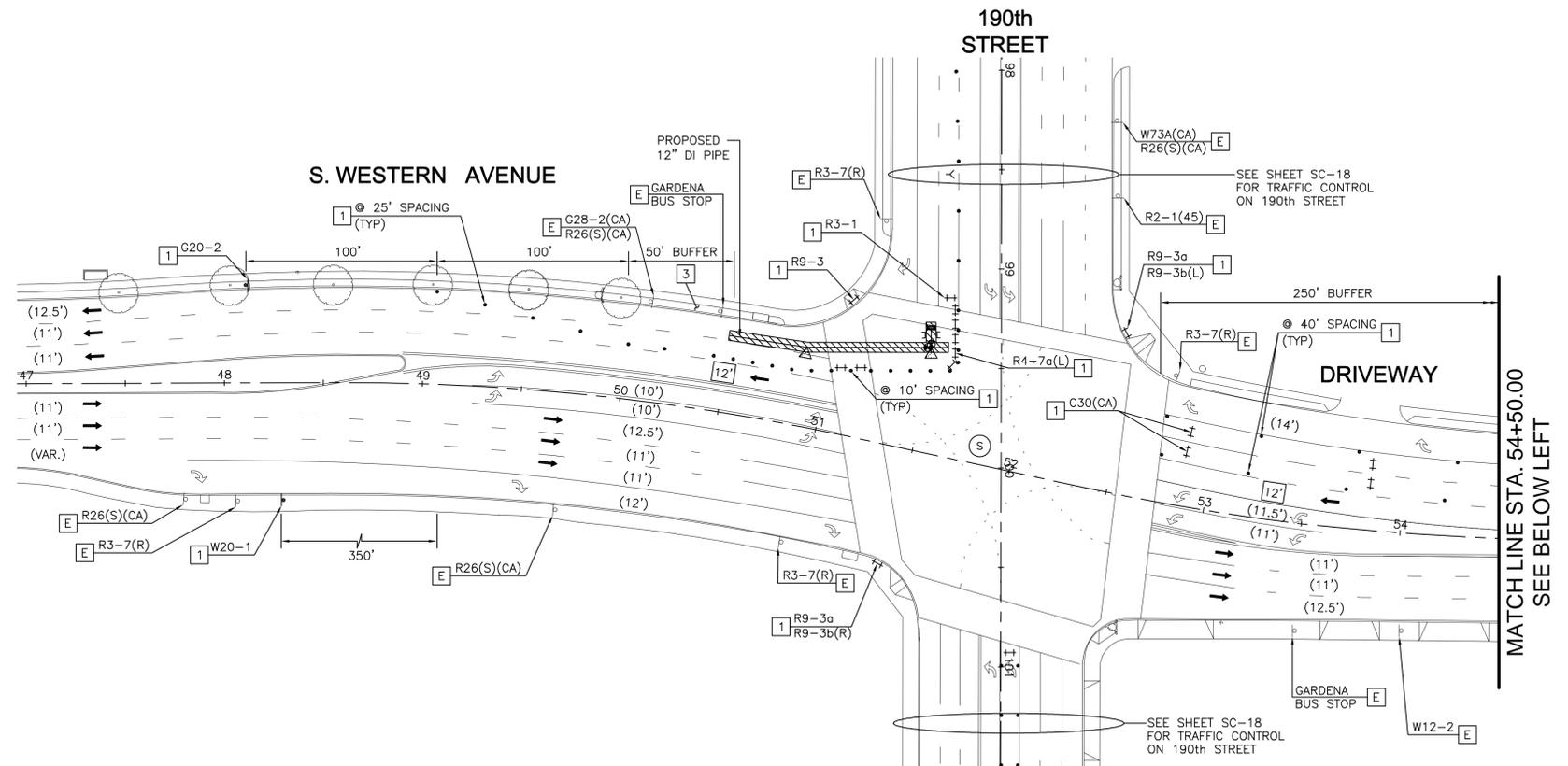
LEGEND:

- ++ TYPE II BARRICADE (WITH SIGN AS NOTED ON PLAN)
- +++ TYPE III BARRICADE (WITH SIGN AS NOTED ON PLAN)
- TEMPORARY SIGN (AS NOTED ON PLAN)
- EXISTING SIGN (ONE POST) (AS NOTED ON PLAN)
- EXISTING SIGN (TWO POST) (AS NOTED ON PLAN)
- 28" CONSTRUCTION CONES OR 36" PORTABLE DELINEATORS
- DIRECTION OF TRAVEL
- ⚡ FLASHING ARROW BOARD SIGN (FAS)
- Y FLAG TREE (SIGN AS NOTED ON PLAN)
- △ TEMPORARY SIGNING AND STRIPING ANGLE POINT
- 12' CONSTRUCTION LANE DIMENSION
- (12') EXISTING LANE DIMENSION
- 🚧 FLAGGER

- WATER MAIN CONSTRUCTION WORK AREA
- WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT CONSTRUCTION WORK AREA
- PAVEMENT CONSTRUCTION WORK AREA

CONSTRUCTION NOTES:

- E EXISTING SIGN AND/OR STRIPING TO REMAIN.
- 1 PROVIDE TEMPORARY STRIPING, CONSTRUCTION SIGN, BARRICADES, CONSTRUCTION CONES, PORTABLE DELINEATORS, FLASHING ARROW SIGN, TEMPORARY K-RAIL OR TEMPORARY CRASH CUSHIONS MODULE (ARRAY PER PLAN).
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- 6 REMOVE (GRIND) EXISTING DETAIL 40 PAVEMENT MARKING. RESTORE IN KIND WITH THERMOPLASTIC PAINT AFTER COMPLETION OF WORK.
- 7 CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS AT ALL TIMES.
- 8 TEMPORARY "NO PARKING-TOW AWAY" SIGNS SHALL BE POSTED WITHIN AFFECTED CONSTRUCTION AREAS A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
- 9 COVER SIGN DURING CONSTRUCTION.

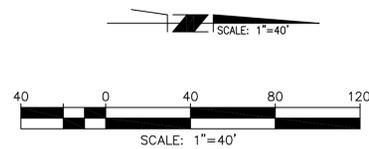


SEE ABOVE RIGHT
MATCH LINE STA 54+50.00

MATCH LINE STA. 54+50.00
SEE BELOW LEFT

TRAFFIC CONTROL NOTES (THIS SHEET):

1. FOR TRAFFIC CONTROL GENERAL NOTES AND DETAILS SEE SHEET SC-01.
2. FOR PROJECT CONSTRUCTION SEQUENCE PLAN SEE SHEET SC-02.
3. TRAFFIC CONTROL ON WESTERN AVENUE IS SUBJECT TO CONDITIONS LISTED ON CALTRANS PERMIT.
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WATER MAIN REPLACEMENT PROJECT
STAGE CONSTRUCTION / TRAFFIC HANDLING PLANS
WESTERN AVENUE
STAGE 10A

CARLOS A. ORTIZ
CIVIL ENGINEER

RBF CONSULTING

14725 ALTON PARKWAY
IRVINE, CALIFORNIA 92618-2027
949.472.3505 • FAX 949.472.8373 • www.RBF.com

WESTERN AVENUE DESIGN SPEED (POSTED)
SOUTH OF 190TH STREET: 40 MPH
NORTH OF 190TH STREET: 35 MPH

STAGE 10A

SC-17

REV.	DATE	DESCRIPTION	BY	CHECKED

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: CM	APPROVED:
DESIGNED: CM	JOHN C. DETTLE DATE
PROJECT ENGINEER:	ACTING CITY ENGINEER
ENGINEERING MANAGER:	R.C.E. NO. 51438 EXP. 06/30/12
SCALE: AS SHOWN SHEET 27 OF 40	
PLAN NO. WP-291	

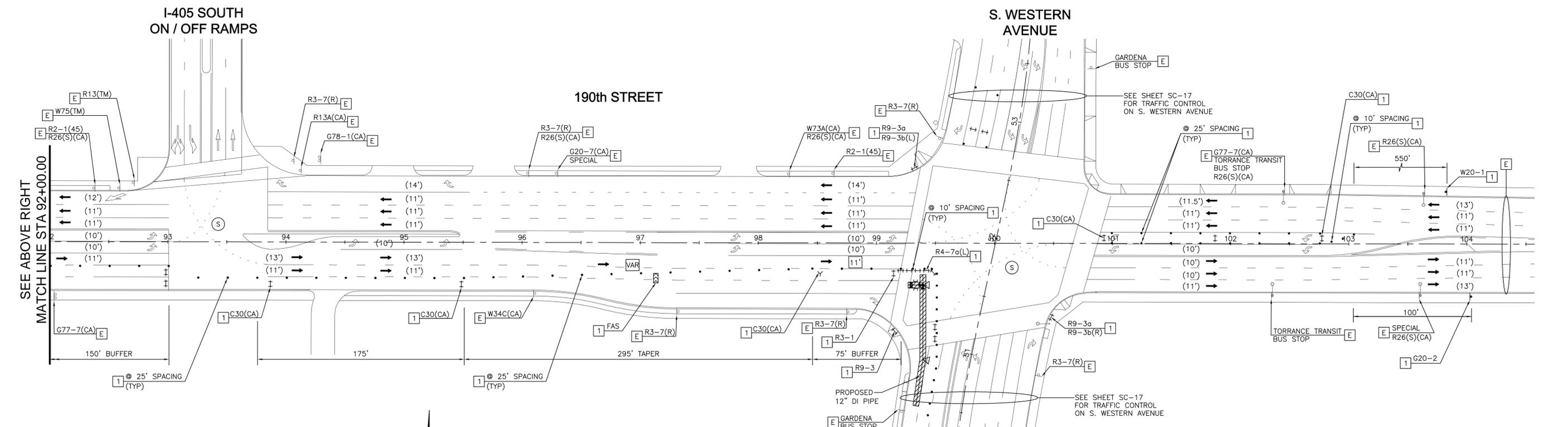
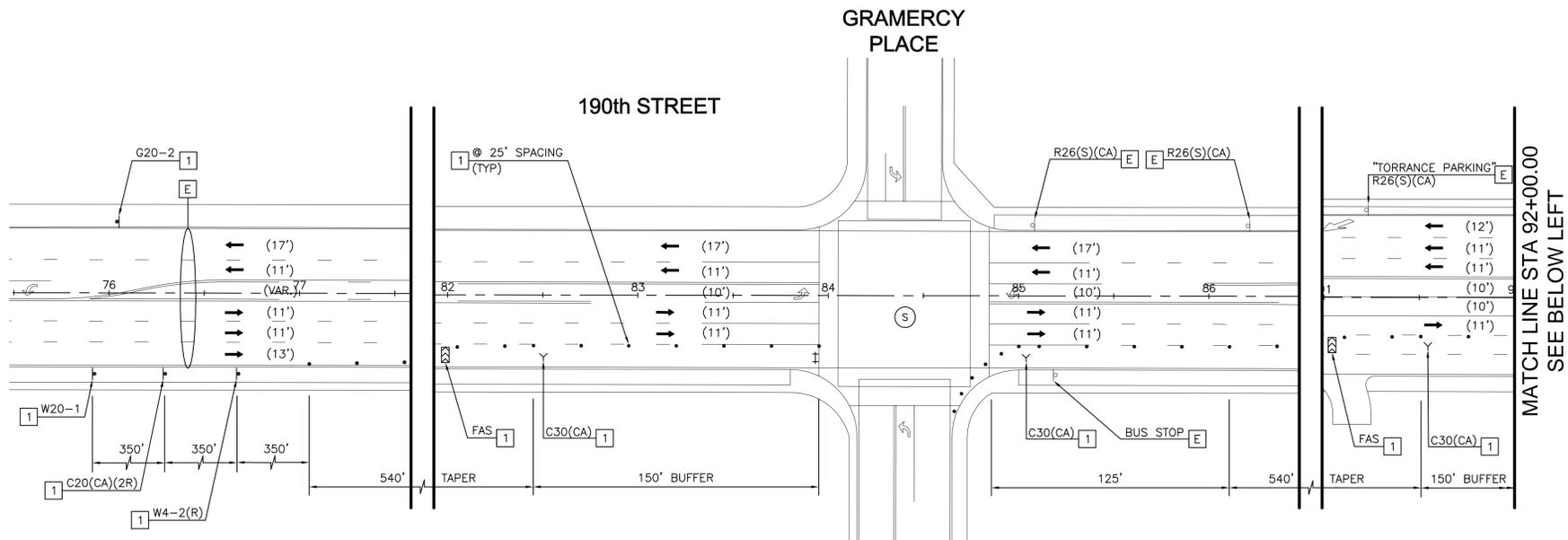
LEGEND:

- ++ TYPE II BARRICADE (WITH SIGN AS NOTED ON PLAN)
- +++ TYPE III BARRICADE (WITH SIGN AS NOTED ON PLAN)
- .- TEMPORARY SIGN (AS NOTED ON PLAN)
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- .-.-.- EXISTING SIGN (TWO POST) (AS NOTED ON PLAN)
- 28" CONSTRUCTION CONES OR 36" PORTABLE DELINEATORS
- ← DIRECTION OF TRAVEL
- ⬇ FLASHING ARROW BOARD SIGN (FAS)
- Y FLAG TREE (SIGN AS NOTED ON PLAN)
- △ TEMPORARY SIGNING AND STRIPING ANGLE POINT
- [12] CONSTRUCTION LANE DIMENSION
- (12') EXISTING LANE DIMENSION
- ⚠ FLAGGER

- WATER MAIN CONSTRUCTION WORK AREA
- WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT CONSTRUCTION WORK AREA
- PAVEMENT CONSTRUCTION WORK AREA

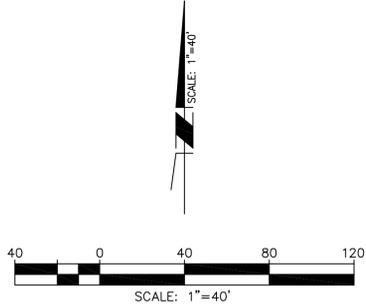
CONSTRUCTION NOTES:

- [E] EXISTING SIGN AND/OR STRIPING TO REMAIN.
- [1] PROVIDE TEMPORARY STRIPING, CONSTRUCTION SIGN, BARRICADES, CONSTRUCTION CONES, PORTABLE DELINEATORS, FLASHING ARROW SIGN, TEMPORARY K-RAIL OR TEMPORARY CRASH CUSHIONS MODULE (ARRAY PER PLAN).
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- [6] REMOVE (GRIND) EXISTING DETAIL 40 PAVEMENT MARKING. RESTORE IN KIND WITH THERMOPLASTIC PAINT AFTER COMPLETION OF WORK.
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- [8] TEMPORARY "NO PARKING-TOW AWAY" SIGNS SHALL BE POSTED WITHIN AFFECTED CONSTRUCTION AREAS A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
- [9] COVER SIGN DURING CONSTRUCTION.



TRAFFIC CONTROL NOTES (THIS SHEET):

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2. FOR PROJECT CONSTRUCTION SEQUENCE PLAN SEE SHEET SC-02.
3. TRAFFIC CONTROL ON WESTERN AVENUE IS SUBJECT TO CONDITIONS LISTED ON CALTRANS PERMIT.
4. CONTRACTOR SHALL NOTIFY ENGINEER AT LEAST TWO DAYS IN ADVANCE OF START OF WORK AT SIGNALIZED INTERSECTIONS.
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WATER MAIN REPLACEMENT PROJECT
STAGE CONSTRUCTION / TRAFFIC HANDLING PLANS
WESTERN AVENUE
STAGE 10A

REV.	DATE	DESCRIPTION	BY	CHECKED

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: CM	APPROVED:
DESIGNED: CM	JOHN C. DETTLE DATE
PROJECT ENGINEER:	ACTING CITY ENGINEER
ENGINEERING MANAGER:	R.C.E. NO. 51438 EXP. 06/30/12
SCALE: AS SHOWN SHEET 28 OF 40	
PLAN NO. WP-291	

190th STREET DESIGN SPEED (POSTED): 45 MPH

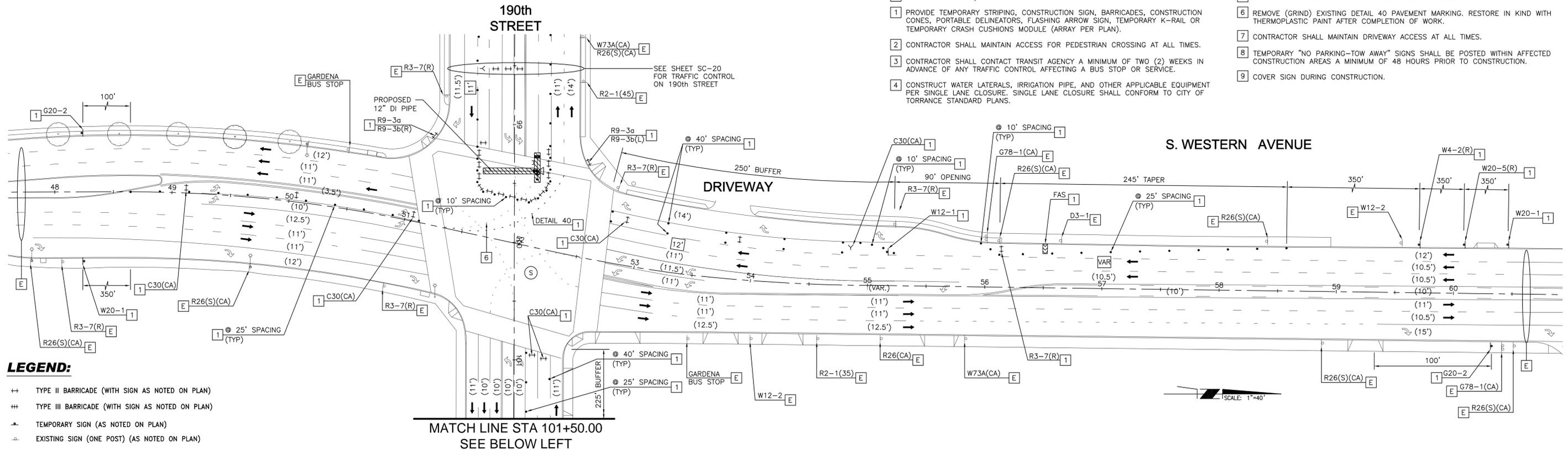
STAGE 10A

SC-18

H:\PDATA\10107269\CADD\TRANSPW\DLV\STAGE\TC7269-18.DWG JMCNEILL 1/20/12 9:59 am

CONSTRUCTION NOTES:

- [E] EXISTING SIGN AND/OR STRIPING TO REMAIN.
- [1] PROVIDE TEMPORARY STRIPING, CONSTRUCTION SIGN, BARRICADES, CONSTRUCTION CONES, PORTABLE DELINEATORS, FLASHING ARROW SIGN, TEMPORARY K-RAIL OR TEMPORARY CRASH CUSHIONS MODULE (ARRAY PER PLAN).
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- [9] COVER SIGN DURING CONSTRUCTION.

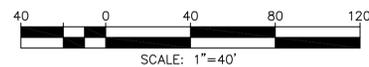


LEGEND:

- ++ TYPE II BARRICADE (WITH SIGN AS NOTED ON PLAN)
- +++ TYPE III BARRICADE (WITH SIGN AS NOTED ON PLAN)
- TEMPORARY SIGN (AS NOTED ON PLAN)
- EXISTING SIGN (ONE POST) (AS NOTED ON PLAN)
- EXISTING SIGN (TWO POST) (AS NOTED ON PLAN)
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- ← DIRECTION OF TRAVEL
- ⚡ FLASHING ARROW BOARD SIGN (FAS)
- Y FLAG TREE (SIGN AS NOTED ON PLAN)
- △ TEMPORARY SIGNING AND STRIPING ANGLE POINT
- [12'] CONSTRUCTION LANE DIMENSION
- (12') EXISTING LANE DIMENSION
- 🚧 FLAGGER
- ▨ WATER MAIN CONSTRUCTION WORK AREA
- ▩ WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT CONSTRUCTION WORK AREA
- ▧ PAVEMENT CONSTRUCTION WORK AREA

TRAFFIC CONTROL NOTES (THIS SHEET):

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6. CONSTRUCTION THIS STAGE SHALL BE COMPLETED ON WEEKDAYS BETWEEN 9:00 PM AND 5:00 AM. STEEL PLATES AND "STEEL PLATES AHEAD" SIGNS SHALL BE INSTALLED DURING NON-WORKING HOURS AND ALL TRAVEL LANES OPEN.
7. CONTRACTOR SHALL CONTACT LADOT AT (213) 485-2298 TEN DAYS PRIOR OF START OF WORK TO POST TEMPORARY TOW AWAY / NO STOPPING SIGNS (WHERE APPROPRIATE) WITHIN CITY OF LOS ANGELES RIGHT-OF-WAY ON WEEKDAYS DURING THE CONSTRUCTION HOURS OF 9:00 PM TO 5:00 AM.



WATER MAIN REPLACEMENT PROJECT
STAGE CONSTRUCTION / TRAFFIC HANDLING PLANS
WESTERN AVENUE
STAGE 10B

PLANNING ■ DESIGN ■ CONSTRUCTION

14725 ALTON PARKWAY
 IRVINE, CALIFORNIA 92618-2027
 949.472.3505 • FAX 949.472.8373 • www.RBF.com

REV.	DATE	DESCRIPTION	BY	CHECKED

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

APPROVED: _____

DRAWN: CM

DESIGNED: CM

PROJECT ENGINEER: _____

ENGINEERING MANAGER: _____

JOHN C. DETTLE
 ACTING CITY ENGINEER
 R.C.E. NO. 51438 EXP. 06/30/12

SCALE: AS SHOWN SHEET 29 OF 40

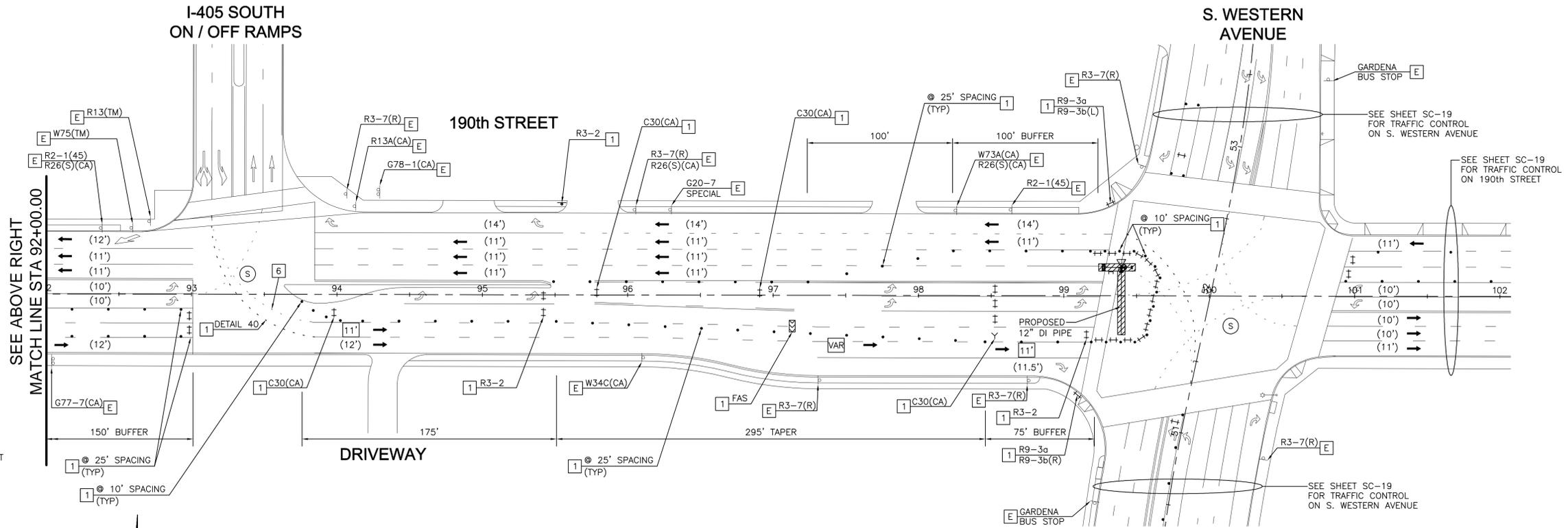
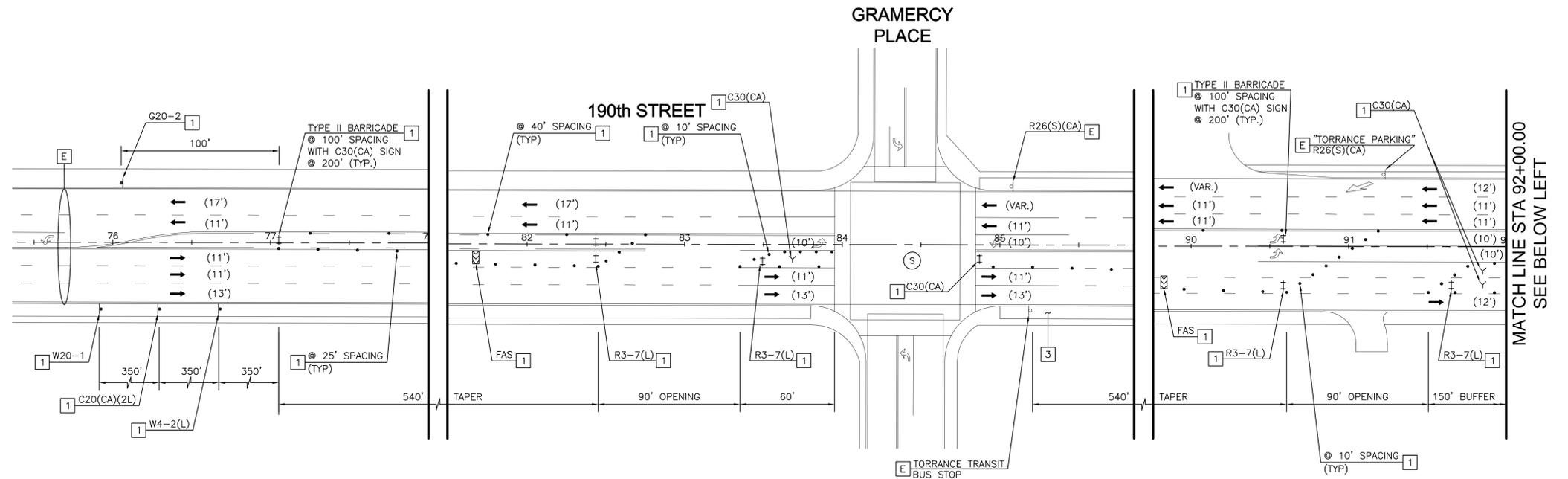
PLAN NO. **WP-291**

WESTERN AVENUE DESIGN SPEED (POSTED)
 SOUTH OF 190TH STREET: 40 MPH
 NORTH OF 190TH STREET: 35 MPH
 190th STREET DESIGN SPEED (POSTED): 45 MPH

H:\PDATA\10107269\CADD\TRANSPW\DLV\STAGE\TC7269-19.DWG JMCNEILL 1/20/12 9:59 am

LEGEND:

- ++ TYPE II BARRICADE (WITH SIGN AS NOTED ON PLAN)
- +++ TYPE III BARRICADE (WITH SIGN AS NOTED ON PLAN)
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- FLASHING ARROW BOARD SIGN (FAS)
- FLAG TREE (SIGN AS NOTED ON PLAN)
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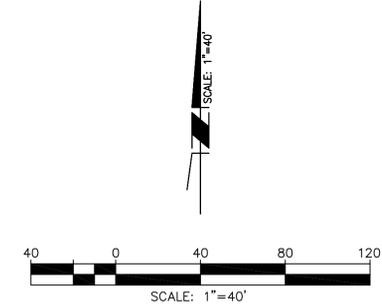


CONSTRUCTION NOTES:

- [E] EXISTING SIGN AND/OR STRIPING TO REMAIN.
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TRAFFIC CONTROL NOTES (THIS SHEET):

- 1. FOR TRAFFIC CONTROL GENERAL NOTES AND DETAILS SEE SHEET SC-01.
- 2. FOR PROJECT CONSTRUCTION SEQUENCE PLAN SEE SHEET SC-02.
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WATER MAIN REPLACEMENT PROJECT
STAGE CONSTRUCTION / TRAFFIC HANDLING PLANS
WESTERN AVENUE
STAGE 10B

PLANNING ■ DESIGN ■ CONSTRUCTION

14725 ALTON PARKWAY
 IRVINE, CALIFORNIA 92618-2027
 949.472.3505 • FAX 949.472.8373 • www.RBF.com

REV.	DATE	DESCRIPTION	BY	CHECKED

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: CM
 DESIGNED: CM

PROJECT ENGINEER: _____
 ENGINEERING MANAGER: _____

APPROVED: _____
 JOHN C. DETTLE, ACTING CITY ENGINEER, R.C.E. NO. 51438, DATE EXP. 06/30/12

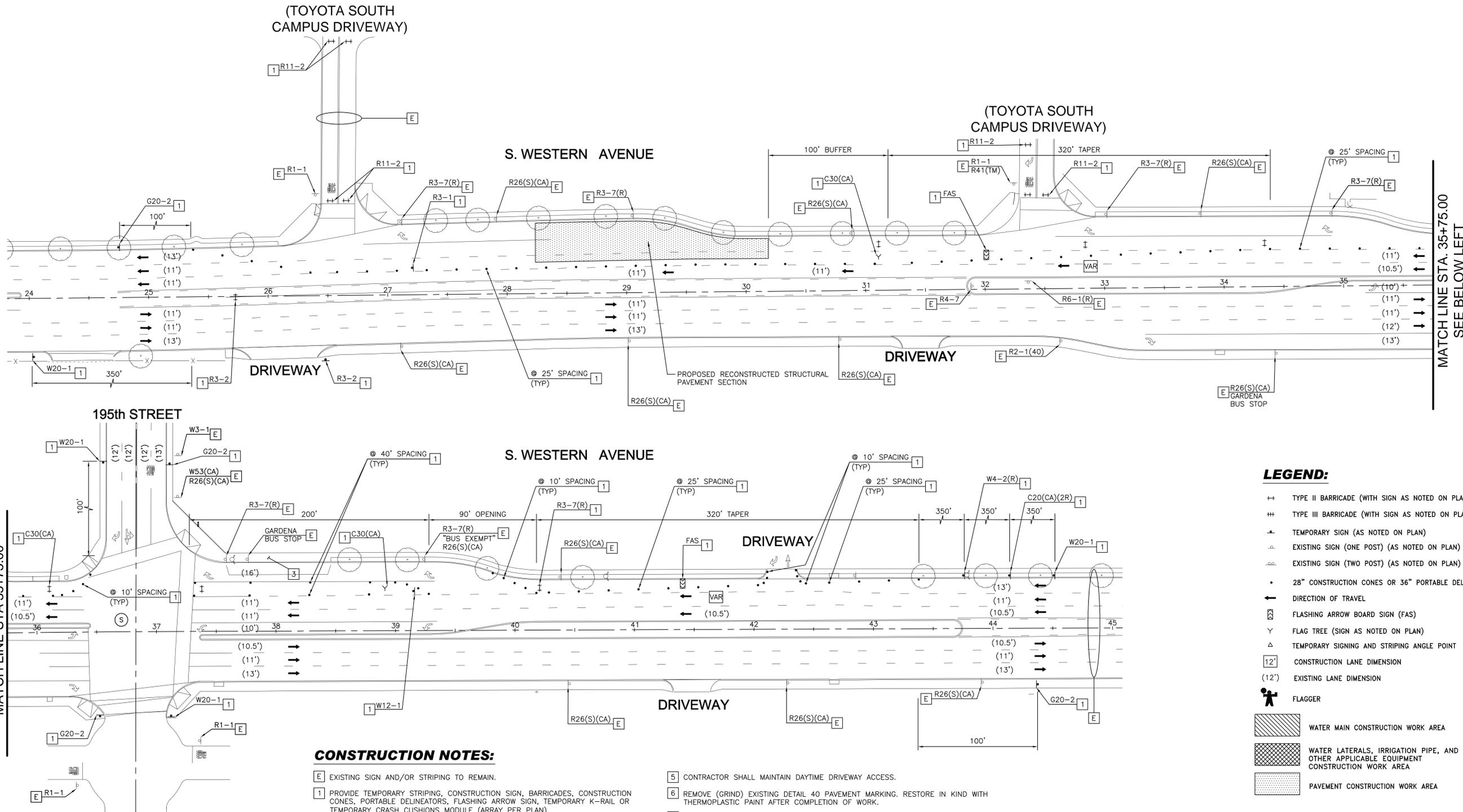
SCALE: AS SHOWN SHEET 30 OF 40
 PLAN NO. **WP-291**

190th STREET DESIGN SPEED: 45 MPH

SC-20

H:\PDATA\10107269\CADD\TRANSPW\DLV\STAGE\TC7269-20.DWG JMCNEILL 1/20/12 10:00 am

H:\PDATA\10107269\CADD\TRANSPW\DLV\STAGE\TC7269-21.DWG JMCNEILL 1/20/12 10:02 am



MATCH LINE STA. 35+75.00
SEE BELOW LEFT

SEE ABOVE RIGHT
MATCH LINE STA 35+75.00

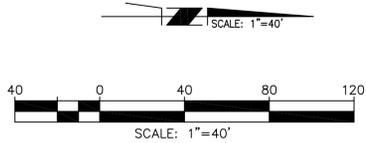
- LEGEND:**
- ++ TYPE II BARRICADE (WITH SIGN AS NOTED ON PLAN)
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 - △ TEMPORARY SIGN (AS NOTED ON PLAN)
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 - ← DIRECTION OF TRAVEL
 - ⚡ FLASHING ARROW BOARD SIGN (FAS)
 - Y FLAG TREE (SIGN AS NOTED ON PLAN)
 - △ TEMPORARY SIGNING AND STRIPING ANGLE POINT
 - 12' CONSTRUCTION LANE DIMENSION
 - (12') EXISTING LANE DIMENSION
 - 🚧 FLAGGER
 - ▨ WATER MAIN CONSTRUCTION WORK AREA
 - ▩ WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT CONSTRUCTION WORK AREA
 - ▧ PAVEMENT CONSTRUCTION WORK AREA

CONSTRUCTION NOTES:

- [E] EXISTING SIGN AND/OR STRIPING TO REMAIN.
- [1] PROVIDE TEMPORARY STRIPING, CONSTRUCTION SIGN, BARRICADES, CONSTRUCTION CONES, PORTABLE DELINEATORS, FLASHING ARROW SIGN, TEMPORARY K-RAIL OR TEMPORARY CRASH CUSHIONS MODULE (ARRAY PER PLAN).
- [2] CONTRACTOR SHALL MAINTAIN ACCESS FOR PEDESTRIAN CROSSING AT ALL TIMES.
- [3] CONTRACTOR SHALL CONTACT TRANSIT AGENCY A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF ANY TRAFFIC CONTROL AFFECTING A BUS STOP OR SERVICE.
- [4] CONSTRUCT WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT PER SINGLE LANE CLOSURE. SINGLE LANE CLOSURE SHALL CONFORM TO CITY OF TORRANCE STANDARD PLANS.
- [5] CONTRACTOR SHALL MAINTAIN DAYTIME DRIVEWAY ACCESS.
- [6] REMOVE (GRIND) EXISTING DETAIL 40 PAVEMENT MARKING. RESTORE IN KIND WITH THERMOPLASTIC PAINT AFTER COMPLETION OF WORK.
- [7] CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS AT ALL TIMES.
- [8] TEMPORARY "NO PARKING-TOW AWAY" SIGNS SHALL BE POSTED WITHIN AFFECTED CONSTRUCTION AREAS A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
- [9] COVER SIGN DURING CONSTRUCTION.

TRAFFIC CONTROL NOTES (THIS SHEET):

1. FOR TRAFFIC CONTROL GENERAL NOTES AND DETAILS SEE SHEET SC-01.
2. FOR PROJECT CONSTRUCTION SEQUENCE PLAN SEE SHEET SC-02.
3. TRAFFIC CONTROL ON WESTERN AVENUE IS SUBJECT TO CONDITIONS LISTED ON CALTRANS PERMIT.
4. CONTRACTOR SHALL NOTIFY ENGINEER AT LEAST TWO DAYS IN ADVANCE OF START OF WORK AT SIGNALIZED INTERSECTIONS.
5. CONTRACTOR SHALL CONTACT THE STATE TRAFFIC SIGNAL OPERATIONS ENGINEER, ROMÉY SALVADOR, AT (213) 897-0296 (OFFICE) OR (213) 761-2868 (MOBILE) TO INQUIRE ON AND COORDINATE ANY MODIFICATIONS TO THE TRAFFIC SIGNAL TIMINGS ON WESTERN AVE.
6. CONSTRUCTION THIS STAGE SHALL BE COMPLETED ON WEEKDAYS BETWEEN 7:00 PM AND 5:30 AM.



WESTERN AVENUE DESIGN SPEED (POSTED): 40 MPH

STAGE 11A

SC-21

WATER MAIN REPLACEMENT PROJECT
STAGE CONSTRUCTION / TRAFFIC HANDLING PLANS
WESTERN AVENUE
STAGE 11A

CIVIL

PLANNING ■ DESIGN ■ CONSTRUCTION

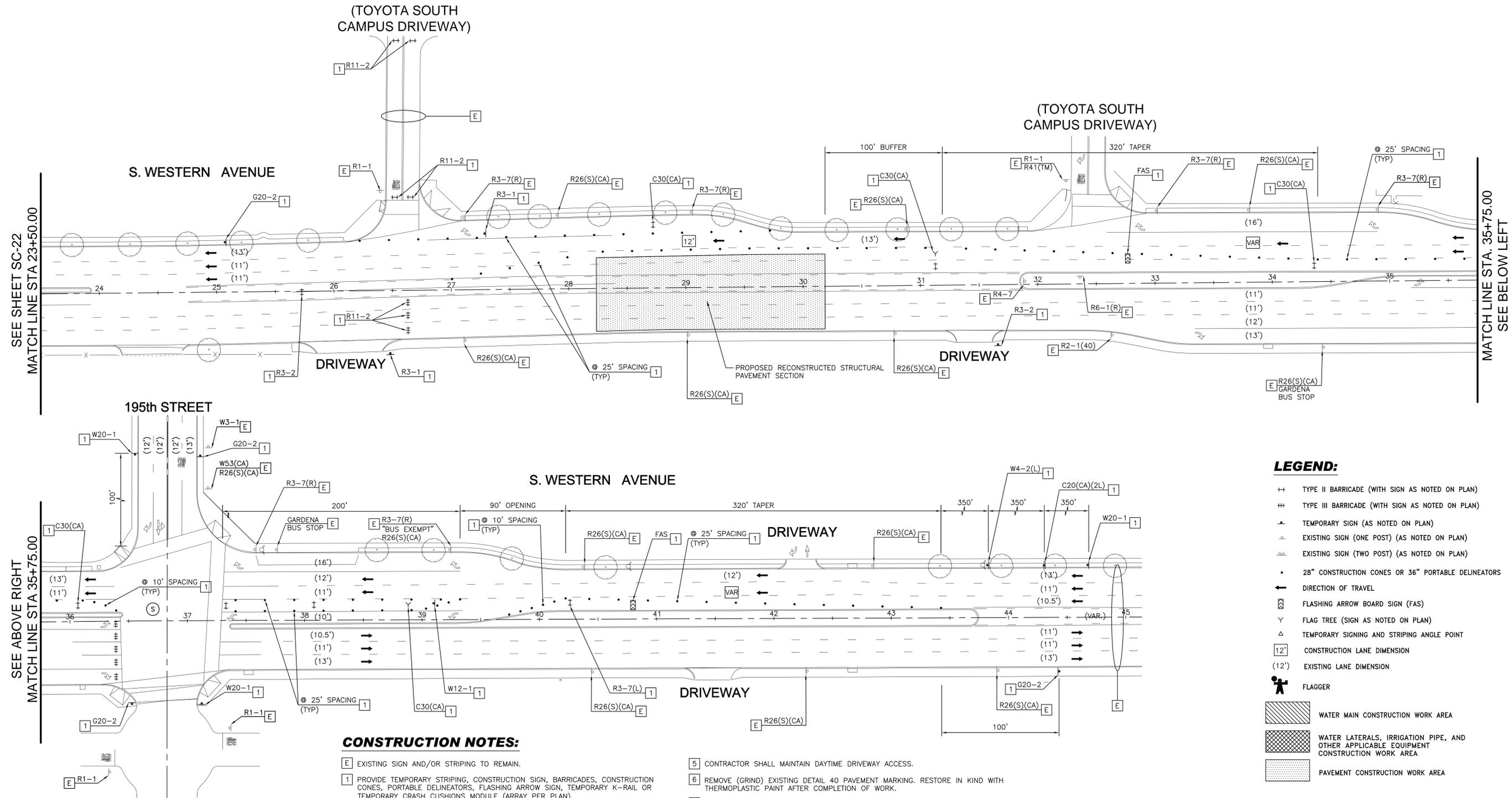
14725 ALTON PARKWAY
IRVINE, CALIFORNIA 92618-2027
949.472.3505 • FAX 949.472.8373 • www.RBF.com

REV.	DATE	DESCRIPTION	BY	CHECKED

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: CM	APPROVED:
DESIGNED: CM	JOHN C. DETTLE DATE
PROJECT ENGINEER:	ACTING CITY ENGINEER
ENGINEERING MANAGER:	R.C.E. NO. 51438 EXP. 06/30/12
SCALE: AS SHOWN SHEET 31 OF 40	
PLAN NO. WP-291	

H:\PDATA\10107269\CADD\TRANSPW\DLV\STAGE\TC269-23.DWG JMCNEILL 1/20/12 10:05 am



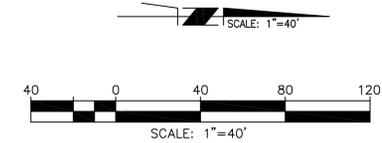
- LEGEND:**
- ++ TYPE II BARRICADE (WITH SIGN AS NOTED ON PLAN)
 - +++ TYPE III BARRICADE (WITH SIGN AS NOTED ON PLAN)
 - ▲ TEMPORARY SIGN (AS NOTED ON PLAN)
 - ▲ EXISTING SIGN (ONE POST) (AS NOTED ON PLAN)
 - ▲ EXISTING SIGN (TWO POST) (AS NOTED ON PLAN)
 - 28" CONSTRUCTION CONES OR 36" PORTABLE DELINEATORS
 - ← DIRECTION OF TRAVEL
 - ▲ FLASHING ARROW BOARD SIGN (FAS)
 - ▲ FLAG TREE (SIGN AS NOTED ON PLAN)
 - ▲ TEMPORARY SIGNING AND STRIPING ANGLE POINT
 - 12' CONSTRUCTION LANE DIMENSION
 - (12') EXISTING LANE DIMENSION
 - ▲ FLAGGER
 - ▨ WATER MAIN CONSTRUCTION WORK AREA
 - ▩ WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT CONSTRUCTION WORK AREA
 - ▧ PAVEMENT CONSTRUCTION WORK AREA

CONSTRUCTION NOTES:

- [E] EXISTING SIGN AND/OR STRIPING TO REMAIN.
- [1] PROVIDE TEMPORARY STRIPING, CONSTRUCTION SIGN, BARRICADES, CONSTRUCTION CONES, PORTABLE DELINEATORS, FLASHING ARROW SIGN, TEMPORARY K-RAIL OR TEMPORARY CRASH CUSHIONS MODULE (ARRAY PER PLAN).
- [2] CONTRACTOR SHALL MAINTAIN ACCESS FOR PEDESTRIAN CROSSING AT ALL TIMES.
- [3] CONTRACTOR SHALL CONTACT TRANSIT AGENCY A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF ANY TRAFFIC CONTROL AFFECTING A BUS STOP OR SERVICE.
- [4] CONSTRUCT WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT PER SINGLE LANE CLOSURE. SINGLE LANE CLOSURE SHALL CONFORM TO CITY OF TORRANCE STANDARD PLANS.
- [5] CONTRACTOR SHALL MAINTAIN DAYTIME DRIVEWAY ACCESS.
- [6] REMOVE (GRIND) EXISTING DETAIL 40 PAVEMENT MARKING. RESTORE IN KIND WITH THERMOPLASTIC PAINT AFTER COMPLETION OF WORK.
- [7] CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS AT ALL TIMES.
- [8] TEMPORARY "NO PARKING-TOW AWAY" SIGNS SHALL BE POSTED WITHIN AFFECTED CONSTRUCTION AREAS A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
- [9] COVER SIGN DURING CONSTRUCTION.

TRAFFIC CONTROL NOTES (THIS SHEET):

1. FOR TRAFFIC CONTROL GENERAL NOTES AND DETAILS SEE SHEET SC-01.
2. FOR PROJECT CONSTRUCTION SEQUENCE PLAN SEE SHEET SC-02.
3. TRAFFIC CONTROL ON WESTERN AVENUE IS SUBJECT TO CONDITIONS LISTED ON CALTRANS PERMIT.
4. CONTRACTOR SHALL NOTIFY ENGINEER AT LEAST TWO DAYS IN ADVANCE OF START OF WORK AT SIGNALIZED INTERSECTIONS.
5. CONTRACTOR SHALL CONTACT THE STATE TRAFFIC SIGNAL OPERATIONS ENGINEER, ROMÉY SALVADOR, AT (213) 897-0296 (OFFICE) OR (213) 761-2868 (MOBILE) TO INQUIRE ON AND COORDINATE ANY MODIFICATIONS TO THE TRAFFIC SIGNAL TIMINGS ON WESTERN AVE.
6. CONSTRUCTION THIS STAGE SHALL BE COMPLETED ON WEEKDAYS BETWEEN 7:00 PM AND 5:30 AM.
7. SEE DETOUR PLAN ON SHEET SC-22 FOR WESTERN AVENUE NB CLOSURE FROM WESTERN WAY TO TOYOTA WAY.



**WATER MAIN REPLACEMENT PROJECT
STAGE CONSTRUCTION / TRAFFIC HANDLING PLANS
WESTERN AVENUE
STAGE 11B**

PLANNING ■ DESIGN ■ CONSTRUCTION

14725 ALTON PARKWAY
IRVINE, CALIFORNIA 92618-2027
949.472.8505 • FAX 949.472.8373 • WWW.RBF.COM

WESTERN AVENUE DESIGN SPEED (POSTED): 40 MPH

REV.	DATE	DESCRIPTION	BY	CHECKED

STAGE 11B SC-23

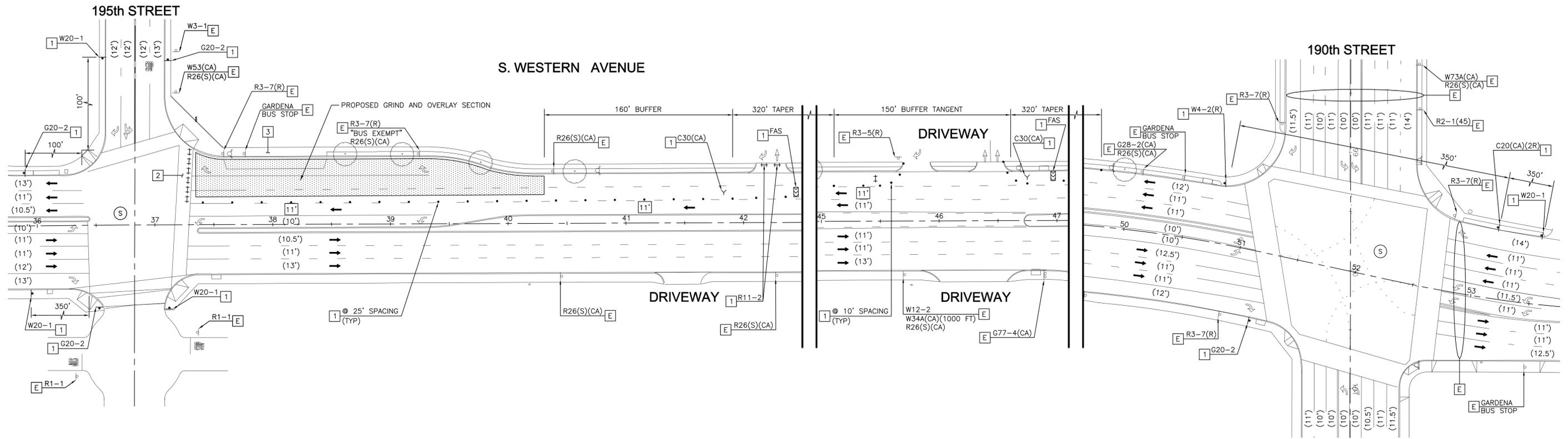
CITY OF TORRANCE PUBLIC WORKS DEPARTMENT	
DRAWN: CM	APPROVED:
DESIGNED: CM	
PROJECT ENGINEER:	JOHN C. DETTLE DATE ACTING CITY ENGINEER R.C.E. NO. 51438 EXP. 06/30/12
ENGINEERING MANAGER:	SCALE: AS SHOWN SHEET 33 OF 40 PLAN NO. WP-291

LEGEND:

- ++ TYPE II BARRICADE (WITH SIGN AS NOTED ON PLAN)
- ++ TYPE III BARRICADE (WITH SIGN AS NOTED ON PLAN)
- ▲ TEMPORARY SIGN (AS NOTED ON PLAN)
- ▲ EXISTING SIGN (ONE POST) (AS NOTED ON PLAN)
- ▲ EXISTING SIGN (TWO POST) (AS NOTED ON PLAN)
- 28" CONSTRUCTION CONES OR 36" PORTABLE DELINEATORS
- ← DIRECTION OF TRAVEL
- ⚡ FLASHING ARROW BOARD SIGN (FAS)
- Y FLAG TREE (SIGN AS NOTED ON PLAN)
- △ TEMPORARY SIGNING AND STRIPING ANGLE POINT
- 12' CONSTRUCTION LANE DIMENSION
- (12') EXISTING LANE DIMENSION
- FLAGGER
- WATER MAIN CONSTRUCTION WORK AREA
- WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT CONSTRUCTION WORK AREA
- PAVEMENT CONSTRUCTION WORK AREA

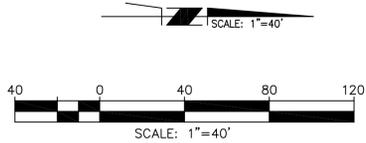
CONSTRUCTION NOTES:

- E EXISTING SIGN AND/OR STRIPING TO REMAIN.
- 1 PROVIDE TEMPORARY STRIPING, CONSTRUCTION SIGN, BARRICADES, CONSTRUCTION CONES, PORTABLE DELINEATORS, FLASHING ARROW SIGN, TEMPORARY K-RAIL OR TEMPORARY CRASH CUSHIONS MODULE (ARRAY PER PLAN).
- 2 CONTRACTOR SHALL MAINTAIN ACCESS FOR PEDESTRIAN CROSSING AT ALL TIMES.
- 3 CONTRACTOR SHALL CONTACT TRANSIT AGENCY A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF ANY TRAFFIC CONTROL AFFECTING A BUS STOP OR SERVICE.
- 4 CONSTRUCT WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT PER SINGLE LANE CLOSURE. SINGLE LANE CLOSURE SHALL CONFORM TO CITY OF TORRANCE STANDARD PLANS.
- 5 CONTRACTOR SHALL MAINTAIN DAYTIME DRIVEWAY ACCESS.
- 6 REMOVE (GRIND) EXISTING DETAIL 40 PAVEMENT MARKING. RESTORE IN KIND WITH THERMOPLASTIC PAINT AFTER COMPLETION OF WORK.
- 7 CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS AT ALL TIMES.
- 8 TEMPORARY "NO PARKING-TOW AWAY" SIGNS SHALL BE POSTED WITHIN AFFECTED CONSTRUCTION AREAS A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
- 9 COVER SIGN DURING CONSTRUCTION.

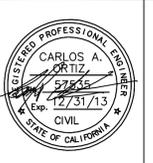


TRAFFIC CONTROL NOTES (THIS SHEET):

1. FOR TRAFFIC CONTROL GENERAL NOTES AND DETAILS SEE SHEET SC-01.
2. FOR PROJECT CONSTRUCTION SEQUENCE PLAN SEE SHEET SC-02.
3. TRAFFIC CONTROL ON WESTERN AVENUE IS SUBJECT TO CONDITIONS LISTED ON CALTRANS PERMIT.
4. CONTRACTOR SHALL NOTIFY ENGINEER AT LEAST TWO DAYS IN ADVANCE OF START OF WORK AT SIGNALIZED INTERSECTIONS.
5. CONTRACTOR SHALL CONTACT THE STATE TRAFFIC SIGNAL OPERATIONS ENGINEER, ROMÉY SALVADOR, AT (213) 897-0296 (OFFICE) OR (213) 761-2868 (MOBILE) TO INQUIRE ON AND COORDINATE ANY MODIFICATIONS TO THE TRAFFIC SIGNAL TIMINGS ON WESTERN AVE.
6. CONSTRUCTION THIS STAGE SHALL BE COMPLETED ON WEEKDAYS BETWEEN 7:00 PM AND 5:30 AM.



**WATER MAIN REPLACEMENT PROJECT
STAGE CONSTRUCTION / TRAFFIC HANDLING PLANS
WESTERN AVENUE
STAGE 12A**



WESTERN AVENUE DESIGN SPEED (POSTED)
SOUTH OF 190TH STREET: 40 MPH
NORTH OF 190TH STREET: 35 MPH

REV.	DATE	DESCRIPTION	BY	CHECKED

STAGE 12A

SC-24

**CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT**

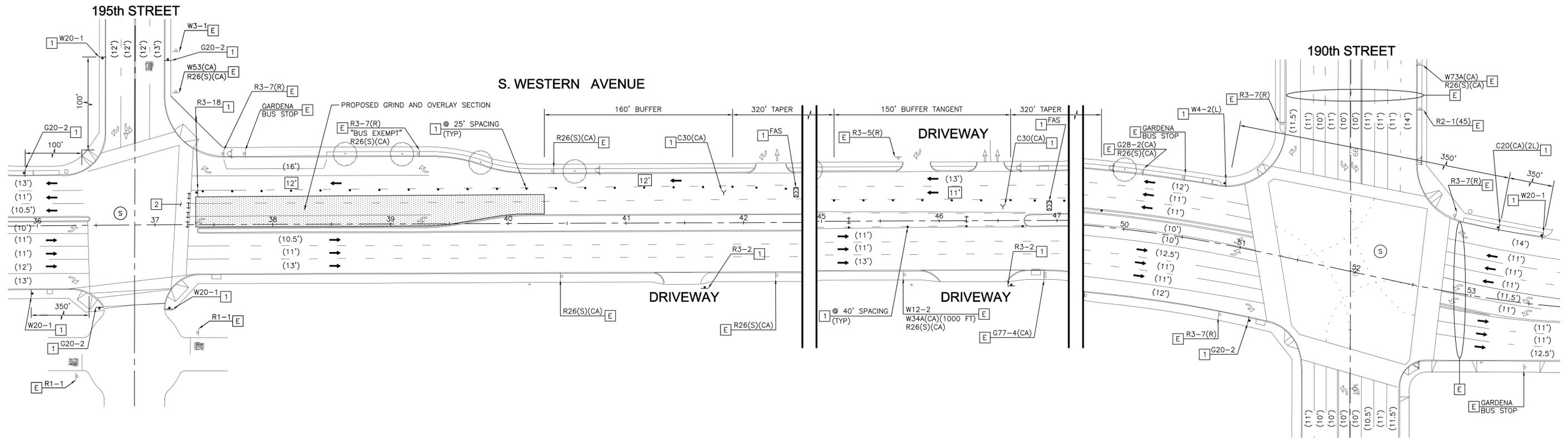
DRAWN: CM	APPROVED:
DESIGNED: CM	JOHN C. DETTLE DATE
PROJECT ENGINEER:	ACTING CITY ENGINEER R.C.E. NO. 51438 EXP. 06/30/12
ENGINEERING MANAGER:	SCALE: AS SHOWN SHEET 34 OF 40
	PLAN NO. WP-291

LEGEND:

- ++ TYPE II BARRICADE (WITH SIGN AS NOTED ON PLAN)
- ++ TYPE III BARRICADE (WITH SIGN AS NOTED ON PLAN)
- ▲ TEMPORARY SIGN (AS NOTED ON PLAN)
- ▲ EXISTING SIGN (ONE POST) (AS NOTED ON PLAN)
- ▲ EXISTING SIGN (TWO POST) (AS NOTED ON PLAN)
- 28" CONSTRUCTION CONES OR 36" PORTABLE DELINEATORS
- ← DIRECTION OF TRAVEL
- ⚡ FLASHING ARROW BOARD SIGN (FAS)
- Y FLAG TREE (SIGN AS NOTED ON PLAN)
- △ TEMPORARY SIGNING AND STRIPING ANGLE POINT
- 12' CONSTRUCTION LANE DIMENSION
- (12') EXISTING LANE DIMENSION
- FLAGGER
- WATER MAIN CONSTRUCTION WORK AREA
- WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT CONSTRUCTION WORK AREA
- PAVEMENT CONSTRUCTION WORK AREA

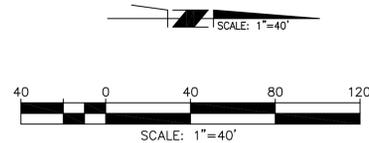
CONSTRUCTION NOTES:

- E EXISTING SIGN AND/OR STRIPING TO REMAIN.
- 1 PROVIDE TEMPORARY STRIPING, CONSTRUCTION SIGN, BARRICADES, CONSTRUCTION CONES, PORTABLE DELINEATORS, FLASHING ARROW SIGN, TEMPORARY K-RAIL OR TEMPORARY CRASH CUSHIONS MODULE (ARRAY PER PLAN).
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- 3 CONTRACTOR SHALL CONTACT TRANSIT AGENCY A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF ANY TRAFFIC CONTROL AFFECTING A BUS STOP OR SERVICE.
- 4 CONSTRUCT WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT PER SINGLE LANE CLOSURE. SINGLE LANE CLOSURE SHALL CONFORM TO CITY OF TORRANCE STANDARD PLANS.
- 5 CONTRACTOR SHALL MAINTAIN DAYTIME DRIVEWAY ACCESS.
- 6 REMOVE (GRIND) EXISTING DETAIL 40 PAVEMENT MARKING. RESTORE IN KIND WITH THERMOPLASTIC PAINT AFTER COMPLETION OF WORK.
- 7 CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS AT ALL TIMES.
- 8 TEMPORARY "NO PARKING-TOW AWAY" SIGNS SHALL BE POSTED WITHIN AFFECTED CONSTRUCTION AREAS A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
- 9 COVER SIGN DURING CONSTRUCTION.



TRAFFIC CONTROL NOTES (THIS SHEET):

1. FOR TRAFFIC CONTROL GENERAL NOTES AND DETAILS SEE SHEET SC-01.
2. FOR PROJECT CONSTRUCTION SEQUENCE PLAN SEE SHEET SC-02.
3. TRAFFIC CONTROL ON WESTERN AVENUE IS SUBJECT TO CONDITIONS LISTED ON CALTRANS PERMIT.
4. CONTRACTOR SHALL NOTIFY ENGINEER AT LEAST TWO DAYS IN ADVANCE OF START OF WORK AT SIGNALIZED INTERSECTIONS.
5. CONTRACTOR SHALL CONTACT THE STATE TRAFFIC SIGNAL OPERATIONS ENGINEER, ROMÉY SALVADOR, AT (213) 897-0296 (OFFICE) OR (213) 761-2868 (MOBILE) TO INQUIRE ON AND COORDINATE ANY MODIFICATIONS TO THE TRAFFIC SIGNAL TIMINGS ON WESTERN AVE.
6. CONSTRUCTION THIS STAGE SHALL BE COMPLETED ON WEEKDAYS BETWEEN 7:00 PM AND 5:30 AM.
7. SEE DETOUR PLAN ON SHEET SC-22 FOR WESTERN AVENUE NB CLOSURE FROM WESTERN WAY TO TOYOTA WAY.



**WATER MAIN REPLACEMENT PROJECT
STAGE CONSTRUCTION / TRAFFIC HANDLING PLANS
WESTERN AVENUE
STAGE 12B**

CARLOS A. CORTIZ
CIVIL ENGINEER
No. 57525
Exp. 12/31/13

RBF CONSULTING
PLANNING ■ DESIGN ■ CONSTRUCTION
14725 ALTON PARKWAY
IRVINE, CALIFORNIA 92618-2027
949.472.8505 • FAX 949.472.8373 • www.RBF.com

WESTERN AVENUE DESIGN SPEED (POSTED)
SOUTH OF 190TH STREET: 40 MPH
NORTH OF 190TH STREET: 35 MPH

STAGE 12B

SC-25

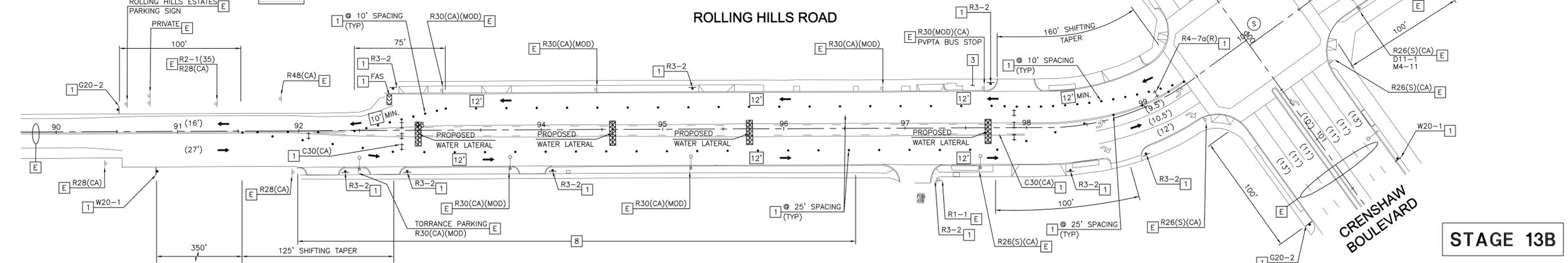
REV.	DATE	DESCRIPTION	BY	CHECKED

CITY OF TORRANCE PUBLIC WORKS DEPARTMENT	
DRAWN: CM	APPROVED:
DESIGNED: CM	JOHN C. DETTLE DATE ACTING CITY ENGINEER R.C.E. NO. 51438 EXP. 06/30/12
PROJECT ENGINEER:	SCALE: AS SHOWN SHEET 35 OF 40
ENGINEERING MANAGER:	PLAN NO. WP-291

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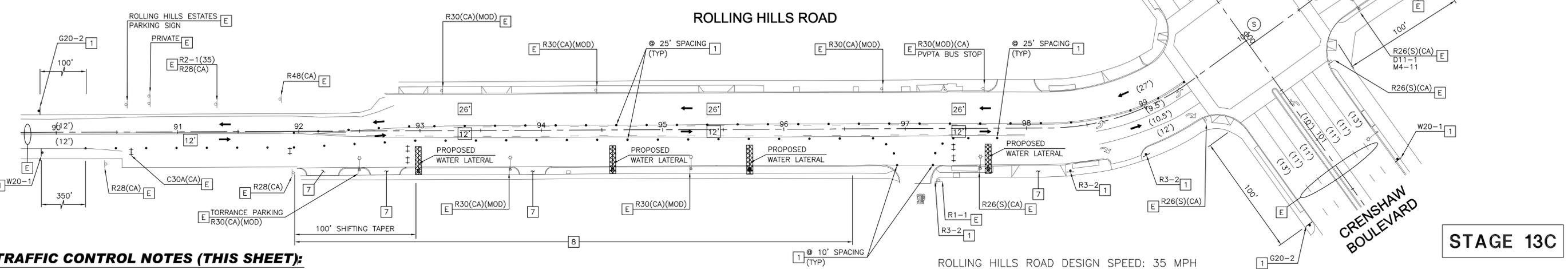
LEGEND:

- ⇄ TYPE II BARRICADE (WITH SIGN AS NOTED ON PLAN)
- ⇄⇄ TYPE III BARRICADE (WITH SIGN AS NOTED ON PLAN)
- △ TEMPORARY SIGN (AS NOTED ON PLAN)
- △ EXISTING SIGN (ONE POST) (AS NOTED ON PLAN)
- △ EXISTING SIGN (TWO POST) (AS NOTED ON PLAN)
- 28" CONSTRUCTION CONES OR 36" PORTABLE DELINEATORS
- ← DIRECTION OF TRAVEL
- ⚡ FLASHING ARROW BOARD SIGN (FAS)
- Y FLAG TREE (SIGN AS NOTED ON PLAN)
- △ TEMPORARY SIGNING AND STRIPING ANGLE POINT
- 12' CONSTRUCTION LANE DIMENSION
- (12') EXISTING LANE DIMENSION
- ⚠ FLAGGER
- ▨ WATER MAIN CONSTRUCTION WORK AREA
- ▨ WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT CONSTRUCTION WORK AREA
- ▨ PAVEMENT CONSTRUCTION WORK AREA



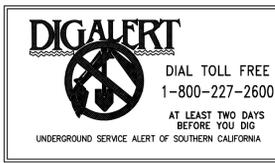
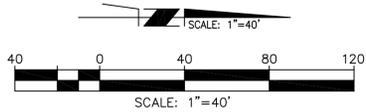
CONSTRUCTION NOTES:

- 1 EXISTING SIGN AND/OR STRIPING TO REMAIN.
- 2 PROVIDE TEMPORARY STRIPING, CONSTRUCTION SIGN, BARRICADES, CONSTRUCTION CONES, PORTABLE DELINEATORS, FLASHING ARROW SIGN, TEMPORARY K-RAIL OR TEMPORARY CRASH CUSHIONS MODULE (ARRAY PER PLAN).
- 3 CONTRACTOR SHALL MAINTAIN ACCESS FOR PEDESTRIAN CROSSING AT ALL TIMES.
- 4 CONTRACTOR SHALL CONTACT TRANSIT AGENCY A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF ANY TRAFFIC CONTROL AFFECTING A BUS STOP OR SERVICE.
- 5 CONTRACTOR SHALL MAINTAIN DAYTIME DRIVEWAY ACCESS.
- 6 REMOVE (GRIND) EXISTING DETAIL 40 PAVEMENT MARKING. RESTORE IN KIND WITH THERMOPLASTIC PAINT AFTER COMPLETION OF WORK.
- 7 CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS AT ALL TIMES.
- 8 TEMPORARY "NO PARKING-TOW AWAY" SIGNS SHALL BE POSTED WITHIN AFFECTED CONSTRUCTION AREAS A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
- 9 COVER SIGN DURING CONSTRUCTION.



TRAFFIC CONTROL NOTES (THIS SHEET):

1. FOR TRAFFIC CONTROL GENERAL NOTES AND DETAILS SEE SHEET SC-01.
2. FOR PROJECT CONSTRUCTION SEQUENCE PLAN SEE SHEET SC-02.
3. CONTRACTOR SHALL NOTIFY ENGINEER AT LEAST TWO DAYS IN ADVANCE OF START OF WORK AT SIGNALIZED INTERSECTIONS.
4. CONTRACTOR SHALL CONTACT THE CITY OF TORRANCE TRAFFIC DIVISION TO INQUIRE ON AND COORDINATE ANY MODIFICATIONS TO THE TRAFFIC SIGNAL TIMINGS ON ROLLING HILLS ROAD.
5. CONSTRUCTION THIS STAGE SHALL BE COMPLETED ON WEEKDAYS BETWEEN 8:30 AM AND 3:00 PM. STEEL PLATES AND "STEEL PLATES AHEAD" SIGNS SHALL BE INSTALLED DURING NON-WORKING HOURS AND ALL TRAVEL LANES OPEN.



WATER MAIN REPLACEMENT PROJECT
STAGE CONSTRUCTION / TRAFFIC HANDLING PLANS

CONCEPTUAL PLAN
STAGE 13B & 13C

PLANNING ■ DESIGN ■ CONSTRUCTION

14725 ALTON PARKWAY
IRVINE, CALIFORNIA 92618-2027
949.472.3505 • FAX 949.472.8373 • www.RBF.com

REV.	DATE	DESCRIPTION	BY	CHECKED

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

DRAWN: CM
DESIGNED: CM

PROJECT ENGINEER: _____
ENGINEERING MANAGER: _____

APPROVED: _____
DATE: _____
JOHN C. DETTLE, ACTING CITY ENGINEER, R.C.E. NO. 51438, EXP. 06/30/12

SCALE: AS SHOWN SHEET 37 OF 40
PLAN NO. **WP-291**

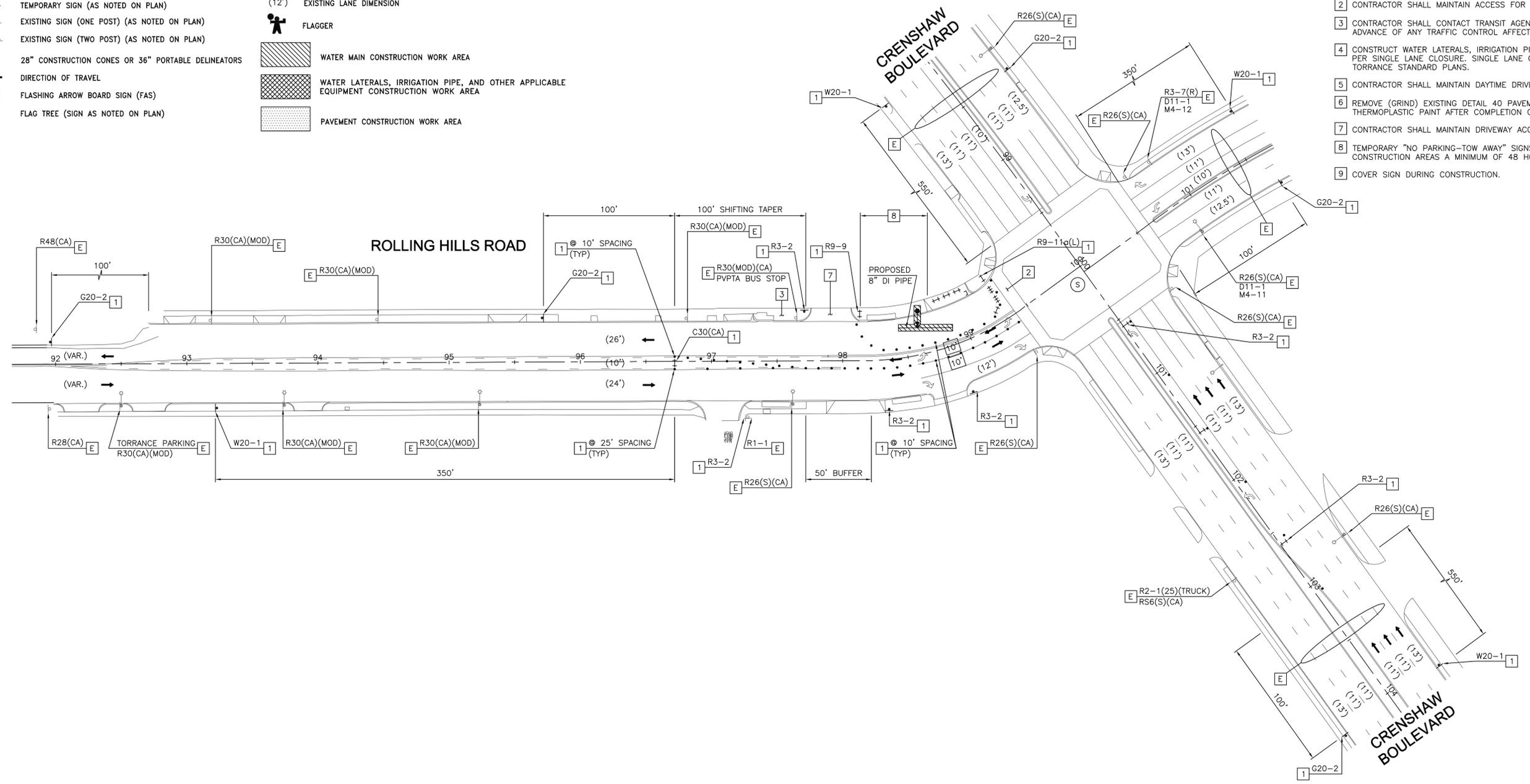
H:\PDATA\10107269\CADD\TRANSPW\DLV\STAGE\TC7269-27.DWG JMCNEILL 1/20/12 10:08 am

LEGEND:

- ++ TYPE II BARRICADE (WITH SIGN AS NOTED ON PLAN)
- ## TYPE III BARRICADE (WITH SIGN AS NOTED ON PLAN)
- ▲ TEMPORARY SIGN (AS NOTED ON PLAN)
- ▲ EXISTING SIGN (ONE POST) (AS NOTED ON PLAN)
- ▲ EXISTING SIGN (TWO POST) (AS NOTED ON PLAN)
- 28" CONSTRUCTION CONES OR 36" PORTABLE DELINEATORS
- ← DIRECTION OF TRAVEL
- ⚡ FLASHING ARROW BOARD SIGN (FAS)
- Y FLAG TREE (SIGN AS NOTED ON PLAN)
- △ TEMPORARY SIGNING AND STRIPING ANGLE POINT
- 12' CONSTRUCTION LANE DIMENSION
- (12') EXISTING LANE DIMENSION
- 🚧 FLAGGER
- ▨ WATER MAIN CONSTRUCTION WORK AREA
- ▩ WATER LATERALS, IRRIGATION PIPE, AND OTHER APPLICABLE EQUIPMENT CONSTRUCTION WORK AREA
- ▧ PAVEMENT CONSTRUCTION WORK AREA

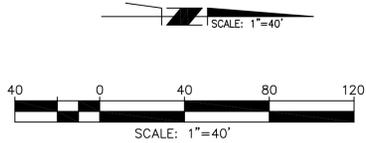
CONSTRUCTION NOTES:

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- 5 CONTRACTOR SHALL MAINTAIN DAYTIME DRIVEWAY ACCESS.
- 6 REMOVE (GRIND) EXISTING DETAIL 40 PAVEMENT MARKING. RESTORE IN KIND WITH THERMOPLASTIC PAINT AFTER COMPLETION OF WORK.
- 7 CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS AT ALL TIMES.
- 8 TEMPORARY "NO PARKING-TOW AWAY" SIGNS SHALL BE POSTED WITHIN AFFECTED CONSTRUCTION AREAS A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
- 9 COVER SIGN DURING CONSTRUCTION.



TRAFFIC CONTROL NOTES (THIS SHEET):

1. FOR TRAFFIC CONTROL GENERAL NOTES AND DETAILS SEE SHEET SC-01.
2. FOR PROJECT CONSTRUCTION SEQUENCE PLAN SEE SHEET SC-02.
3. CONTRACTOR SHALL NOTIFY ENGINEER AT LEAST TWO DAYS IN ADVANCE OF START OF WORK AT SIGNALIZED INTERSECTIONS.
4. CONTRACTOR SHALL CONTACT THE CITY OF TORRANCE TRAFFIC DIVISION TO INQUIRE ON AND COORDINATE ANY MODIFICATIONS TO THE TRAFFIC SIGNAL TIMINGS ON ROLLING HILLS ROAD.
5. CONSTRUCTION THIS STAGE SHALL BE COMPLETED ON WEEKDAYS BETWEEN 8:30 AM AND 3:00 PM. STEEL PLATES AND "STEEL PLATES AHEAD" SIGNS SHALL BE INSTALLED DURING NON-WORKING HOURS AND ALL TRAVEL LANES OPEN.



**WATER MAIN REPLACEMENT PROJECT
STAGE CONSTRUCTION / TRAFFIC HANDLING PLANS
CONCEPTUAL PLAN
STAGE 14A**



ROLLING HILLS ROAD DESIGN SPEED: 35 MPH
CRENSHAW BOULEVARD DESIGN SPEED: 45 MPH

STAGE 14A

SC-28

REV.	DATE	DESCRIPTION	BY	CHECKED

CITY OF TORRANCE PUBLIC WORKS DEPARTMENT	
DRAWN: CM	APPROVED:
DESIGNED: CM	JOHN C. DETTLE DATE
PROJECT ENGINEER:	ACTING CITY ENGINEER R.C.E. NO. 51438 EXP. 06/30/12
ENGINEERING MANAGER:	SCALE: AS SHOWN SHEET 38 OF 40
	PLAN NO. WP-291

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