



COUNTY OF SAN DIEGO
DEPARTMENT OF PUBLIC WORKS
PLAN PREPARATION GUIDELINES

OCTOBER
2010

PLAN PREPERATION GUIDE

The text and examples of the Plan Preparation Guide have been prepared for use by both engineers and technicians in the preparation of project plans for the County of San Diego, Department of Public Works, Engineering Services Division.

To ensure that you have the latest Department of Public Works Civil 3D Design Standards and Plan Preparation Guide visit:
<http://www.sdcounty.ca.gov/dpw/standards/standards.html>

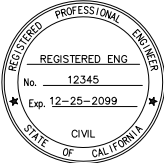
GENERAL

- CADD DRAWINGS
- DRAWING MATERIALS
- BORDER
- STANDARD PLANS AND STANDARD DRAWINGS

EXAMPLES OF PROJECT PLANS, INSTRUCTIONS AND CHECKLISTS

- BASE SHEET
- TYPICAL BASE SHEET DETAIL
- TITLE SHEET
- TYPICAL TITLE SHEET (WITH INSTRUCTIONS)
- TYPICAL TITLE SHEET
- GENERAL NOTES AND REFERENCES
- CROSS SECTION
- TYPICAL CROSS SECTION SHEET
- PLAN AND PROFILE
- TYPICAL PLAN AND PROFILE SHEET (WITH INSTRUCTIONS)
- TYPICAL PLAN AND PROFILE SHEET
- TYPICAL PLAN AND PROFILE SHEET
- DRIVEWAY AND CURB RETURN PROFILES
- TYPICAL DRIVEWAY AND CURB RETURN PROFILE SHEET
- STORM DRAIN PLAN AND PROFILE
- TYPICAL STORM DRAIN PLAN AND PROFILE SHEET
- RETAINING WALL PLAN AND PROFILE
- TYPICAL RETAINING WALL PLAN AND PROFILE SHEET
- TRAFFIC SIGNAL
- TYPICAL TRAFFIC SIGNAL SHEET
- TYPICAL SIGNING AND STRIPING SHEET
- TYPICAL SIGNING AND STRIPING SHEET
- TRAFFIC CONTROL PLAN
- TYPICAL STAGE CONSTRUCTION PLAN SHEET
- TYPICAL TRAFFIC CONTROL PLAN SHEET
- WATER POLUTION CONTROL SHEET
- TYPICAL WATER POLUTION CONTROL DETAIL SHEET
- TYPICAL WATER POLUTION CONTROL DETAIL SHEET
- TYPICAL WATER POLUTION CONTROL DETAIL SHEET
- TYPICAL WATER POLUTION CONTROL PLAN SHEET

---% SUBMITTAL
NOT FOR
CONSTRUCTION

	PLANS	BY	DATE
	DESIGNED	----	----
	CHECKED	----	----
	DELINEATED	----	----
SAN DIEGO ENGINEERING 1234 COASTAL WAY SAN DIEGO, CA 92123 619-555-4040			
REGISTERED CIVIL ENGINEER			DATE

SUBMITTAL

REFLECTS CURRENT SUBMITTAL
PERCENTAGE, ON ALL SHEETS

SEAL PER DISCIPLINE

SEAL IS PRE-INSERTED IN _CoSD-TB.dwg
MAKE SPECIFIC EDITS IN THAT DRAWING
TO BLOCK _CoSD-Stamp.dwg

TITLE BLOCK

FILE NAME: _CoSD-TB.dwg
INSERT AT 0,0,0 IN PAPERSPACE
AT A SCALE OF 1:1

SHEET INFORMATION

ATTACHED TO TITLE BLOCK
UPDATES AUTOMATICALLY

TYPICAL BASE SHEET INFORMATION

TITLE BLOCK BORDER DIMENSION IS 20.50" x 32.50" IN
ORDER TO PRINT PROPERLY, PLOT EXTENTS AT A SCALE
OF 1:1 CENTERED ON 24" x 36" MEDIA. NO DATA OF ANY
KIND IS ALLOWED OUTSIDE THE PERIMETER OF THE
BORDER EXCEPT FOR INFORMATION AUTOMATICALLY ADDED,
IE SHEET INFO.

NOT AVAILABLE

COUNTY SIGNATURE BLOCK ON TITLE SHEET
BLANK ON ALL OTHER SHEETS.
CAN BE USED FOR LOGOS AFTER SHEET 01

ASSET TAG NUMBER

IF APPLICABLE

COUNTY OF SAN DIEGO
DEPARTMENT OF PUBLIC WORKS
5555 OVERLAND AVENUE, SAN DIEGO, CA 92123-1295



REVISIONS	BY	APPROVED	DATE

COORDINATE INDEX
340 N, 1730 E
CONST. COMPL. _____
FIELD REVISIONS _____

TYPICAL SAN DIEGO COUNTY ROAD
In the Vicinity of
TITLE SHEET

SCALE: HOR. NONE	VERT. NONE
RS12345	R.S. 12345
SP	
SHEET XX OF SHEETS	

TITLE SHEET

1. INSTRUCTION

THE TITLE SHEET OF THE PLAN SET WILL INCLUDE: THE COUNTY OF SAN DIEGO DPW COVER SHEET, THE DPW TITLE BLOCK AND THE TITLE BLOCK INFORMATION BLOCK. THE INFORMATION ON THE TITLE SHEET SHALL BE LIMITED TO THAT INFORMATION SHOWN IN THE "PLAN PREPARATION GUIDELINES". FEATURES SUCH AS TYPICAL SECTIONS, CONSTRUCTION DETAILS, DRAINAGE DETAILS, STANDARD ABBREVIATIONS, LEGENDS AND CONSTRUCTION NOTES SHALL NOT BE SHOWN ON THE TITLE SHEET.

2. TYPICAL SHEET INDEX

THE INDEX OF SHEETS SHALL LIST ALL SHEETS CONTAINED IN THE PROJECT PLANS. THE SHEET NAME SHOWN ON THE INDEX OF SHEETS SHALL MATCH THE NAME SHOWN ON THE INDIVIDUAL SHEET. A TYPICAL SET OF PROJECT PLANS MAY INCLUDE THE FOLLOWING:

ROAD PROJECTS

INDEX OF SHEETS

TITLE SHEET
GENERAL NOTES AND REFERENCES
PROJECT IMPACT ARES (PIA) MAP
TYPICAL SECTIONS
PLAN AND PROFILE SHEETS
DRIVEWAY PLAN AND PROFILE SHEETS
CURB RETURN PROFILES
DRAINAGE PLAN AND PROFILE SHEETS
DRAINAGE DETAIL SHEETS
RETAINING WALL PLAN AND PROFILE SHEETS
RETAINING WALL DETAILS
TRAFFIC SIGNAL PLANS
TRAFFIC CONTROL PLAN
DETOUR PLAN
STAGE CONSTRUCTION PLAN
WATER POLLUTION CONTROL PLAN

BRIDGE PROJECTS

INDEX OF SHEETS

CIVIL SHEETS
TITLE SHEET
GENERAL NOTES AND REFERENCES
PROJECT IMPACT ARES (PIA) MAP
APPROACH ROAD PLAN AND PROFILE SHEETS
CHANNEL GRADING PLAN
SIGNING AND STRIPING PLAN
TRAFFIC CONTROL PLANS
STAGE CONSTRUCTION PLANS
DETOUR ROAD PLAN AND PROFILE SHEETS
WATER POLLUTION CONTROL PLAN

BRIDGE PLANS
GENERAL PLAN
DECK CONTOURS
FOUNDATION PLAN
ABUTMENTS
WINGWALLS
BENTS
TYPICAL SECTION
GIRDER LAYOUT
GIRDER REINFORCEMENT
PRESTRESSING DETAILS
ROCK SLOPE PROTECTION PLAN
LOG OF TEST BORING

CHECKKLIST

- ☐ VICINITY MAP (PROJECT SITE) WITH LIMITS OF IMPROVEMENT INDICATED
- ☐ CALIFORNIA COORDINATES, NAD 27 (COORDINATES OF THE LOWER LEFT CORNER OF THE STANDARD 200 SCALE COUNTY TOPOGRAPHIC SHEET ON WHICH THE PROJECT BEGINS)
- ☐ INDEX OF SHEETS
- ☐ PROJECT LOCATION (ON COUNTY MAP)
- ☐ LENGTH OF PROJECT
- ☐ WORK AUTHORIZATION NUMBER
- ☐ ROAD SURVEY NUMBER
- ☐ COMMUNITY NAME
- ☐ UTILITY ALERT NOTE
- ☐ COUNTY SIGNATURE BLOCK

PROJECT STANDARD SPECIFICATIONS

CALTRANS STANDARD SPECIFICATIONS, MAY 2006

PROJECT STANDARD PLANS

CALTRANS STANDARD PLANS (CSP), MAY 2006



CALTRANS STANDARD PLAN SHEET NUMBER

DETAIL NUMBER

ROAD WORK:

A10A, A10B	ABBREVIATIONS
A10C, A10D	SYMBOLS
A20A, A20B	PAVEMENT MARKERS & TRAFFIC LINES TYPICAL DETAILS
A20D	PAVEMENT MARKERS & TRAFFIC LINES TYPICAL DETAILS
A24D	PAVEMENT MARKINGS, WORDS
A73B	MARKERS
A73C	DELINEATORS, CHANNELIZERS AND BARRICADES
A77E(1–6)	METAL BEAM GUARD RAILING TYPICAL LAYOUTS FOR STRUCTURE APPROACH
A77F1	METAL BEAM GUARD RAILING TYPICAL LAYOUTS FOR STRUCTURE APPROACH
A77J4	METAL BEAM GUARD RAILING TRANSITION RAILING (TYPE WB)
A77K1	MBGR CONNECTIONS TO BRIDGE RAILINGS WITH SIDEWALKS DETAILS NO. 1
A77L4	METAL BEAM GUARD RAILING TERMINAL SYSTEM (TYPE CAT)
A87A	CURBS AND DRIVEWAYS (TYPE PER PLAN)
A87B	ASPHALT CONCRETE DIKES
T2	TEMPORARY CRASH CUSHION, SAND FILLED (SHOULDER INSTALLATIONS)
T3	TEMPORARY RAILING (TYPE K)
D87D	OVERSIDE DRAINS
D90	HEADWALL

BRIDGE:

A62B	LIMITS OF PAYMENT FOR EXCAVATION AND BRIDGE BACKFILL SURCHARGE AND WALL
A62C	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL BRIDGE
B0–1	BRIDGE DETAILS
B0–5	BRIDGE DETAILS
B0–13	BRIDGE DETAILS
B6–1	T–BEAM DETAILS
B7–1	BOX GIRDER DETAILS
B7–6	DECK DRAINS TYPE D–1 D–2
B7–8	DECK DRAINAGE DETAILS
B7–10	UTILITY OPENING – BOX GIRDER
B7–11	UTILITY DETAILS
B8–5	CAST–IN–PLACE PRESTRESSED GIRDER DETAILS
B11–51	TABULAR HAND RAILING
B11–54	CONCRETE BARRIER TYPE 26
B11–55	CONCRETE BARRIER TYPE 732
B11–57	CONCRETE BARRIER TYPE 742
B14–5	WATER SUPPLY LINE (DETAILS)(PIPE SIZES LESS THAN 4”)

SAN DIEGO AREA REGIONAL STANDARD DRAWINGS (RSD) AUG 2009

G–2	CURB AND GUTTER COMBINED
G–7	SIDEWALK – TYPICAL SECTIONS

SAN DIEGO COUNTY DESIGN STANDARDS (DS) NOV 2009

DS–07	ASPHALT CONCRETE DRIVEWAY
DS–21A	CURB RAMP – TYPES A AND B

PERMANENT WATER POLLUTION CONTROL BMP'S

- | | |
|----------------------------|-------------------|
| 1. SITE DESIGN BMP’S | SEE SHEET(S) XXXX |
| 2. SOURCE CONTROL BMP’S | SEE SHEET(S) XXXX |
| 3. TREATMENT CONTROL BMP’S | SEE SHEET(S) XXXX |
| 4. ----- BMP’S | SEE SHEET(S) XXXX |
| 5. ----- BMP’S | SEE SHEET(S) XXXX |

SAMPLE LEGEND

SYMBOL	DESCRIPTION	RSD
---	CENTERLINE	
=====	CURB AND GUTTER TYPE G	G–2, TYPE G
-----	6" CURB	G–1
=====	AC DIKE	G–5, TYPE E AND F
-----	SAWCUT LINE	
—o—o—o—	PEELER LOG FENCE	
	4" DG SIDEWALK	
	CURB RAMPS	DS–21A, DS–21E, & DS–21F
	NEW PCC DRIVEWAY	G–14D
	ASPHALT CONC. CURB RAMPS	DS–21A MOD., DS–21C MOD. DS–21E MOD., & DS–21F MOD.
	NEW ASPHALT DRIVEWAY	G–14D, MOD.
	CURB INLET TYPE C	D–3A, D–11A, D–11B, D–12 D–13, D–15,
	CATCH BASIN TYPE I	D–29, D–11A, D–11B
=====	18" REINFORCED CONCRETE PIPE	
<u>259.0</u>	PROPOSED ELEV.	
	3" ASPHALT CONCRETE TYPE B	
	PLANE AC PAVEMENT	
-----	EXIST. RIGHT–OF–WAY	
-----	EXIST. AC DIKE	
=====	EXIST. CURB AND GUTTER	
—W—	EXIST. WATER LINE	
—o—o—o—	EXIST. STREET LIGHT	
	EXIST. FIRE HYDRANT	
	EXIST. WATER VALVE	
	EXIST. GAS VALVE	
	EXIST. CATCH BASIN	
	EXIST. UTILITY POLE	
-----	EXIST. STORM DRAIN CULVERT	
<u>(259.0)</u>	EXISTING GROUND SPOT ELEV.	

TYPICAL CONSTRUCTION NOTES

CONSTRUCTION NOTES ARE TO RETAIN THE SAME NOTE NUMBER FOR THE SAME CONSTRUCTION NOTE THROUGHOUT THE ENTIRE SET OF PLANS.

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES

PLANS

DESIGNED

CHECKED

DELINEATED

BY

DATE

SAN DIEGO ENGINEERING
1234 COASTAL WAY
SAN DIEGO, CA 92123
619–555–4040

REGISTERED CIVIL ENGINEER

DATE

SURVEY CONTROL

BENCHMARK

VERTICAL DATUM IS NGVD 1929
DESIGNATION: BMQ 300
DESCRIPTION: STANDARD DISK STAMPED Q 300 1935 CONC. PST. FROM POST OFFICE AT RINCON 1.9 MILES SOUTH TO JUNCTION OF DRIVE TO HOUSE (90 FT SOUTH EAST SOUTH END BR B35–B4). BM IS 46 FT EAST OF JUNCTION 52 FT EAST C/L HWY @ 50 FT NORTH C/L DRIVE
ELEVATION: 865.313

REMARKS

THESE PLANS ARE BASED ON US CUSTOMARY (ENGLISH) UNITS. ALL DISTANCES ARE EXPRESSED IN FEET (FT) AND INCHES (IN) UNLESS OTHERWISE NOTED

HORIZONTAL CONTROL

ALL BEARINGS, DISTANCES, STATIONS AND COORDINATES ARE GRID AND BASED ON THE NORTH AMERICAN DATUM OF 1983 (1991.35) CALIFORNIA COORDINATE SYSTEM, ZONE 6. BASED ON 1st ORDER CONTROL STATIONS SDGPS 03, SDGPS 34 AND LOMAX.

VCRB PM3
N 2040433.783 ft
E 6346507.008 ft
EL = 869.85 ft

AT STATION VCRB PM3
 $\lambda = -0 - 23 -12.48$
COMBINATION FACTOR = 0.99991830
GROUND DISTANCE = GRID DISTANCE / COMBINATION FACTOR
CONVERSION FACTOR: 1 US SURVEY FOOT = 1200/3937 METERS

COUNTY OF SAN DIEGO
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5555 OVERLAND AVENUE, SAN DIEGO, CA 92123-1295



REVISIONS	BY	APPROVED	DATE

COORDINATE INDEX
340 N, 1730 E.
CONST. COMPL.
FIELD REVISIONS

TYPICAL SAN DIEGO COUNTY ROAD
In the Vicinity of
General Notes and References

SCALE: HOR. NONE VERT. NONE
W.A. RS12345 R.S. 12345
SP
SHEET XX OF SHEETS

CROSS SECTION

CHECHKLIST

- ☐ SCALE – OR LABEL AS NO SCALE
- ☐ LAYOUT LINE – ROAD SURVEY OR CONSTRUCTION CENTERLINE
- ☐ CROSS SLOPE (PERCENT)
- ☐ ROADWAY STRUCTURAL SECTION
- ☐ AC DIKES (WITH TYPE IDENTIFICATION)
- ☐ CURB AND GUTTER (WITH TYPE IDENTIFICATION)
- ☐ RIGHT OF WAY STATIONING LIMITS
BELOW EACH STATION, SMALLEST
STATION AT TOP OF SHEET
- ☐ PERTINENT EXISTING FEATURES
- ☐ PROFILE GRADE POINT, WIDTHS OF PAVEMENT
SHOULDERS, MEDIANS, SIDEWALKS, DITCHES
IN FEET, NOT INCHES)
- ☐ SAW CUT LINE
- ☐ CUT/FULL SLOPES
(CATCH POINT, SLOPE RATIO)

REGISTERED PROFESSIONAL ENGINEER

REGISTERED ENG

No. 12345

Exp. 12-25-2099

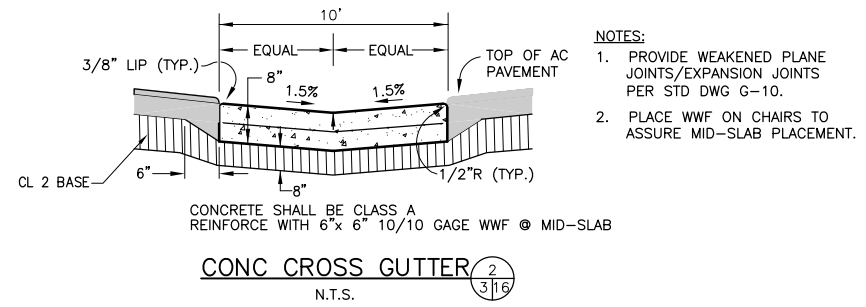
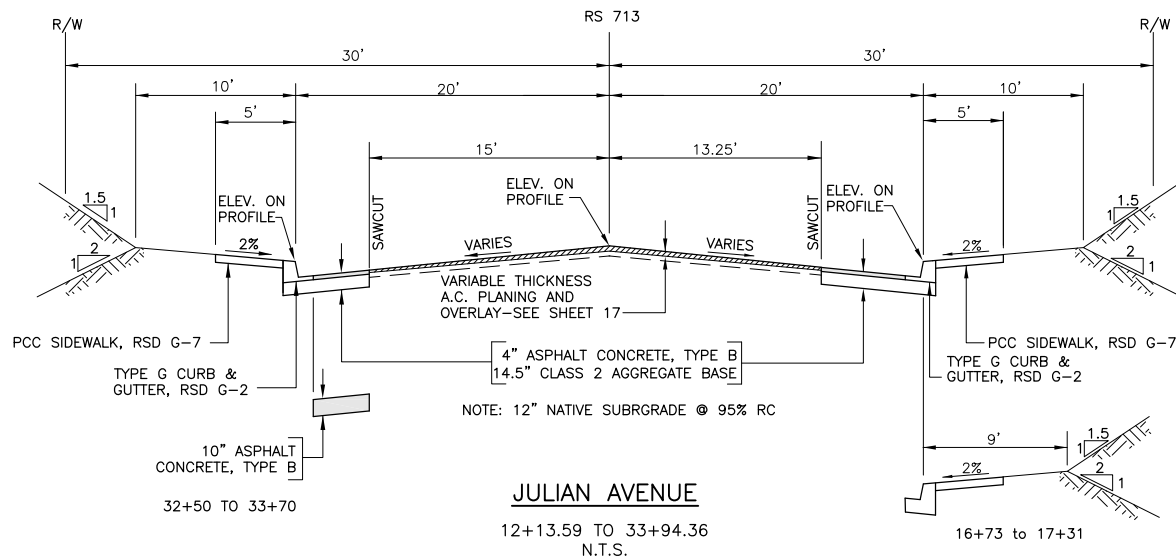
CIVIL

STATE OF CALIFORNIA

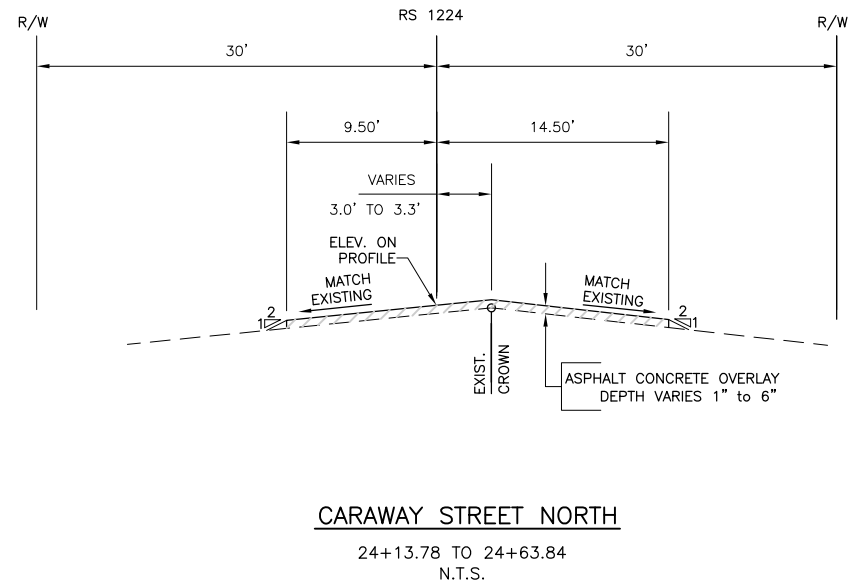
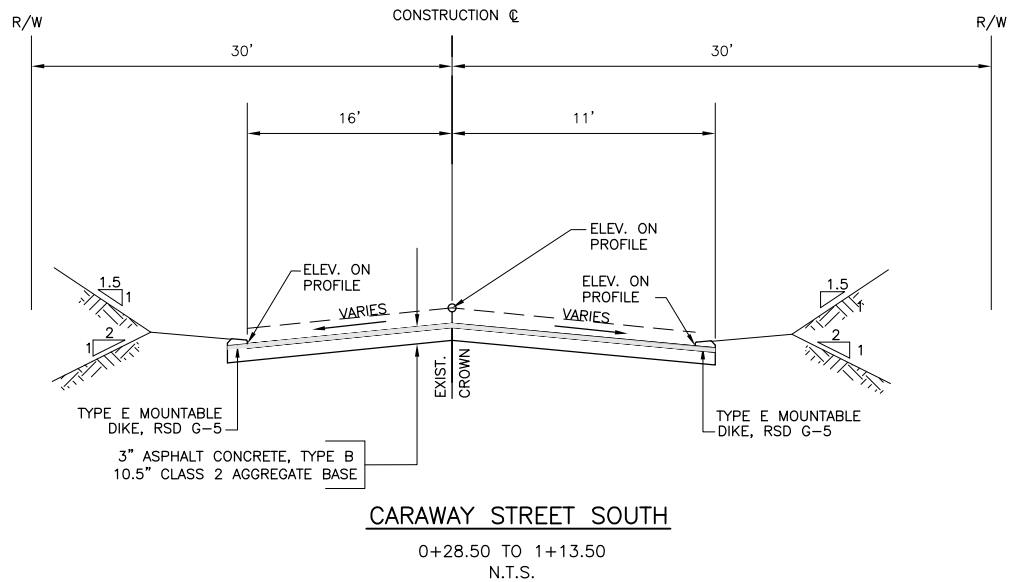
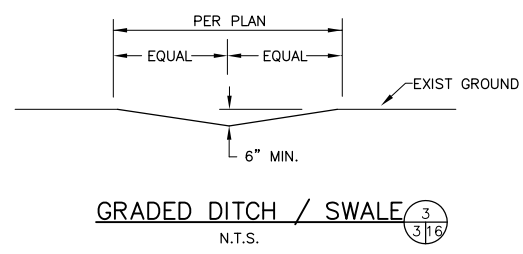
PLANS	BY	DATE
DESIGNED	----	----
CHECKED	----	----
DELINEATED	----	----

SAN DIEGO ENGINEERING
1234 COASTAL WAY
SAN DIEGO, CA 92123
619-555-4040

REGISTERED CIVIL ENGINEER DATE



- NOTES:
1. PROVIDE WEAKENED PLANE JOINTS/EXPANSION JOINTS PER STD DWG G-10.
 2. PLACE WWF ON CHAIRS TO ASSURE MID-SLAB PLACEMENT.



COUNTY OF SAN DIEGO
DEPARTMENT OF PUBLIC WORKS
5555 OVERLAND AVENUE, SAN DIEGO, CA 92123-1295



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COORDINATE INDEX
340 N. 1730 E.
CONST. COMPL.
FIELD REVISIONS

TYPICAL SAN DIEGO COUNTY ROAD
In the Vicinity of
TYPICAL CROSS SECTIONS

SCALE: HOR. NONE VERT. NONE
W.A. RS12345 R.S. 12345
SP
SHEET XX OF SHEETS

PLAN AND PROFILE SHEETS

PLAN INSTRUCTIONS

ONLY THOSE EXISTING TOPOGRAPHIC FEATURES WHICH AFFECT CONSTRUCTION AND WHICH ARE ESSENTIAL FOR FIELD ORIENTATION OF THE PLANS SHALL BE INCLUDED (AS AN XREFERENCE). IN URBAN AREAS, CONTOURS GENERALLY NEED NOT BE SHOWN.

SHOW AND IDENTIFY CONTROL LINE (ROAD SURVEY, CONSTRUCTION CENTERLINE ETC) WITH ALL SURVEY CONTROL: STATIONING, STATION EQUATIONS, TANGENT DISTANCES AND BEARINGS AND CURVE STATIONS RADIUS, LENGTH AND DELTA, BEGIN AND END CURVE POINTS. ADD STREET NAME LABEL.

SHOW PROPOSED: SAW CUT LINES EDGE OF PAVEMENT (OR TOP OF CURB), SIDEWALK EDGES (FRONT AND BACK OF WALK), HINGE POINT, TOP AND TOE OF SLOPE, SLOPE ARROWS (DESIGNATING CUT OR FILL) ALL DRAINAGE STRUCTURES, SURVEY MONUMENTS TO BE SET, FENCES, GUARD RAILING, BARRIERS AND ALL OTHER FACILITIES TO BE CONSTRUCTED. SHOW ALL EXISTING FEATURES TO BE REMOVED (IE TREES) OR RELOCATED (FENCES, ETC) SHOW ALL DRIVEWAYS WITH CENTERLINE STATIONING. SOLID LINES SHALL BE USED FOR PROPOSED CONSTRUCTION ITEMS (REFER TO "DPW CAD STANDARDS")

INDICATE WORK TO BE PERFORMED

USE PHRASES SIMILAR TO "ABANDON" OR "REMOVE", "JOIN/MATCH EXIST", "PROTECT IN PLACE", "RESET", "RELOCATE", "RECONSTRUCT".

"CONSTRUCT", "PLACE", ETC

INCLUDE ALL NECESSARY DIMENSIONS, STATIONS AND OFFSETS

TOE OF AND TOP OF CUTS (EXCEPT WHERE GRADING IS MINIMAL

PLAN CHECKLIST

- ☐ SCALES (OR LABELED NOT TO SCALE)
- ☐ CONTROL LINE (ROAD SURVEY, CONSTRUCTION CENTERLINE, ETC.)
- ☐ STANDARD NORTH ARROW
- ☐ UNDERGROUND UTILITIES (SEWER, WATER, GAS, TELEPHONE ETC)
- ☐ UTILITY POLES
- ☐ MATCH LINES
- ☐ BEARINGS
- ☐ BENCH MARKS
- ☐ RIGHT OF WAY
- ☐ ROADWAY WIDTHS
- ☐ STANDARD LEGEND (SHOWN ON EACH PLAN SHEET)
- ☐ DRIVEWAYS (STATION, WIDTH, SURFACING DESIGN STANDARD)
- ☐ SURVEY MONUMENTS (WITH COORDINATES)
- ☐ PEDESTRIAN RAMPS
- ☐ EXISTING FEATURES (SHADED LINES, DASHED LINES)

PROFILE INSTRUCTIONS

ON COMBINED PLAN AND PROFILE SHEETS, THE PROFILE STATIONING (IN WHOLE STATIONS) SHALL LINE UP WITH STATIONING SHOWN BELOW THE PROFILE GRID.

PROFILE SHOULD DISPLAY VERTICAL CURVE LENGTHS, TANGENT GRADIENTS PVI STATION AND INTERSECTION ELEVATION. GRADIENTS OF REVERSE OR COMPOUND VERTICAL CURVATURE PROFILE OF ORIGINAL GROUND AND EXTENDING BEYOND IMPROVEMENTS (50 FT. MIN.). ELEVATIONS AND STATIONS BCV'S, EVC'S, GRADE BREAKS, PRVC'S, PCVC'S, EQUATIONS, PAVING NOTCHES, BROKEN PROFILES FOR DATUM CHANGES AND EACH EDGE OF THE SHEET ON PROFILE GRADE.

NOTE THAT ROADS IMPROVED WITH PCC CURB AND GUTTER SHALL BE DISPLAYED WITH PROFILES FOR TOP OF CURB (TC) WHEREAS ROADS WITHOUT PCC CURB AND GUTTER SHALL INCLUDE A SUPERELEVATION DIAGRAM WITH CROSS SLOPES TO EDGE OF PAVEMENT.

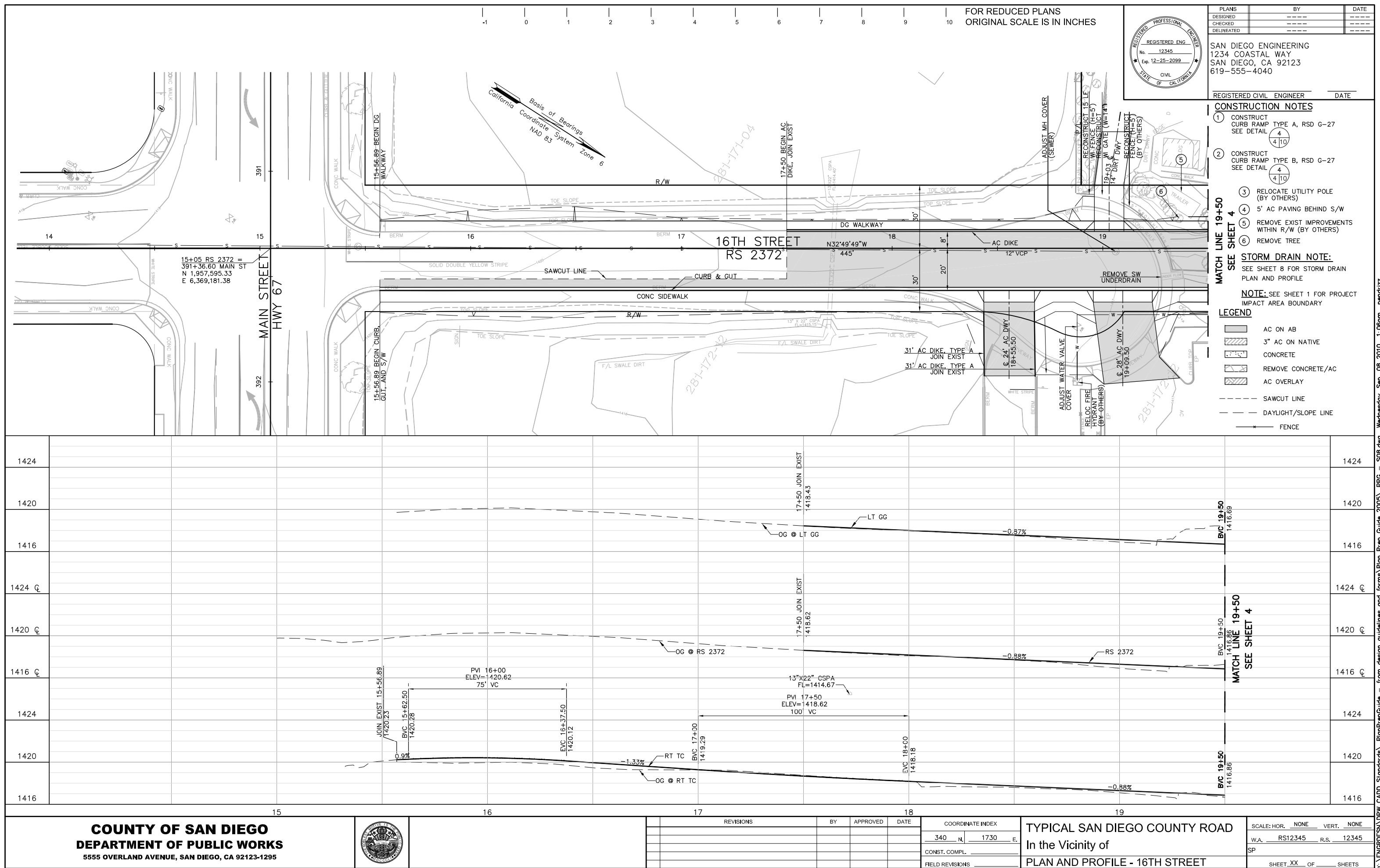
PROFILE CHECKLIST

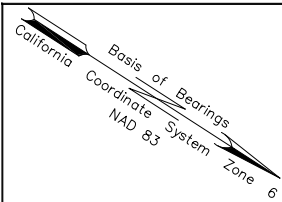
- ☐ ELEVATIONS LABELED AT BOTH EDGES OF SHEET
- ☐ PROFILE LINES WITH LABEL AND GRADE (IN %)
- ☐ SUPERELEVATION DIAGRAM (SHOWN DIRECTLY ABOVE THE CORRESPONDING PROFILE WHERE SUFFICIENT SPACE IS AVAILABLE)
- ☐ ORIGINAL GROUND LINES WITH LABEL
- ☐ ELEVATION AT STATIONS (SHOWN AT BVC, EVC, GB, PRVC AND PCVC)
- ☐ UTILITY CROSSINGS
- ☐ EQUATIONS

SUPERELEVATION DIAGRAM INSTRUCTIONS

SUPERELEVATION DIAGRAMS SHALL BE LOCATED ABOVE THE PROFILE ALIGNMENT AND BE ALIGNED WITH STATIONING SHOWN BELOW PROFILE GRID. SUPER ELEVATION IN PERCENT, AXIS OF ROTATION (0% LINE) AND CURVE POINTS. VERTICAL LINES SHOULD INDICATE THE LOCATION OF ALL HORIZONTAL CURVES BC'S AND EC'S.

CERTAIN COMBINATIONS OF PROFILE GRADE LINE, VERTICAL CURVES, SUPERELEVATION TRANSITIONS AND VARIABLE PAVEMENT WIDTHS MAY PRODUCE UNDESIRABLE PAVEMENT EDGE PROFILES. WHERE THESE COMBINATIONS OCCUR, IT IS ESSENTIAL TO PLOT EDGE OF PAVEMENT PROFILES AND GRAPHICALLY ADJUST BUMPS AND DRAINAGE POCKETS. THESE SHOULD BE DRAWN TO AN EXAGGERATED VERTICAL SCALE AND PLOTTED SEPARATE FROM THE PROJECT PLANS AND SUBMITTED TO THE RESIDENT ENGINEER AND FIELD SURVEYS FOR USE IN STAKING.





-1 0 1 2 3 4 5 6 7 8 9 10

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES

PLANS

DESIGNED

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BY

DATE

REGISTERED PROFESSIONAL ENGINEER

REGISTERED ENG

No. 12345

Exp. 12-25-2099

CIVIL

STATE OF CALIFORNIA

SAN DIEGO ENGINEERING

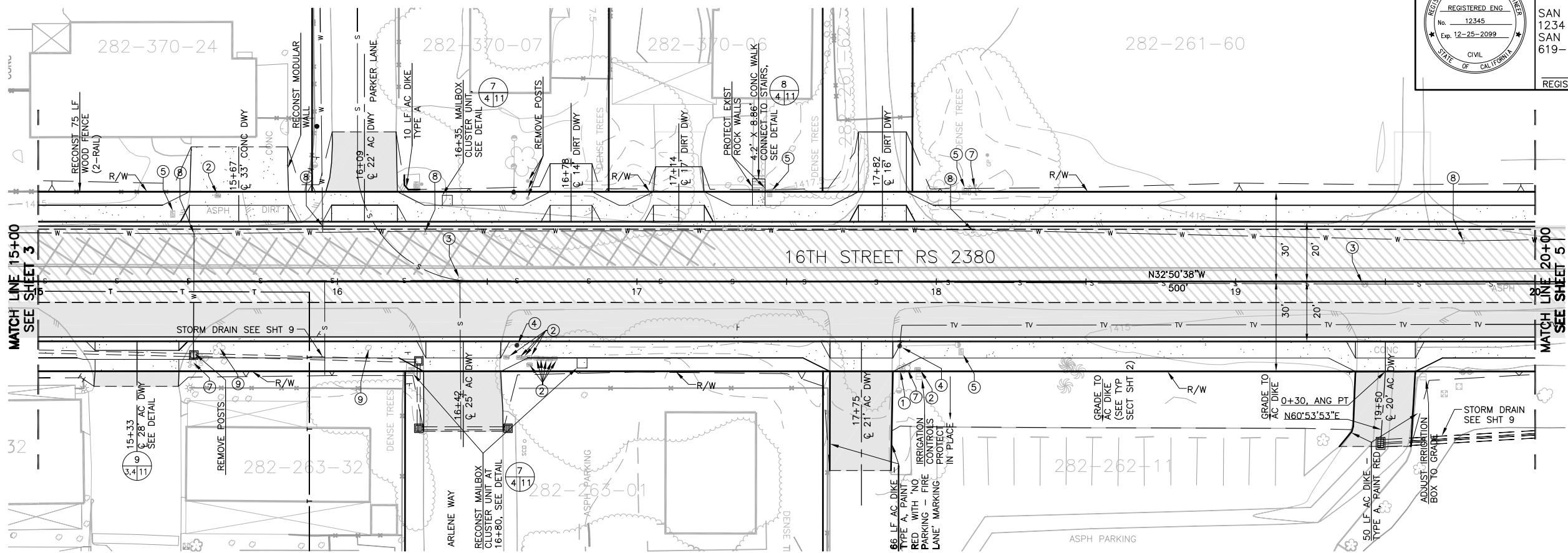
1234 COASTAL WAY

SAN DIEGO, CA 92123

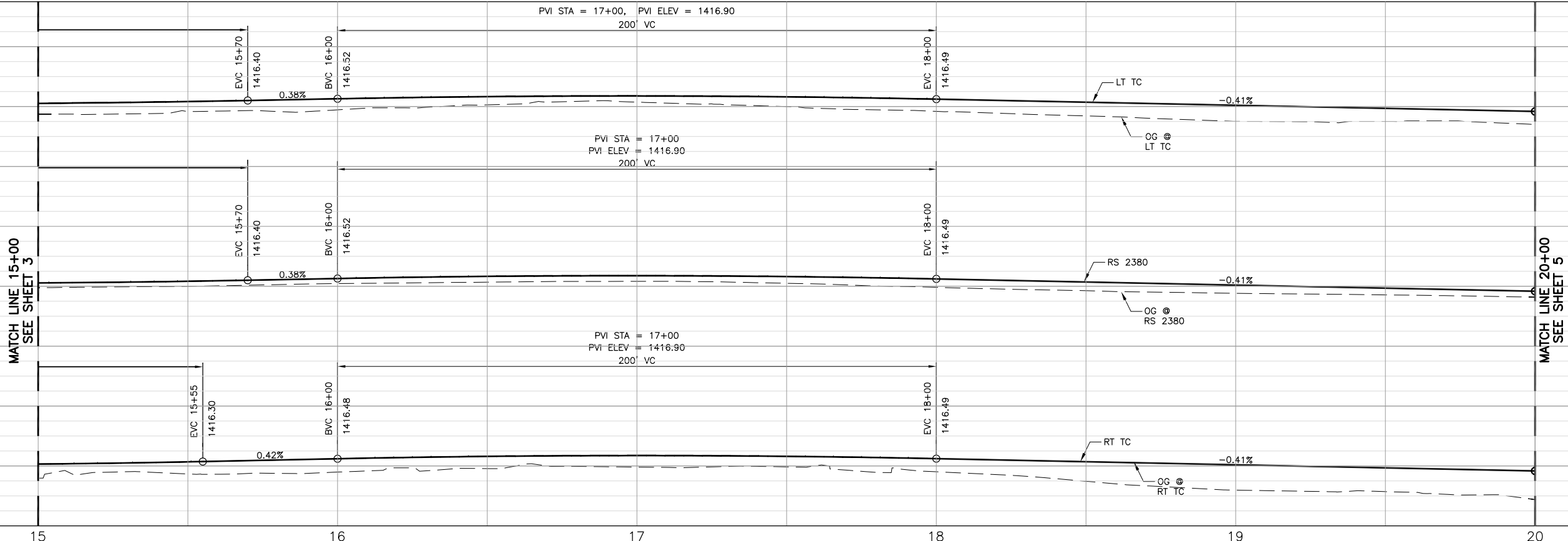
619-555-4040

REGISTERED CIVIL ENGINEER

DATE



- CONSTRUCTION NOTES:**
- 1 RECONST UTILITY BOX (BY OTHERS)
 - 2 RELOCATE WATER METER (BY OTHERS)
 - 3 ADJUST MH COVER (SEWER)
 - 4 RELOCATE POWER POLE (BY OTHERS)
 - 5 RECONST MAILBOX
 - 6 ADJUST SEWER CLEAN OUT
 - 7 RELOCATE FIRE HYDRANT (BY OTHERS)
 - 8 ADJUST WATER VALVE COVER
 - 9 REMOVE TREE
- STORM DRAIN NOTE:**
SEE SHEETS 8-11 FOR STORM DRAIN PLAN, PROFILE & DETAILS
- LEGEND**
- AC ON AB
 - AC OVERLAY
 - CONCRETE
 - AC PLANNING SEE SHEET 11
 - UTILITY POLE
 - SAWCUT
 - DAYLIGHT/SLOPE LINE
 - EXIST TELEPHONE
 - EXIST WATER
 - EXIST TV
 - EXIST SEWER



COUNTY OF SAN DIEGO

DEPARTMENT OF PUBLIC WORKS

5555 OVERLAND AVENUE, SAN DIEGO, CA 92123-1295

REVISIONS	BY	APPROVED	DATE

COORDINATE INDEX

340 N, 1730 E

CONST. COMPL.

FIELD REVISIONS

TYPICAL SAN DIEGO COUNTY ROAD

In the Vicinity of

PLAN AND PROFILE

SCALE: HOR. NONE VERT. NONE

W.A. RS12345 R.S. 12345

SP

SHEET XX OF SHEETS

Wednesday, Sep. 08 2010 1:06pm pendizz

DRIVEWAY AND CURB RETURN

- ☐ SCALES (HORIZONTAL AND VERTICAL)
- ☐ ORIGINAL GROUND
- ☐ SLOPE (IN %)
- ☐ TYPE, CLASS AND THICKNESS
OF PAVEMENT AND BASE
- ☐ STATIONING BELOW EACH SECTION,
SMALLEST STATION AT TOP OF SHEET

REGISTERED PROFESSIONAL ENGINEER

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1234 COASTAL WAY

SAN DIEGO, CA 92123

619-555-4040

REGISTERED CIVIL ENGINEER

DATE

DRIVEWAY SCHEDULE					
STATION	L/R	SURFACE	WIDTH (FT.)	LENGTH (FT.)	DRIVEWAY TYPE
17+14	L	DIRT	17'	8.36'	G-14A
17+75	R	A.C.	21'	33.10'	G-14A
17+82	L	DIRT	16'	20'	G-14A
19+50	R	A.C.	20'	25.05'	G-14A
20+97	R	DIRT	15'	20'	G-14A
21+74	L	A.C.	24'	20'	G-14A
23+40	L	A.C.	24'	24.65'	G-14A

NOTE:
A.C. DRIVEWAYS SHALL BE 3" A.C./4" CLASS 2 A.B.
OVER 6" NATIVE SUBGRADE ALL COMPACTED TO 95% RC.
DRIVEWAY LENGTH IS MEASURED FROM R/W.

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TYPICAL SAN DIEGO COUNTY ROAD
In the Vicinity of
PROFILE - DRIVEWAY AND CURB RETURN

SCALE: HOR. 1"=10'	VERT. 1"=5'
W.A. RS12345	R.S. 12345
SP	
SHEET XX OF SHEETS	

SHEET 11

STORM DRAIN PLAN AND PROFILE

PLAN INSTRUCTIONS

STORM DRAIN PLAN AND PROFILE SHEETS ARE PREPARED ON DUPLICATE SKELETONS OF THE BASE PLAN SHEETS. SEPARATE PLANS IF REQUIRED.

PROFILE INSTRUCTIONS

WHERE STORM DRAIN FACILITIES ARE TO BE INSTALLED OR CONSTRUCTED, STORM DRAIN PROFILES SHALL BE PREPARED FOR INCLUSION IN THE PLANS. A PROFILE OF EACH PROPOSED STORM DRAIN SYSTEM SHALL BE PLOTTED ON THE STORM DRAIN PLAN AND PROFILE SHEET. EACH STORM DRAIN PLAN AND PROFILE SHEET SHALL CONTAIN THE FOLLOWING DATA FOR EACH STORM DRAIN SYSTEM:

- TYPE, SIZE, LENGTH AND LOCATION OF CULVERTS
- CULVERT APPURTENANCES (INCLUDING, BUT NOT LIMITED TO HEADWALLS, WINGWALLS, DRAINAGE INLETS, FLARED END SECTIONS, INLET AND OUTLET STRUCTURES) SHALL BE SHOWN AND LABELED.
- ORIGINAL GROUND AND FINISHED GRADE PROFILES
- ALL FLOW LINE ELEVATIONS
- ALL UNDERGROUND UTILITY CROSSINGS
- SLOPE OF THE CULVERT SHOWN IN PERCENT

NOTE:
TC ELEVATIONS SHALL BE SHOWN FOR ALL CURB INLET/OUTLETS IN PROFILE VIEW. FOR ROADS WITHOUT CURB AND GUTTER, SHOW LENGTH OF TRANSITION FOR AC DIKES THAT CONNECT TO THE CURB INLET/OUTLET.

REGISTERED PROFESSIONAL ENGINEER

REGISTERED ENG

No. 12345

Exp. 12-25-2099

CIVIL

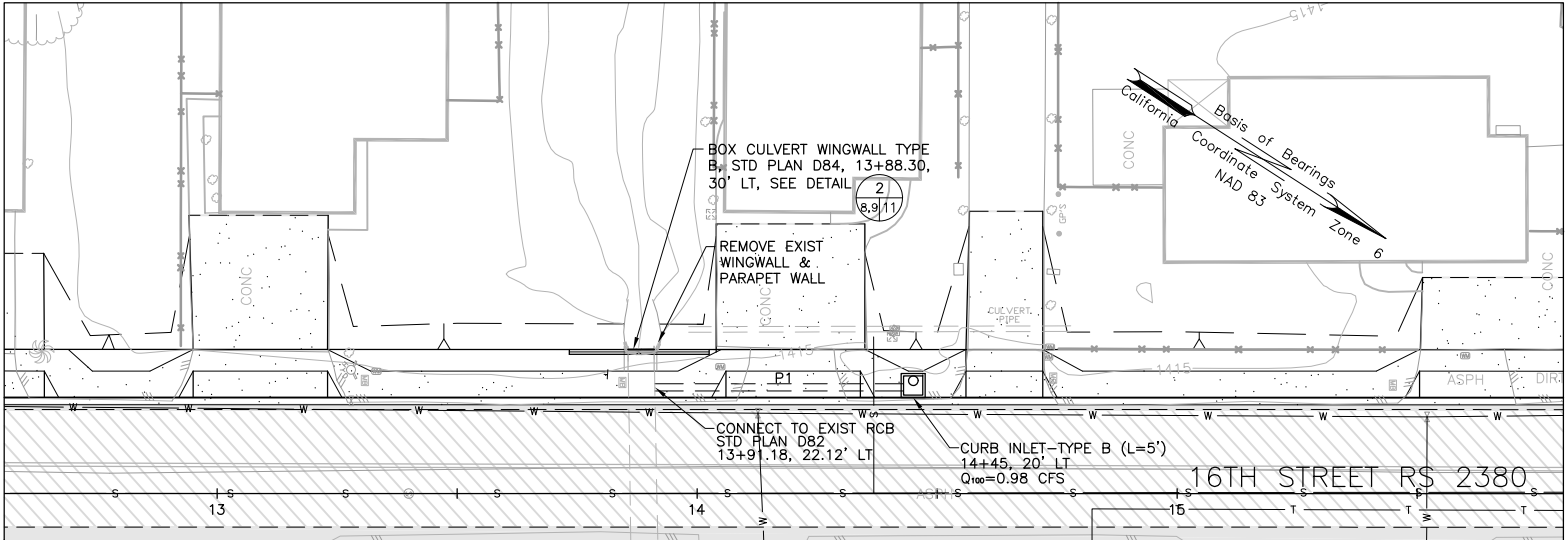
STATE OF CALIFORNIA

PLANS	BY	DATE
DESIGNED	----	----
CHECKED	----	----
DELINEATED	----	----

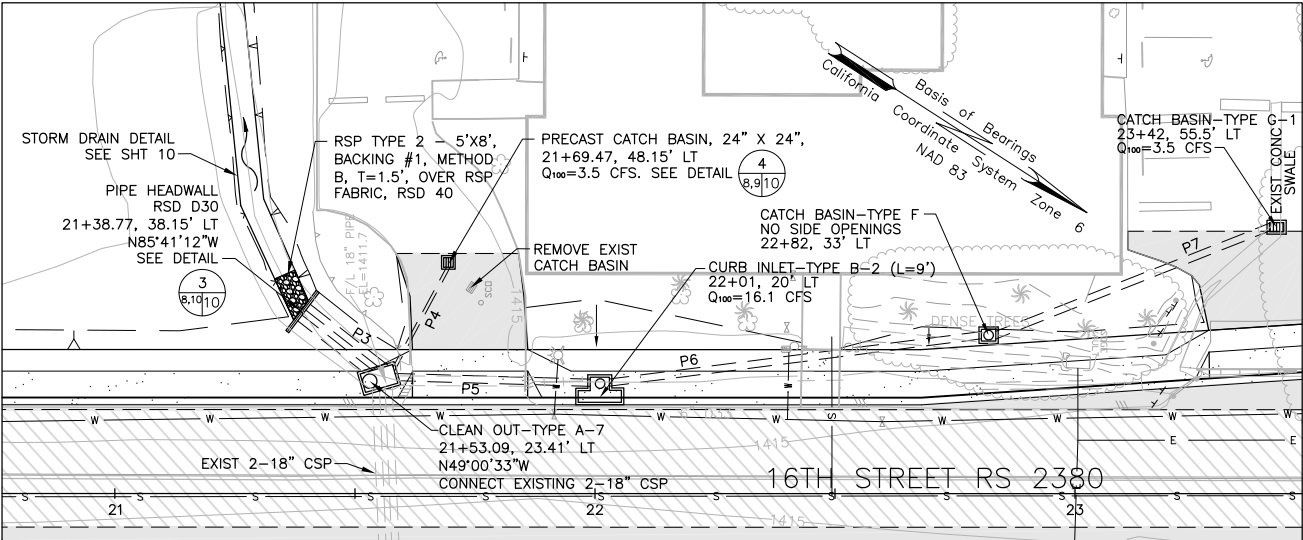
SAN DIEGO ENGINEERING
1234 COASTAL WAY
SAN DIEGO, CA 92123
619-555-4040

REGISTERED CIVIL ENGINEER

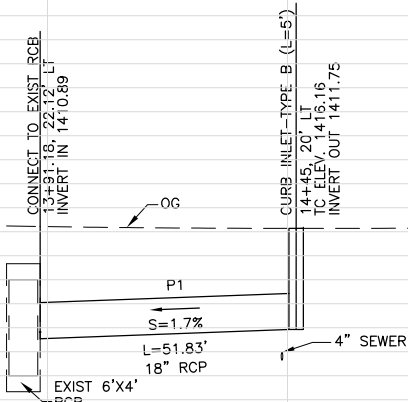
DATE



PLAN
1:20



PLAN
1:20



PROFILE
1:20 H
1:5 V



PROFILE
1:20 H
1:5 V

COUNTY OF SAN DIEGO
DEPARTMENT OF PUBLIC WORKS
5555 OVERLAND AVENUE, SAN DIEGO, CA 92123-1295



REVISIONS	BY	APPROVED	DATE

COORDINATE INDEX	
340	1730
CONST. COMPL.	
FIELD REVISIONS	

TYPICAL SAN DIEGO COUNTY ROAD
In the Vicinity of
PLAN AND PROFILE - STORM DRAIN

SCALE: HOR. NONE	VERT. NONE
W.A. RS12345	R.S. 12345
SP	
SHEET XX	OF SHEETS

RETAINING WALL PLAN AND PROFILE

INSTRUCTIONS

STANDARD PLANS AND STANDARD DRAWINGS ARE AVAILABLE FOR A VARIETY OF RETAINING WALLS. LOADING AND FOUNDATION REQUIREMENTS ARE OUTLINED ON THE STANDARD PLANS AND STANDARD DRAWINGS. FOR SITES WITH REQUIREMENTS THAT ARE NOT COVERED BY THE STANDARD PLANS OR STANDARD DRAWINGS, A SPECIAL DESIGN IS REQUIRED.

A FOUNDATION INVESTIGATION SHOULD BE MADE FOR ALL LOCATIONS AT WHICH A RETAINING WALL IS BEING CONSIDERED. THE DEPARTMENT OF PUBLIC WORKS MATERIALS TESTING LAB TYPICALLY MAKES FOUNDATION INVESTIGATIONS.

RETAINING WALLS SHOULD ALWAYS HAVE THEIR OWN STATIONING. THE BEGINNING AND END OF THE WALLS AND CRITICAL ANGLE POINTS WILL NEED STATION EQUATIONS TO TIE BACK INTO THE ROADWAY CONTROL LINE:

BEGIN WALL # 1
1+00 WALL # 1 =
45+50 @ 40'RT RS XX

RETAINING WALLS SHOULD ALWAYS REFERENCE USE THE LAYOUT LINE AS THE OFFSET CONTROL. THE RETAINING WALL LAYOUT LINE (LOL) SHALL BE CLEARLY SHOWN ON THE PLAN AND IN A RETAINING WALL TYPICAL SECTION. ALL STATION EQUATIONS AND OFFSETS SHALL BE WITH RESPECT TO THE WALL L.O.L. THE LAYOUT LINE IS TYPICALLY THE FACE OF THE WALL. ALL DATA TABLES AND OFFSETS SHOULD BE REFERENCED TO THIS LAYOUT LINE.

THE RETAINING WALL PLANS SHOULD INCLUDE A PLAN VIEW, A PROFILE VIEW AND A TYPICAL SECTION. THE FOLLOWING SHOULD BE SHOWN ON EACH VIEW:

THE PLAN VIEW SHOULD SHOW AND LABEL: THE BEGINNING OF THE WALL, ALL ANGLE POINTS AND THE END OF THE WALL WITH STATION AND OFFSET CALLOUTS FOR ALL. STATION EQUATIONS NEED TO BE LABELED FOR THE BEGINNING AND END OF WALLS. PLAN VIEW SHALL SHOW THE LIMITS OF THE FOOTING, THE LOCATION OF THE WALL L.O.L. AND THE ROAD R/W LINE. NOTE THAT ARROWS OF STANDARD LINETYPE OF RETAINING WALL SHOULD POINT IN THE DIRECTION OF THE RETAINED EARTH.

THE PROFILE VIEW SHOULD SHOW AND LABEL: TOP OF WALL ELEVATION, TOP OF FOOTING ELEVATION, FINISH GRADE ELEVATIONS ALONG FACE AND BACK OF WALL AND ORIGINAL GROUND AT THE WALL LAYOUT LINE. STATION EQUATIONS NEED TO BE LABELED FOR THE BEGINNING AND END OF WALLS. THE TYPICAL SECTION SHOULD SHOW AND LABEL THE SAME ITEMS AS THE PROFILE VIEW.

THERE MAY BE A NEED TO SHOW THE JOINT LOCATIONS IN YOUR PROFILE VIEW. THE MINIMUM SPACING FOR THESE ARE TYPICALLY CALLED OUT ON THE STANDARD PLANS AND THE STANDARD DRAWINGS. KEEP THIS IN MIND WHEN LABELING YOUR PROFILE VIEW, AS LABELS MAY NEED TO BE SHOWN AT THE MINIMUM DISTANCES. STORM DRAIN PLAN AND PROFILE SHEETS ARE PREPARED ON DUPLICATE SKELETONS OF THE BASE PLAN SHEETS. SEPARATE PLANS IF REQUIRED.

REGISTERED PROFESSIONAL ENGINEER

REGISTERED ENG

No. 12345

Exp. 12-25-2099

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STATE OF CALIFORNIA

PLANS

DESIGNED

CHECKED

DELINEATED

BY

DATE

SAN DIEGO ENGINEERING

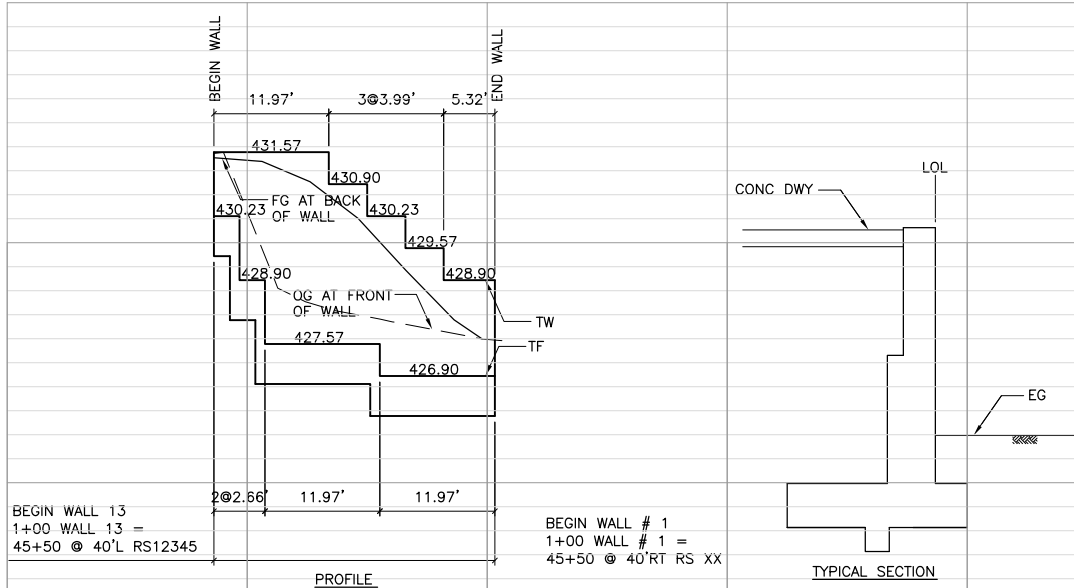
1234 COASTAL WAY

SAN DIEGO, CA 92123

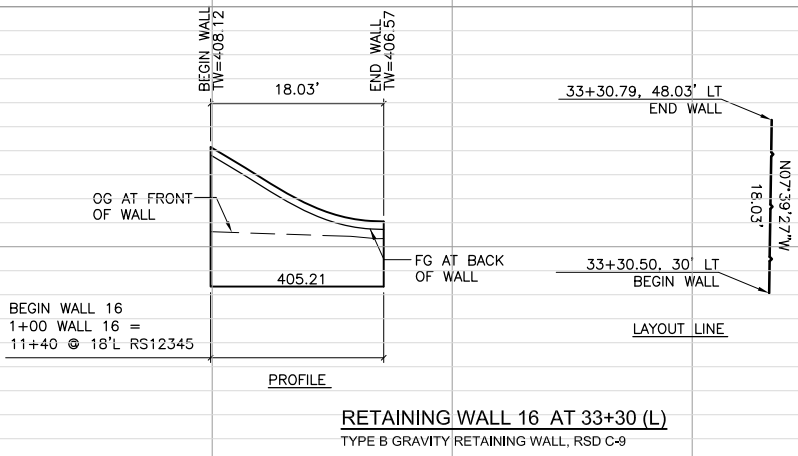
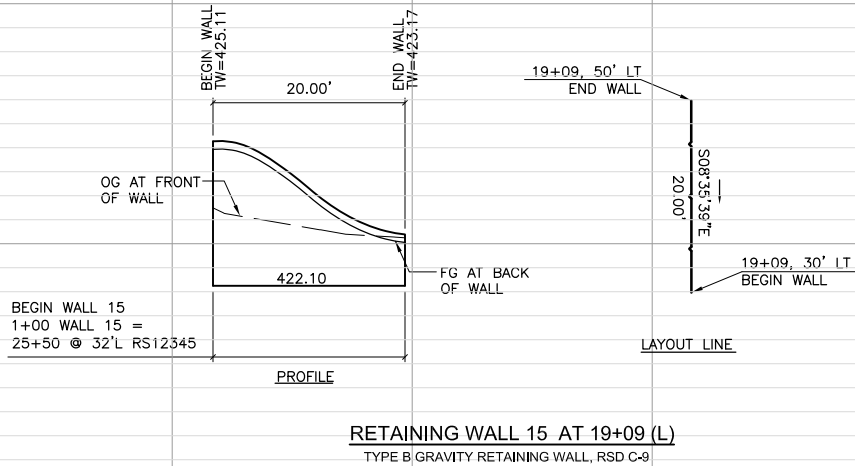
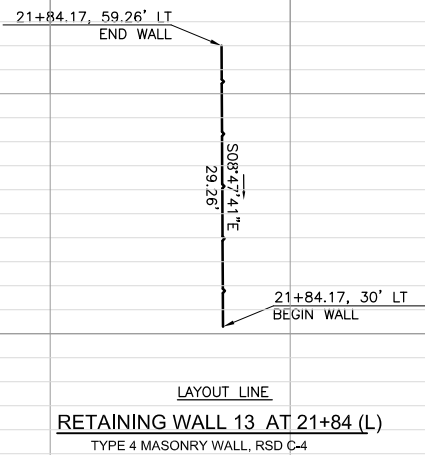
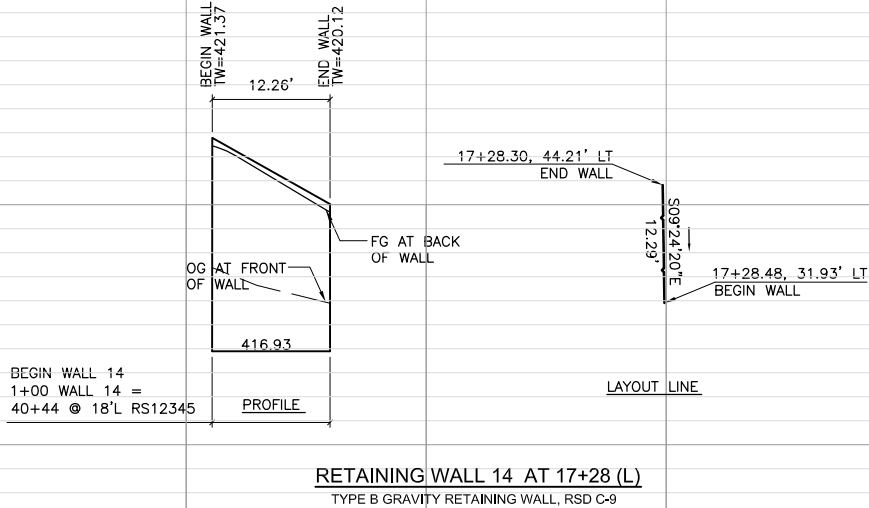
619-555-4040

REGISTERED CIVIL ENGINEER

DATE



Basis of Bearings
California
Coordinate System
NAD 83
Zone 6



COUNTY OF SAN DIEGO
DEPARTMENT OF PUBLIC WORKS
5555 OVERLAND AVENUE, SAN DIEGO, CA 92123-1295



REVISIONS	BY	APPROVED	DATE

COORDINATE INDEX
340 N 1730 E
CONST. COMPL.
FIELD REVISIONS

TYPICAL SAN DIEGO COUNTY ROAD
In the Vicinity of
RETAINING WALL ELEVATIONS

SCALE: HOR. NONE VERT. NONE
W.A. RS12345 R.S. 12345
SP
SHEET XX OF SHEETS

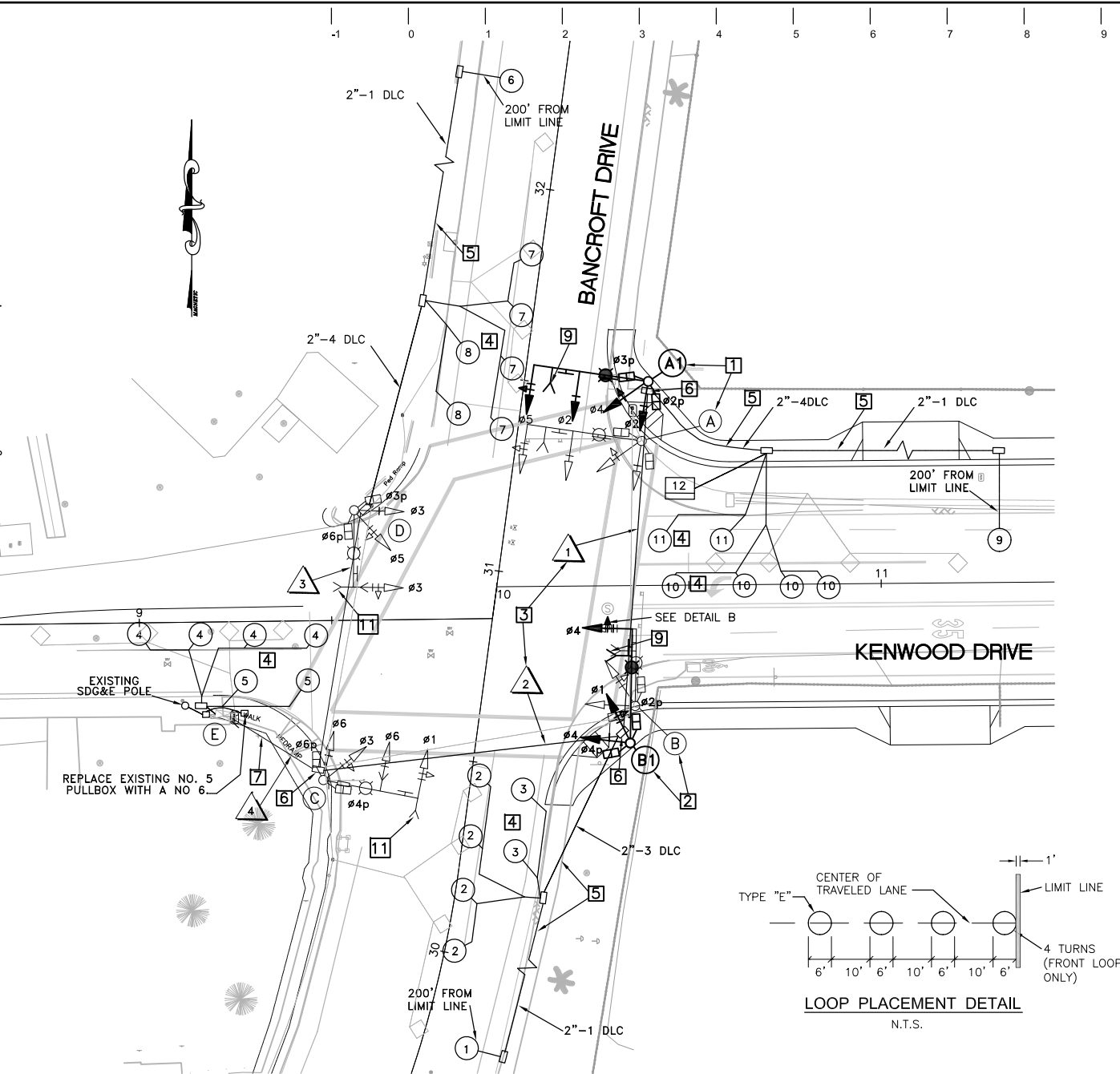
TRAFFIC SIGNAL PLANS

CHECHKLIST

- ☐ SCALE (OR LABELED NO SCALE)
- ☐ CONTROL LINE (ROAD SURVEY, CENTERLINE, ETC.)
- ☐ POLE AND EQUIPMENT SCHEDULE
- ☐ DETECTOR ASSIGNMENT SCHEDULE
- ☐ PHASE DIAGRAM
- ☐ TYPICAL LOOP SPACING
- ☐ PEDESTRIAN RAMPS
- ☐ CONDUCTOR SCHEDULE
- ☐ TYPICAL POLE LOCATION
- ☐ LEGENDS (STOP BAR, ARROWS, ETC.)
- ☐ STRIPING, LANE WIDTHS
- ☐ STANDARD NORTH ARROW
- ☐ TR NUMBER (ASSET TAG)

GENERAL NOTES

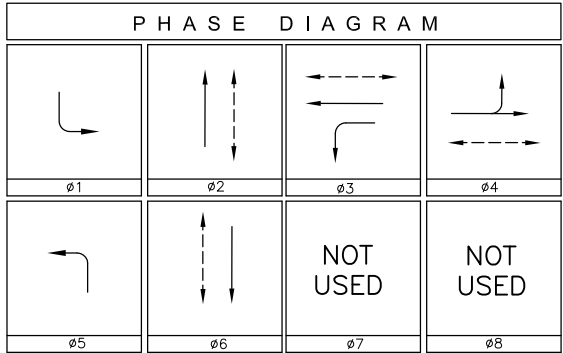
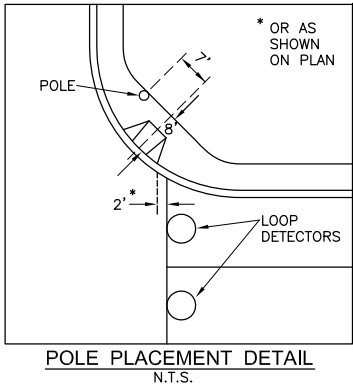
1. THE LOCATION OF ALL UNDERGROUND UTILITIES IS APPROXIMATE. THE CONTRACTOR SHALL DETERMINE THE DEPTH OF ALL UTILITIES, INCLUDING THOSE NOT SHOWN ON THE PLAN, AND VERIFY ALL CONDITIONS ON THE JOB.
2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND NOTIFY ALL UTILITIES AND AGENCIES AT LEAST 48 HOURS IN ADVANCE.
3. ALL LOOPS SHALL BE CENTERED IN TRAVEL LANE UNLESS OTHERWISE NOTED.
4. ALL PULL BOXES ARE NUMBER 5, AND CONDUIT IS 2-INCH UNLESS OTHERWISE NOTED.
5. ALL SIGNAL HEADS SHALL BE TWELVE-INCH IN DIAMETER WITH BACK PLATES. ALL RED, YELLOW, AND GREEN INDICATIONS SHALL BE L.E.D.
6. PEDESTRIAN HEADS AND PUSHBUTTON SIGNS SHALL BE INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS SHALL BE L.E.D., SIDE BY SIDE.
7. CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN FOR TRAFFIC SIGNAL INSTALLATION PER CALTRANS TRAFFIC MANUAL TO THE COUNTY OF SAN DIEGO TRAFFIC ENGINEERING SECTION A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO CONSTRUCTION. FOR INFORMATION CALL (858) 874-4025.
8. ALL TRAFFIC SIGNAL POLE FOUNDATIONS SHALL HAVE A 3-INCH CONDUIT INSTALLED TO THE ADJACENT PULL BOX.
9. THE CONTRACTOR IS RESPONSIBLE FOR THE LAYOUT AND INSTALLATION OF LOOP DETECTORS, TRAFFIC STRIPING, PAVEMENT MARKINGS, PARKING REMOVAL, AND TRAFFIC SIGNING, AS SHOWN ON THE PLAN:
 - a) THE CONTRACTOR SHALL OBTAIN THE APPROVAL OF THE COUNTY TRAFFIC ENGINEERING SECTION FOR THE LOOP LOCATIONS, STRIPING, PAVEMENT MARKINGS, PARKING REMOVAL, AND SIGN LOCATIONS PRIOR TO PAINTING AND INSTALLATION. CONTRACTOR SHALL USE LEAD-FREE PAINT FOR ALL STRIPING AND PAVEMENT MARKINGS.
 - b) THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ALL CONFLICTING STRIPING AND PAVEMENT MARKINGS AND SANDBLASTING/GRINDING AND SAND SEALING.
- 10.CONTRACTOR SHALL NOT ERECT ANY SIGNAL STANDARDS MORE THAN THREE WEEKS PRIOR TO SCHEDULED TRAFFIC SIGNAL TURN ON.
- 11.FLASHING SIGNAL OPERATION SHALL BE RED ON ALL PHASES. PEDESTRIAN SIGNALS SHALL BE BLANK DURING FLASHING OPERATION.
- 12.ALL TRAFFIC SIGNAL IMPROVEMENTS SHALL BE INSTALLED IN COORDINATION WITH THE SIGNING AND STRIPING CONTRACTOR.
- 13.CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MONUMENTATION AND/OR BENCHMARKS WHICH WILL BE DISTURBED OR DESTROYED BY CONSTRUCTION. SUCH POINTS SHALL BE REFERENCED AND REPLACED BY APPROPRIATE MONUMENTATION BY A LICENSED LAND SURVEYOR OR A REGISTERED CIVIL ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYING. A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FILED BY THE LICENSED SURVEYOR OR REGISTERED CIVIL ENGINEER AS REQUIRED BY THE LAND SURVEYOR'S ACT.
- 14.RAISED PAVEMENT MARKERS SHALL BE PLACED ON ALL NEW CENTERLINE AND LANE LINE STRIPING PER CALTRANS STANDARD PLANS.
- 15.CONTRACTOR SHALL REPLACE ALL STRIPING, PAVEMENT MARKERS, AND LEGENDS OBLITERATED BY THIS PROJECT.
- 16.CONTRACTOR SHALL REMOVE/TRIM VEGETATION PER ENGINEER.
- 17.ALL CONDUIT PLACED IN STREET SHALL HAVE A MINIMUM OF 24" COVER (R.S.D. G-34).



FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES

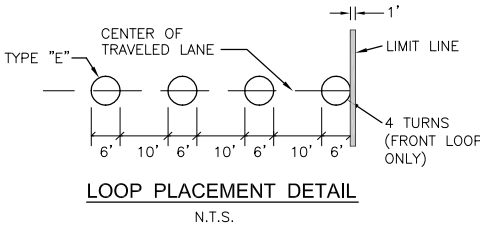
REGISTERED PROFESSIONAL ENGINEER
REGISTERED ENG
No. 12345
Exp. 12-25-2099
CIVIL
STATE OF CALIFORNIA

SAN DIEGO ENGINEERING
1234 COASTAL WAY
SAN DIEGO, CA 92123
619-555-4040
REGISTERED CIVIL ENGINEER
DATE



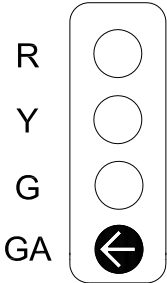
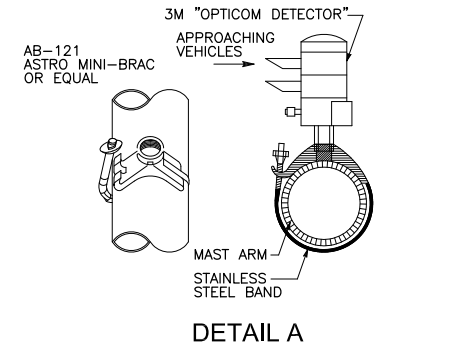
CONSTRUCTION NOTES

- 1 RELOCATE AND REPLACE POLE A WITH NEW POLE A1. SALVAGE EXISTING POLE: 19A-4-70.
- 2 RELOCATE AND REPLACE POLE B WITH NEW POLE B1. SALVAGE EXISTING POLE: 17A-3-70.
- 3 INSTALL CONDUIT RUNS 1 & 2.
- 4 TYPE E DETECTOR LOOPS.
- 5 INSTALL CONDUIT AS SHOWN.
- 6 INSTALL No. 6 PULLBOXES AS SHOWN.
- 7 INSTALL ADDITIONAL DLC CABLE IN CONDUIT RUN 1.
- 8 PROVIDE AND INSTALL NEW TRAFFIC SIGNAL STREET NAME SIGNS PER COUNTY OF SAN DIEGO STREET NAME STANDARD PLAN DATED 12/20/98, SHEETS 1 AND 2 OF 2, AS WELL AS DETAIL 2.
- 9 INSTALL EMERGENCY VEHICLE PRE-EMPTION EQUIPMENT. MOUNTING HARDWARE AND CABLE SHALL BE FURNISHED BY CONTRACTOR. SEE DETAIL A ON THIS SHEET.
- 10 REPLACE ALL CONDUCTORS ON "CONDUCTOR SCHEDULE".



POLE AND EQUIPMENT SCHEDULE									
LOC.	STANDARD			SIGNAL MOUNTING AND PLACEMENT				REMARKS	
	TYPE	MASTARM		VEHICLE		PEDESTRIAN			
		SIG.	LUM.	POLE	MASTARM	SIGNAL	PPB		
(N)	(A)	19-4-80 (N)	30' (N)	12' (N)	(N)SV-2-TB ø2 ø4 ●	(N)MAS ø2 (N)MAS ø5 ●	(N)SP-2-T ø2P ø3P	(N)ø2W ø3S	REPLACE AND RELOCATE EXISTING POLE "KENWOOD DR" 8 (N) 250 WHPS
(N)	(B)	19-3-80 (N)	30' (N)	12' (N)	(N)SV-2-TB ø1 ● ø4	(N)MAS ø4 *	(N)SP-2-T ø2P ø4P	(N)ø2W ø4N	REPLACE AND RELOCATE EXISTING POLE "BANCROFT DR" 8 (N) 250 WHPS
(E)	(C)	19A-4-70	25'	12'	SV-2-TB ø3 ø6	MAS ø1 MAS ø6	SP-2-T ø4P ø6P	ø4N ø6E	EXISTING POLE TO REMAIN "KENWOOD DR" (N) 250 WHPS
(E)	(D)	17A-3-70	20'	12'	SV-2-TB ø3 ø5	MAS ø3	SP-2-T ø3P ø6P	ø3N ø6E	EXISTING POLE TO REMAIN "BANCROFT DR" (N) 250 WHPS
(E)	(E)	MODEL 170 CONTROLLER ASSEMBLY							

• = RED, YELLOW, AND GREEN ARROWS * = RED, YELLOW, GREEN, AND GREEN ARROWS
(N) = NEW
(E) = EXISTING TO REMAIN



DETECTOR ASSIGNMENT SCHEDULE			
No.	PHASE	SLOT	FIELD TERMINAL
1	2	I2U	TB2-5 & 6
2	5	J1U	TB3-1 & 2
3	2	I2L	TB2-7 & 8
4	4	I6U	TB4-9 & 10
5	4	I6L	TB4-11 & 12
6	6	J2U	TB3-5 & 6
7	1	I1U	TB2-1 & 2
8	6	J2L	TB3-7 & 8
9	3	I5U	TB4-5 & 6
10	3	I5L	TB4-7 & 8
11	3	I9U	TB6-9 & 10
12	3	I9L	TB6-11 & 12
PPB-ø2P	ø2P	2I12U	TB8-4 & COM 12
PPB-ø3P	ø3P	3I13L	TB8-5 & COM 13
PPB-ø4P	ø4P	4I12L	TB8-8 & COM 12
PPB-ø6P	ø6P	6I13U	TB8-7 & COM 13

*REPLACE ALL LOOPS.

CONDUCTOR SCHEDULE									
AWG OR CABLE	PHASE	POLE OR CIRCUIT	* 1	* 2	3	4			
3 5 12 SIGNAL CABLE		POLE A	1	1	1	1			
		POLE B	1	1	1	1			
		POLE C	1	1	1	1			
		POLE D	1	1	1	1			
TOTAL CABLES (3 COND/5 COND/12 COND)			1	2	1	1	1		
#10 — LUMINAIRE			2	2	2	2			
#10 — FLASHING BEACON									
#6 — SERVICE									
DLC TYPE "B"	ø1				1	1			
	ø2			2	2				
	ø3		4	4	4				
	ø4				2				
	ø5		1	1	1				
	ø6			2	2				
TOTAL DLC			3	6	3	11			
EVPE — DLC			1	2	1	4			
CONDUIT SIZE			4"	4"	2"	3½"			
* RELOCATE AND REPLACE CONDUIT. 10									

COUNTY OF SAN DIEGO
DEPARTMENT OF PUBLIC WORKS
5555 OVERLAND AVENUE, SAN DIEGO, CA 92123-1295



REVISIONS	BY	APPROVED	DATE

COORDINATE INDEX	
340	N 1730 E
CONST. COMPL.	
FIELD REVISIONS	

TYPICAL SAN DIEGO COUNTY ROAD
In the Vicinity of
TRAFFIC SIGNAL PLAN (TR-147)

SCALE: HOR. NONE VERT. NONE
W.A. RS12345 R.S. 12345
TR
SHEET XX OF SHEETS

SIGNING AND STRIPING PLANS

CHECHKLIST

- ☐ SHOW ALL EXISTING SIGNS WITH NOTE TO REMAIN, REMOVE, RELOCATE, SALVAGE, ETC
- ☐ IDENTIFY ALL NEW SIGNS TO BE INSTALLED
- ☐ IDENTIFY ALL NEW STRIPING, PAVEMENT MARKINGS AND MARKERS
- ☐ SHOW NORTH ARROW
- ☐ LABEL STREET NAMES
- ☐ DO NOT SHOW CONTOURS

REGISTERED PROFESSIONAL ENGINEER

REGISTERED ENG

No. 12345

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CIVIL

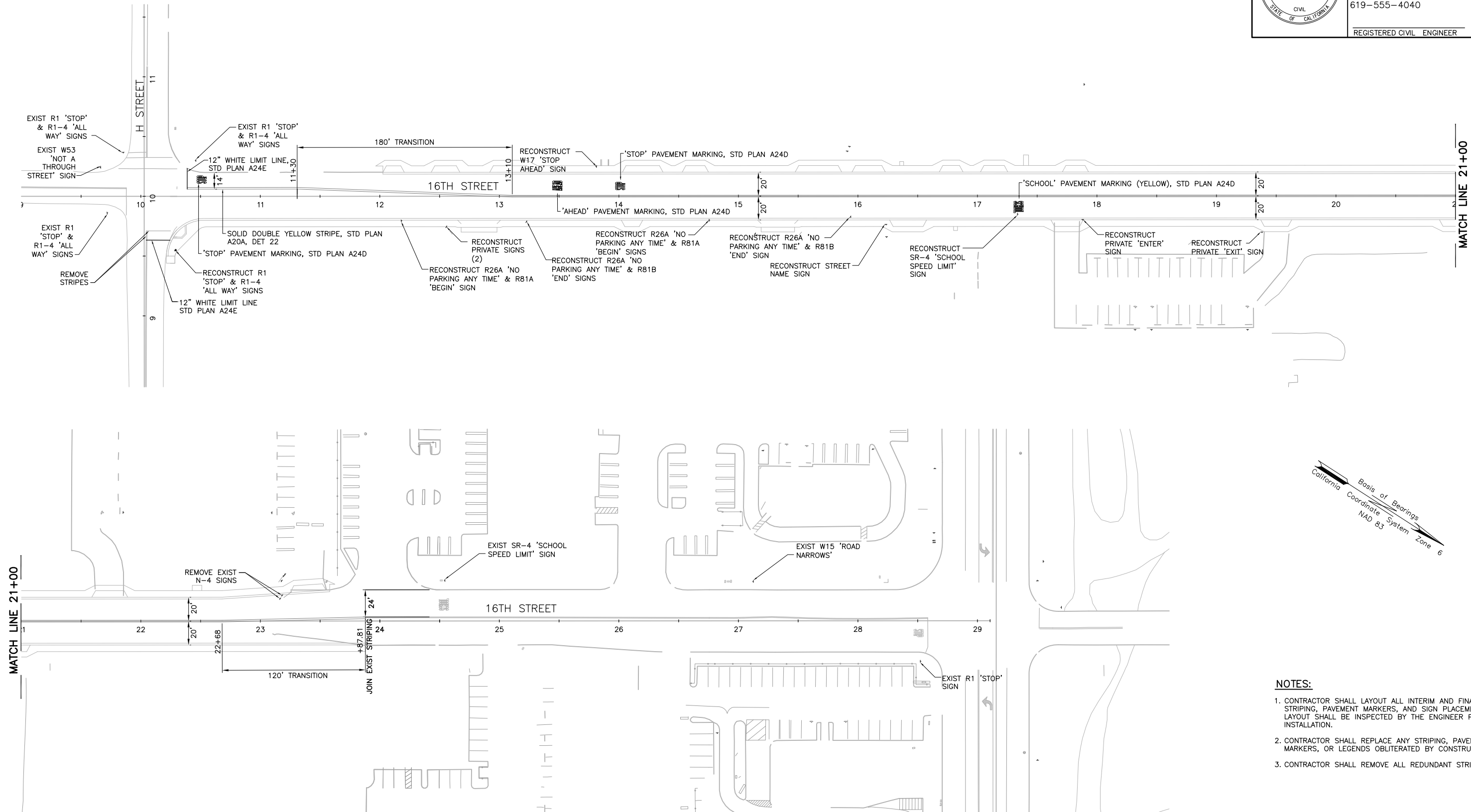
STATE OF CALIFORNIA

PLANS	BY	DATE
DESIGNED	----	----
CHECKED	----	----
DELINEATED	----	----

SAN DIEGO ENGINEERING
1234 COASTAL WAY
SAN DIEGO, CA 92123
619-555-4040

REGISTERED CIVIL ENGINEER

DATE



- NOTES:**
- CONTRACTOR SHALL LAYOUT ALL INTERIM AND FINAL: STRIPING, PAVEMENT MARKERS, AND SIGN PLACEMENT. LAYOUT SHALL BE INSPECTED BY THE ENGINEER PRIOR TO INSTALLATION.
 - CONTRACTOR SHALL REPLACE ANY STRIPING, PAVEMENT MARKERS, OR LEGENDS OBLITERATED BY CONSTRUCTION.
 - CONTRACTOR SHALL REMOVE ALL REDUNDANT STRIPING.

COUNTY OF SAN DIEGO
DEPARTMENT OF PUBLIC WORKS
5555 OVERLAND AVENUE, SAN DIEGO, CA 92123-1295



REVISIONS	BY	APPROVED	DATE

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340 N.	1730 E.
CONST. COMPL.	
FIELD REVISIONS	

TYPICAL SAN DIEGO COUNTY ROAD
In the Vicinity of
SIGNING AND STRIPING PLAN

SCALE: HOR. NONE VERT. NONE
W.A. RS12345 R.S. 12345
SHEET XX OF SHEETS

TRAFFIC CONTROL PLAN

PLAN INSTRUCTIONS

THESE PLANS SHOW THE SEQUENCE OF OPERATION, WORK TO BE PERFORMED AND THE TRAVELED WAY TO BE USED FOR ALL MOVEMENTS OF TRAFFIC DURING EACH CONSTRUCTION SEQUENCE.

STAGE CONSTRUCTION, TRAFFIC CONTROL AND /OR DETOUR PLANS SHALL BE INCLUDED IN THE PROJECT PLANS WHEN DETOURING OR STAGING OF THE WORK IS NEEDED. WHERE SUFFICIENT INFORMATION TO CONSTRUCT DETOURS CANNOT BE SHOWN ON THE STAGE CONSTRUCTION AND TRAFFIC CONTROL PLANS, SEPARATE DETOUR PLANS SHALL BE PREPARED. STAGE CONSTRUCTION AND TRAFFIC CONTROL PLANS MAY BE PREPARED BY UTILIZING DUPLICATE SKELETONS OF THE BASE PLAN SHEETS. DETOURS TO BE CONSTRUCTED SHALL BE SHOWN IN A SEPARATE DETOUR PLAN AND PROFILE SHEET.

EACH STAGE SHOWN ON THE STAGE CONSTRUCTION PLAN SHALL SHOW:

- EXISTING ROADBEDS AND ROADBEDS COMPLETED IN PREVIOUS STAGE
- CONSTRUCTION TO BE PERFORMED IN THE STAGE SHOWN
- TRAFFIC DIRECTION AND NUMBER OF LANES AVAILABLE IN THE STAGE SHOWN

EXISTING ROAD OR DETOURS THAT HAVE BEEN REPLACED BY PERMANENT CONSTRUCTION IN PREVIOUS STAGES SHALL NOT BE SHOWN ON SUBSEQUENT STAGES.

ROADWAY CROSS SECTIONS SHALL BE PROVIDED FOR ALL STAGE CONSTRUCTION WHEN DIFFERENTIAL GRADES EXCEED ONE FOOT.

PLAN CHECKLIST

- ☐ SCALE (OR LABELED NO SCALE)
- ☐ STANDARD NORTH ARROW
- ☐ UNDERGROUND UTILITIES (SEWER, WATER, GAS, TELEPHONE)
- ☐ UTILITY POLES
- ☐ DETOUR CENTERLINE (STATIONS, EQUATIONS)
- ☐ BEARINGS
- ☐ RIGHT OF WAY WIDTHS
- ☐ DETOUR ROADWAY WIDTH
- ☐ DRIVEWAYS (STATION AND WIDTH)
- ☐ DRAINAGE PIPES
- ☐ DETOUR SIGNING
- ☐ TYPICAL SECTION

PROFILE CHECKLIST

- ☐ GRID
- ☐ GRADES
- ☐ ORIGINAL GROUND
- ☐ DRAINAGE PIPES
- ☐ UTILITY CROSSINGS

REGISTERED PROFESSIONAL ENGINEER

REGISTERED ENG

No. 12345

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CIVIL

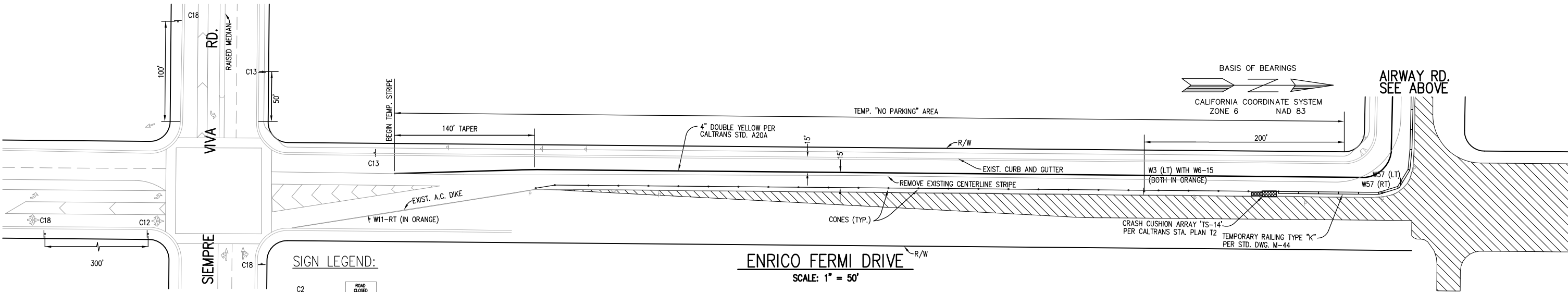
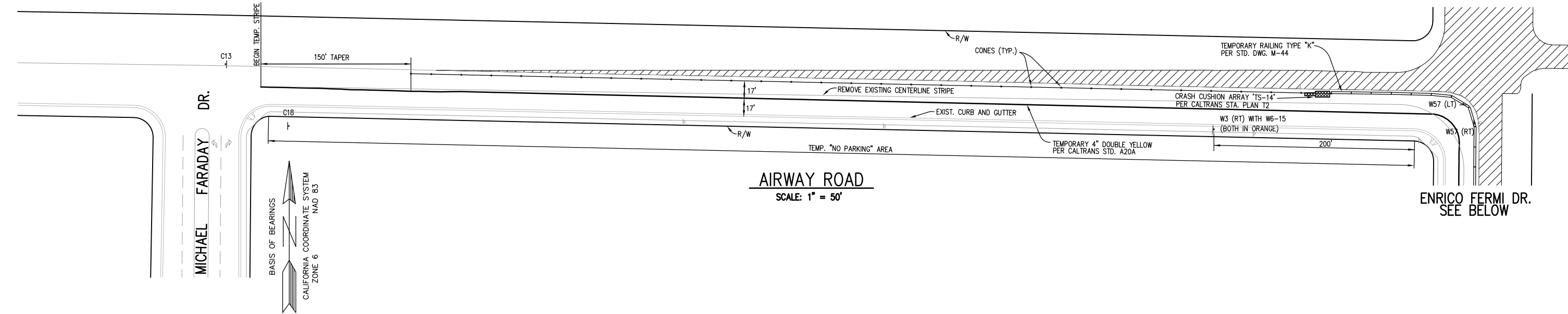
STATE OF CALIFORNIA

PLANS	BY	DATE
DESIGNED	----	----
CHECKED	----	----
DELINEATED	----	----

SAN DIEGO ENGINEERING
1234 COASTAL WAY
SAN DIEGO, CA 92123
619-555-4040

REGISTERED CIVIL ENGINEER

DATE



TRAFFIC CONTROL LEGEND:

- CONE
- TEMPORARY BARRICADE
- SIGN
- TEMP. CRASH CUSHIONS
- WORK AREA

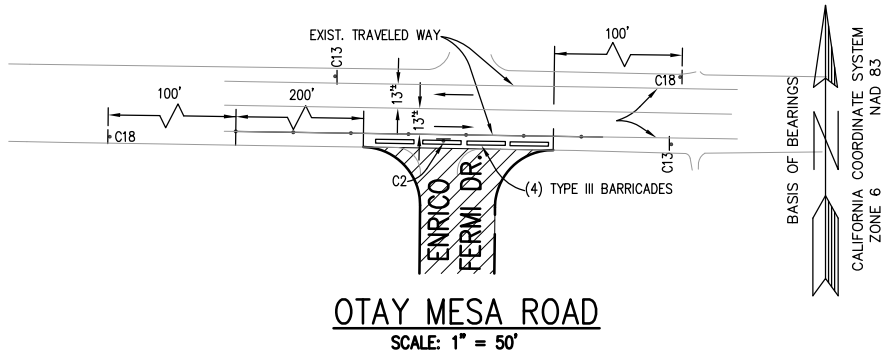
WORK HOURS: _____ TO _____

WORK DATES: _____ TO _____

WORK DATES TO BE PROVIDED BY THE CONTRACTOR
PRIOR TO THE COMMENCEMENT OF WORK.

SIGN LEGEND:

- C2 ROAD CLOSED
- C12 NARROW LANE
- C13 END CONSTRUCTION
- C18 ROAD CONSTRUCTION AHEAD
- W3
- W11(RT)
- W56
- W57



COUNTY OF SAN DIEGO
DEPARTMENT OF PUBLIC WORKS
5555 OVERLAND AVENUE, SAN DIEGO, CA 92123-1295



REVISIONS	BY	APPROVED	DATE

COORDINATE INDEX	
340	N 1730 E
CONST. COMPL.	
FIELD REVISIONS	

TYPICAL SAN DIEGO COUNTY ROAD
In the Vicinity of
TRAFFIC CONTROL PLAN

SCALE: HOR. NONE VERT. NONE
W.A. RS12345 R.S. 12345
SHEET XX OF SHEETS

-1 0 1 2 3 4 5 6 7 8 9 10

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES

----% SUBMITTAL
NOT FOR
CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER

REGISTERED ENG

No. 12345

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CIVIL

STATE OF CALIFORNIA

PLANS

DESIGNED

CHECKED

DELINEATED

BY

DATE

SAN DIEGO ENGINEERING

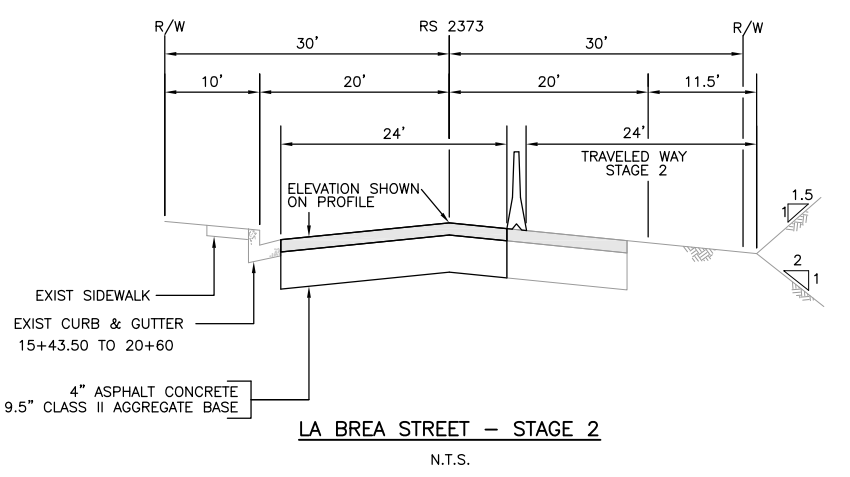
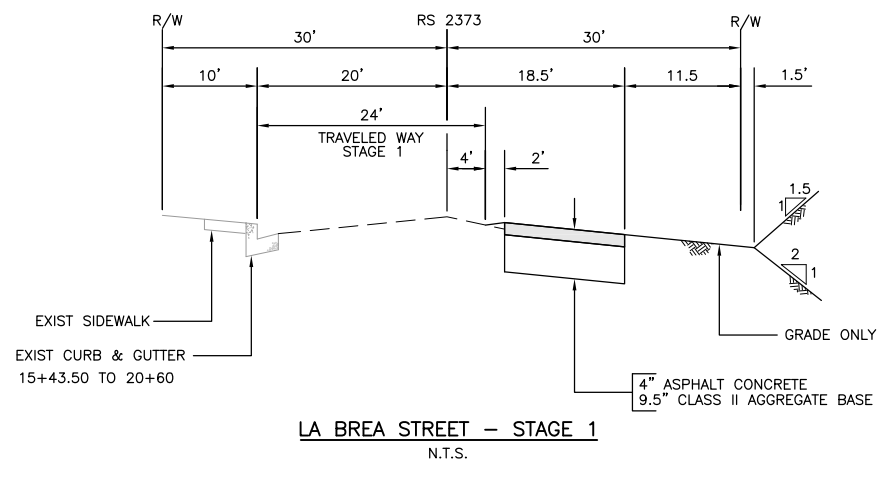
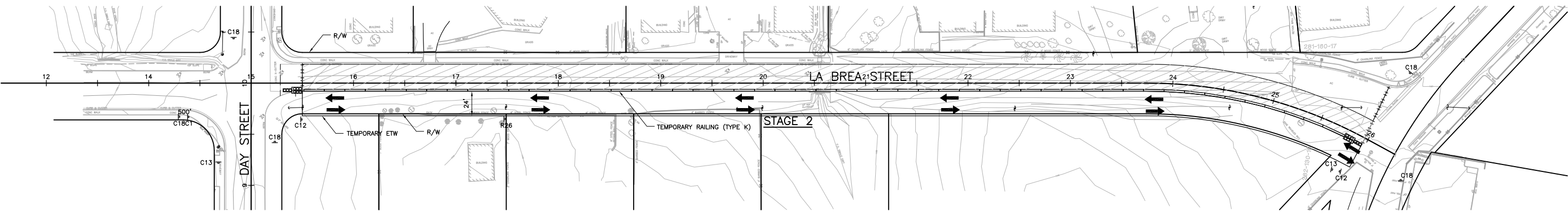
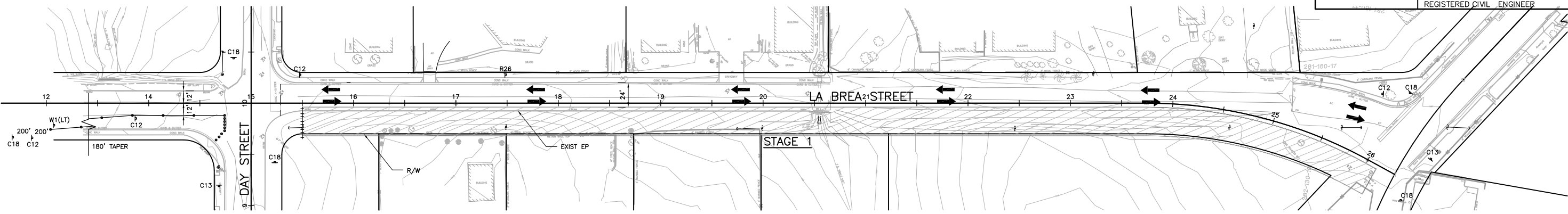
1234 COASTAL WAY

SAN DIEGO, CA 92123

619-555-4040

REGISTERED CIVIL ENGINEER

DATE



- LEGEND**
- CONSTRUCTION THIS STAGE
 - DIRECTION OF TRAFFIC
 - TEMPORARY RAILING (TYPE K)
 - CONSTRUCTION SIGN
 - CONE
 - CRASH CUSHION CALTRANS STD A81A

DETOUR AHEAD

C1

NARROW LANE

C12

END CONSTRUCTION

C13

ROAD CONSTRUCTION AHEAD

C18

SHOULDER WORK AHEAD

C24

NO PARKING ANY TIME

R26

ONE WAY

W1(LT)

COUNTY OF SAN DIEGO
DEPARTMENT OF PUBLIC WORKS
5555 OVERLAND AVENUE, SAN DIEGO, CA 92123-1295



REVISIONS	BY	APPROVED	DATE

COORDINATE INDEX	
340	N 1730 E
CONST. COMPL.	
FIELD REVISIONS	

TYPICAL SAN DIEGO COUNTY ROAD
In the Vicinity of
STAGE CONSTRUCTION PLAN

SCALE: HOR. NONE VERT. NONE
W.A. RS12345 R.S. 12345
SP
SHEET XX OF SHEETS

WATER POLUTION CONTROL PLAN

PLAN INSTRUCTIONS

EVERY EFFORT MUST BE MAINTAINED TO CONTROL RUNOFF DURING THE CONSTRUCTION PHASE OF THE PROJECT. INCLUDE A PLAN VIEW DESCRIBING AN EROSION AND SEDIMENT CONTROL PLAN. THE DESIGN MUST DEMONSTRATE THAT RUNOFF WILL BE CONTROLLED DURING CONSTRUCTION AND AFTER COMPLETION.

PLAN CHECKLIST

- ☐ TEMPORARY BMP
- ☐ SCALE (OR LABELED NO SCALE)
- ☐ STANDARD NORTH ARROW
- ☐ EXISTING TOPOGRAPHY SCREENED AT 10 PERCENT
- ☐ PROPOSED TOPOGRAPHY SHOWING ONE FOOT CONTOUR LINES AND ELEVATION VALUES AT EVERY FIVE FOOT INCREMENTS
- ☐ TOP OF SLOPE/TOE OF SLOPE
- ☐ FILL SLOPE/CUT SLOPE
- ☐ DAYLIGHT LIMITS OF GRADING
- ☐ ROADWAY WIDTHS
- ☐ RIGHT OF WAY WIDTHS
- ☐ DRIVEWAYS
- ☐ EXISTING DRAINAGE FACILITIES WITH FLOW DIRECTION
- ☐ PROPOSED DRAINAGE FACILITIES WITH FLOW DIRECTION
- ☐ ENVIRONMENTAL SENSITIVE AREA
- ☐ STORM WATER DISCHARGE LOCATION
- ☐ EXISTING GRADED SWALE
- ☐ PROPOSED GRADED SWALE
- ☐ LEGEND OF BMP
- ☐ DESCRIPTION OF BMP
- ☐ DETAILS
- ☐ CROSS SECTION OF DETAILS

NOTE THAT ALL PERMANENT BMP FEATURES THAT REQUIRE FUTURE MAINTENANCE MUST BE SUMMARIZED ON SHEET 2, GENERAL NOTES AND REFERENCES

REGISTERED PROFESSIONAL ENGINEER

REGISTERED ENG

No. 12345

Exp. 12-25-2099

CIVIL

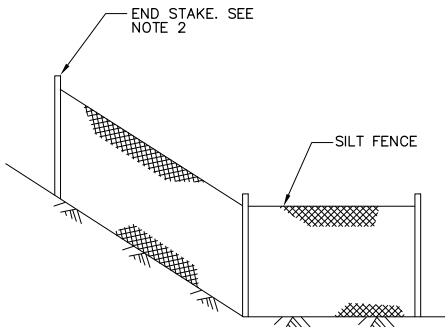
STATE OF CALIFORNIA

PLANS	BY	DATE
DESIGNED	----	----
CHECKED	----	----
DELINEATED	----	----

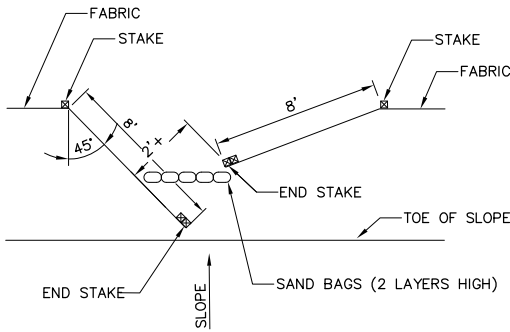
SAN DIEGO ENGINEERING
1234 COASTAL WAY
SAN DIEGO, CA 92123
619-555-4040

REGISTERED CIVIL ENGINEER

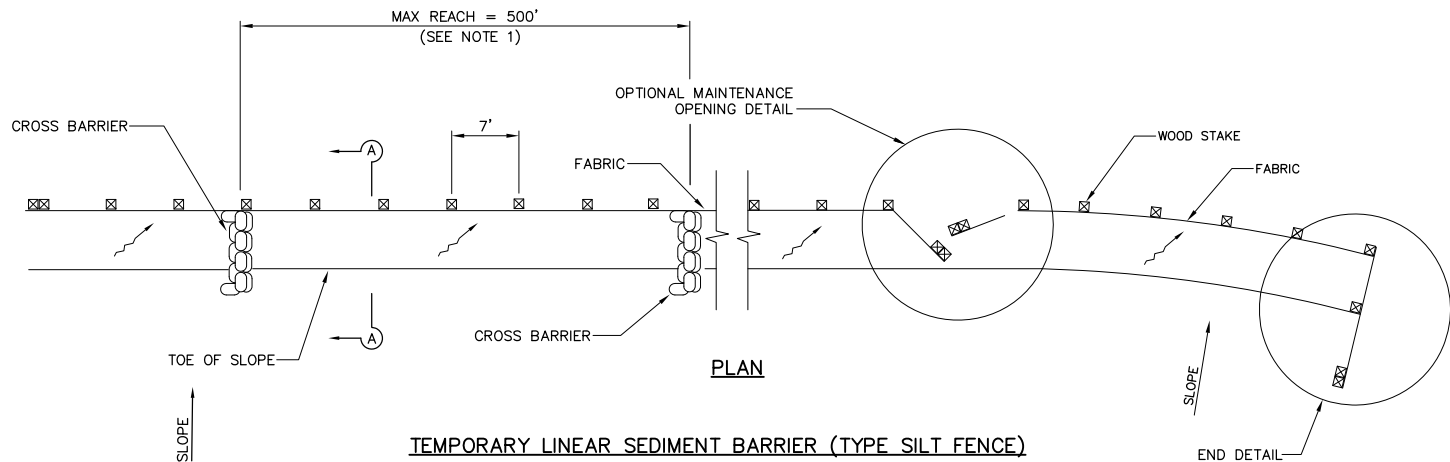
DATE



END DETAIL



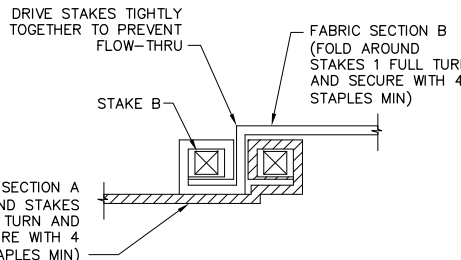
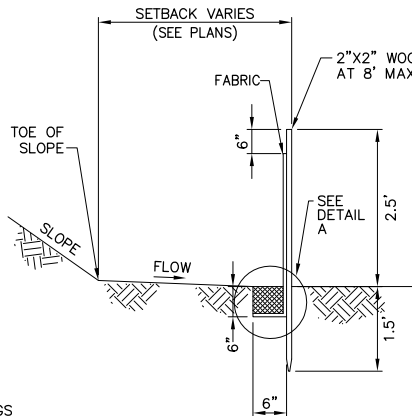
OPTIONAL MAINTENANCE OPENING DETAIL
(SEE NOTE 11)



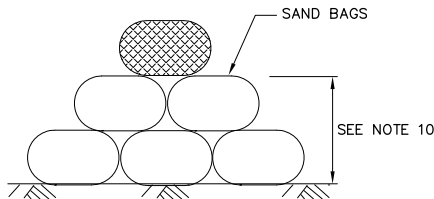
TEMPORARY LINEAR SEDIMENT BARRIER (TYPE SILT FENCE)

NOTES

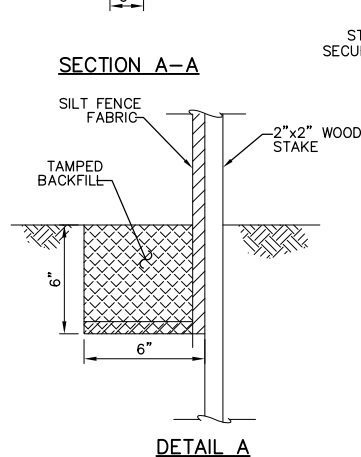
1. CONSTRUCT THE LENGTH OF EACH REACH SO THAT THE CHANGE IN BASE ELEVATION ALONG THE REACH DOES NOT EXCEED 1/3 THE HEIGHT OF THE LINEAR BARRIER, IN NO CASE SHALL THE REACH LENGTH EXCEED 500 FEET.
2. THE LAST 8 FEET OF FENCE SHALL BE TURNED UP SLOPE.
3. STAKE DIMENSIONS ARE NOMINAL.
4. DIMENSIONS MAY VARY TO FIT FIELD CONDITION.
5. STAKES SHALL BE SPACED AT 8 FOOT MAXIMUM, AND SHALL BE POSITIONED ON DOWNSTREAM SIDE OF FENCE.
6. STAKES TO OVERLAP AND FENCE FABRIC TO FOLD AROUND EACH STAKE ONE FULL TURN. SECURE TO STAKE WITH 4 STAPLES.
7. STAKES SHALL BE DRIVEN TIGHTLY TOGETHER TO PREVENT POTENTIAL FLOW-THROUGH OF SEDIMENT AT JOINT. THE TOPS OF THE STAKES SHALL BE SECURED WITH WIRE.
8. FOR END STAKES, FENCE FABRIC SHALL BE FOLDED AROUND TWO STAKES ONE FULL TURN AND SECURED WITH 4 STAPLES.
9. MINIMUM 4 STAPLES PER STAKE. DIMENSIONS SHOWN ARE TYPICAL.
10. CROSS BARRIERS SHALL BE A MINIMUM OF 1/3, AND A MAXIMUM OF 1/2 THE HEIGHT OF THE LINER BARRIER.
11. MAINTENANCE OPENINGS SHALL BE CONSTRUCTED IN A MANNER TO ENSURE SEDIMENT REMAINS BEHIND SILT FENCE.
12. JOINING SECTIONS SHALL NOT BE PLACED AT SUMP LOCATIONS.
13. SANDBAG ROWS AND LAYERS SHALL BE OFFSET TO ELIMINATE GAPS.



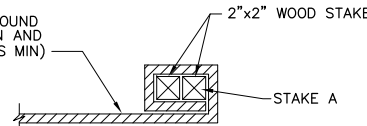
JOINING SECTION DETAIL (TOP VIEW)



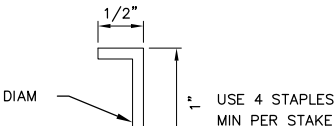
SECTION C-C



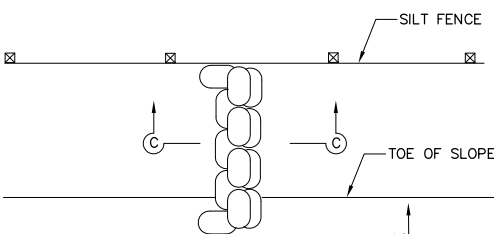
SECTION A-A



END STAKE DETAIL (TOP VIEW)



STAPLE DETAIL



CROSS BARRIER DETAIL

TEMPORARY SILT FENCE
NO SCALE



REVISIONS	BY	APPROVED	DATE

COORDINATE INDEX
340 N, 1730 E
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-1 0 1 2 3 4 5 6 7 8 9 10

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES

REGISTERED PROFESSIONAL ENGINEER

REGISTERED ENG

No. 12345

Exp. 12-25-2099

CIVIL

STATE OF CALIFORNIA

PLANS

DESIGNED

CHECKED

DELINEATED

BY

DATE

SAN DIEGO ENGINEERING

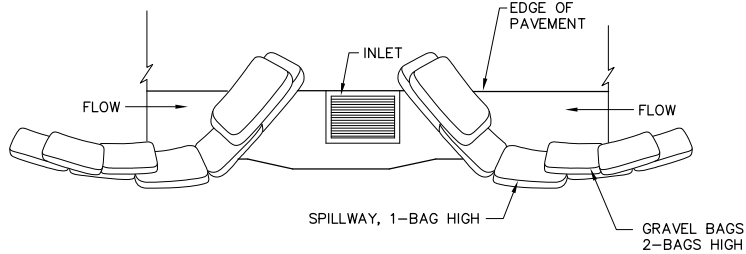
1234 COASTAL WAY

SAN DIEGO, CA 92123

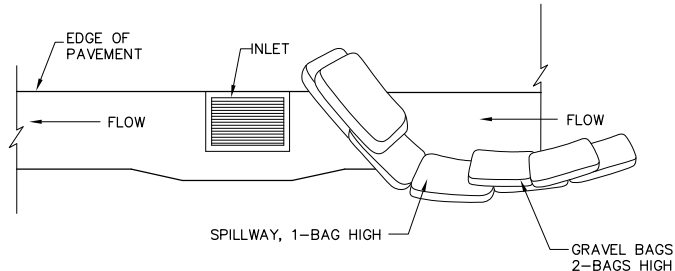
619-555-4040

REGISTERED CIVIL ENGINEER

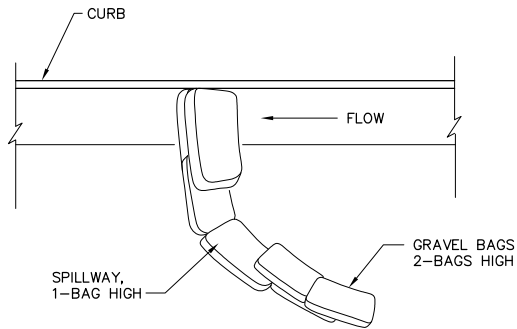
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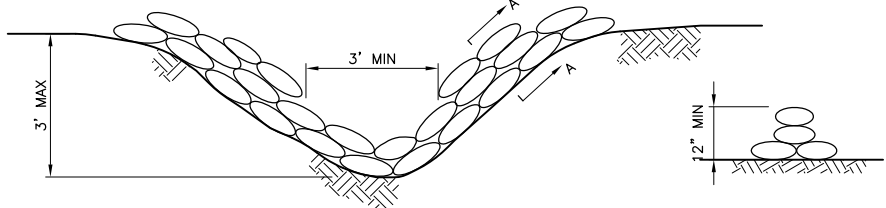
PROTECTION FOR INLET ON SUMP
NTS



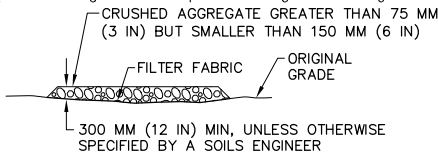
PROTECTION FOR INLET ON GRADE
NTS



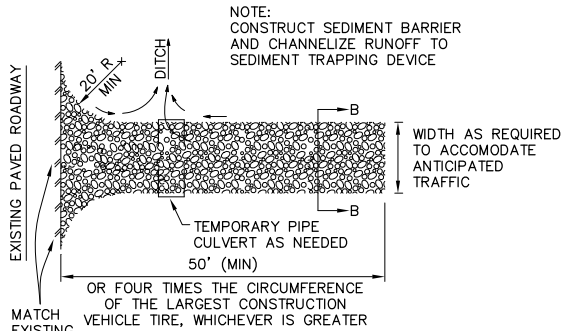
GRAVEL BAG CHEVRON



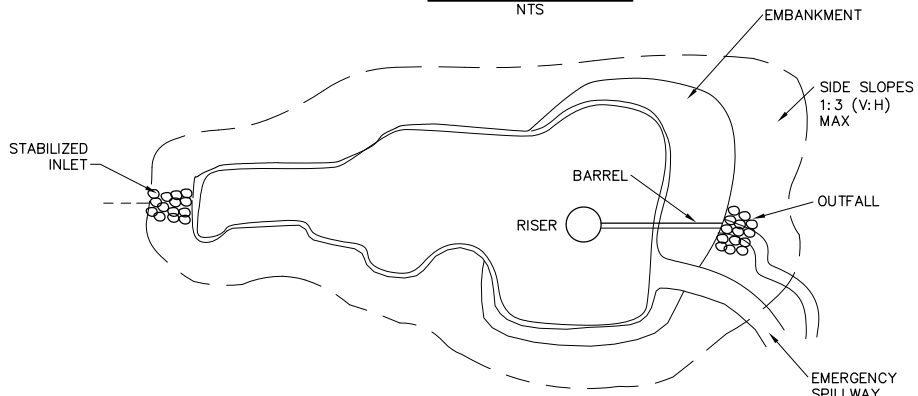
TEMPORARY GRAVEL BAG BARRIER
NTS



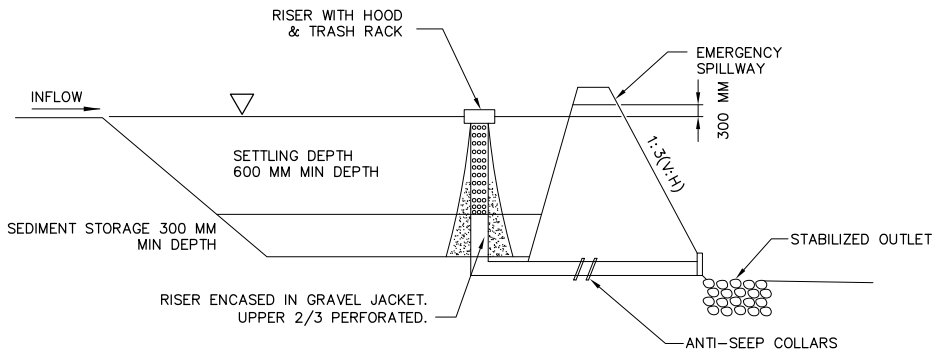
SECTION B-B
NTS



TYPICAL TIRE WASH
NTS



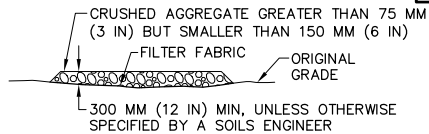
TOP VIEW



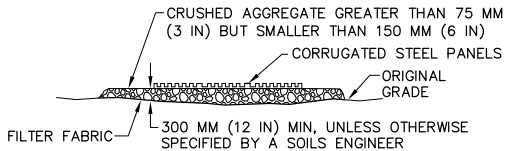
SIDE VIEW

- NOTES:
1. TYPICAL TRAP DESIGN SHOWN WILL HANDLE 12.7 MM OF RUNOFF OVER A 24 HOUR PERIOD.
 2. SETTLING VOLUME: 130 CM PER HECTARE OF DRAINAGE AREA.
 3. SEDIMENT STOAGE VOLUME: 65 CM PER HECTARE OF DRAINAGE AREA.

TYPICAL SEDIMENT TRAP DETAIL SC 3-1
NTS

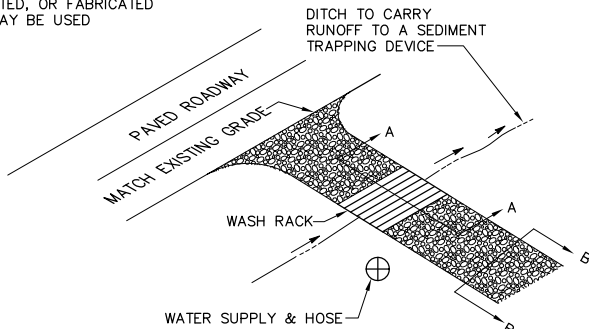


SECTION B-B
NTS

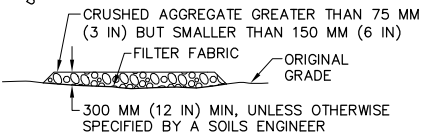


SECTION A-A
NTS

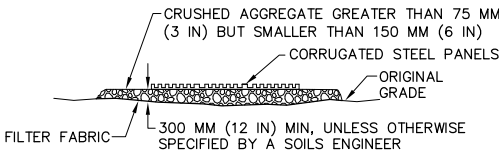
NOTE:
MANY DESIGNS CAN BE FIELD
FABRICATED, OR FABRICATED
UNITS MAY BE USED



TYPICAL TIRE WASH
NTS

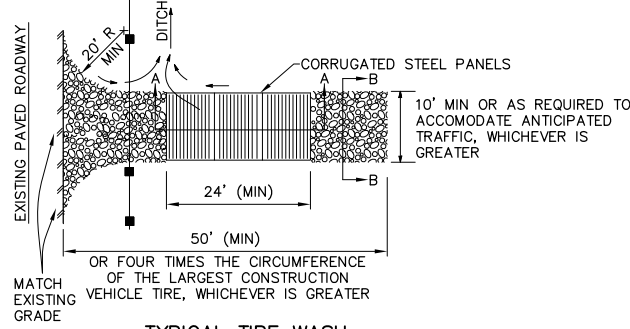


SECTION B-B
NTS



SECTION A-A
NTS

NOTE:
CONSTRUCT SEDIMENT BARRIER
AND CHANNELIZE RUNOFF TO
SEDIMENT TRAPPING DEVICE



TYPICAL TIRE WASH
NTS

COUNTY OF SAN DIEGO
DEPARTMENT OF PUBLIC WORKS
5555 OVERLAND AVENUE, SAN DIEGO, CA 92123-1295

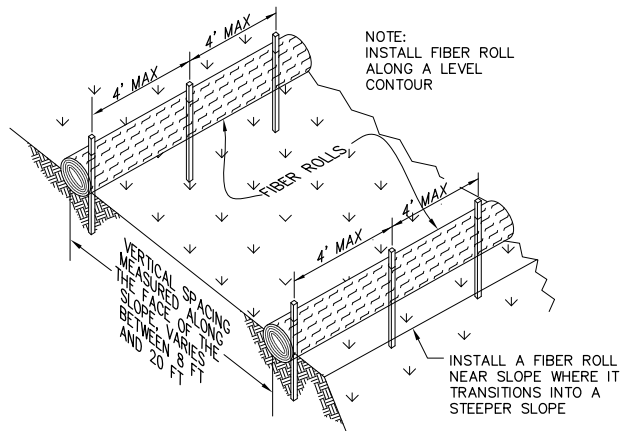


REVISIONS	BY	APPROVED	DATE

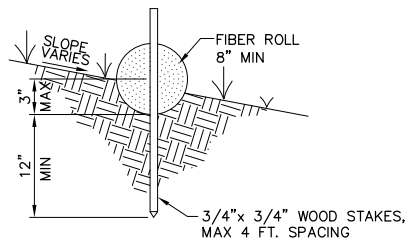
COORDINATE INDEX
340 N, 1730 E
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TYPICAL SAN DIEGO COUNTY ROAD
In the Vicinity of
WATER POLLUTION CONTROL DETAILS

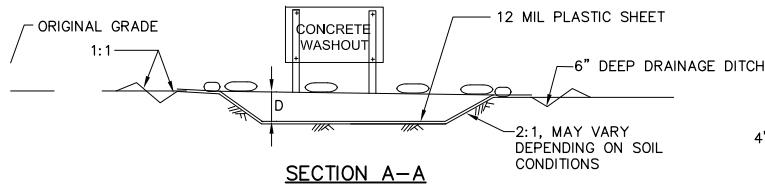
SCALE: HOR. NONE VERT. NONE
W.A. RS12345 R.S. 12345
SP
SHEET XX OF SHEETS



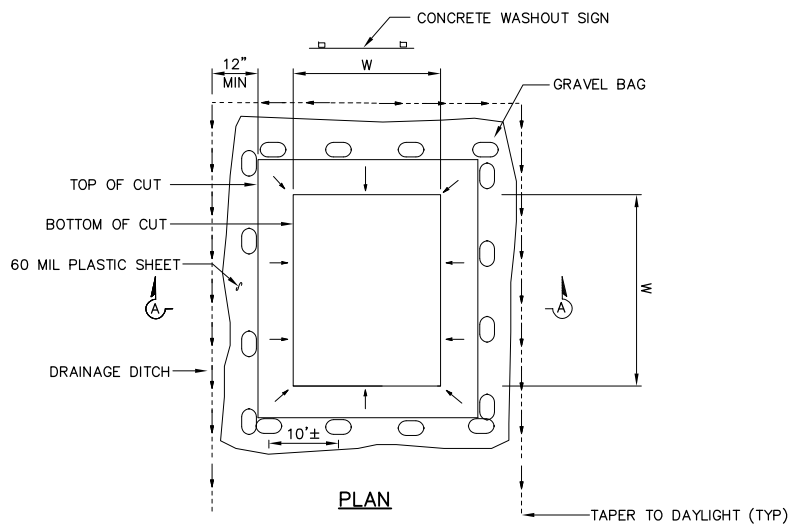
TYPICAL FIBER ROLL INSTALLATION
NTS



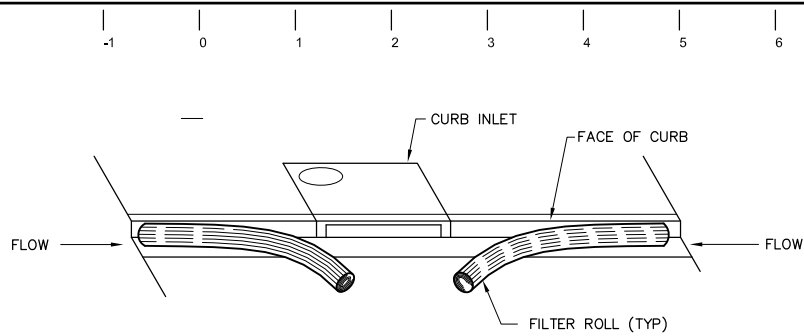
ENTRENCHMENT DETAIL
NTS



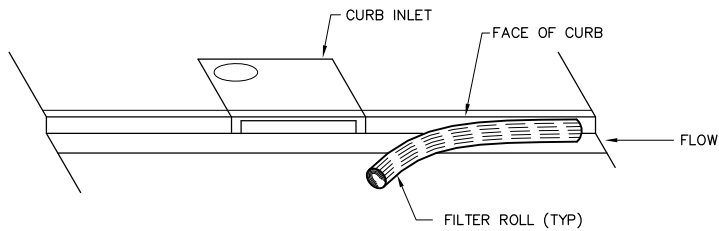
SECTION A-A



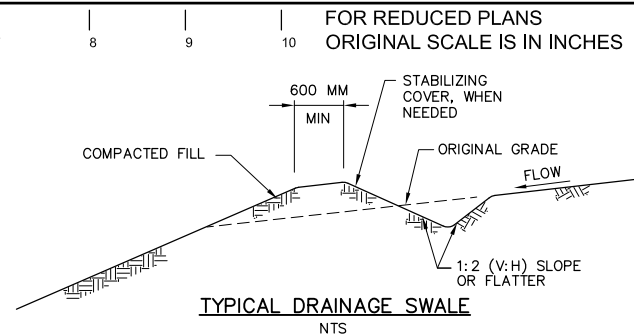
TEMPORARY CONCRETE WASHOUT FACILITY
(BELOW GRADE)



PROTECTION FOR INLET ON SUMP
NTS

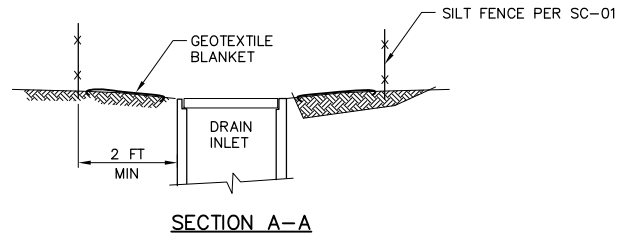


PROTECTION FOR INLET ON GRADE
NTS

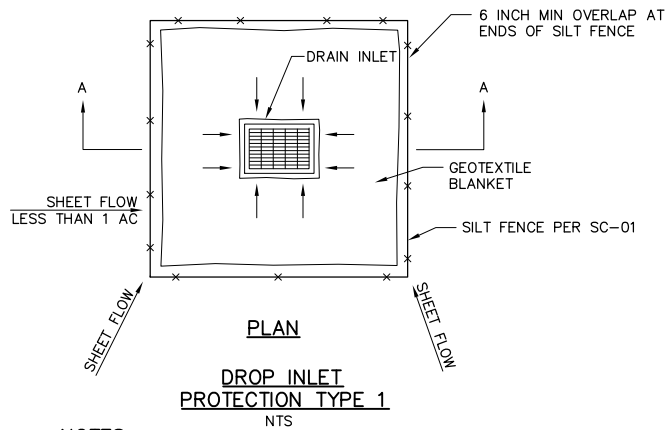


TYPICAL DRAINAGE SWALE
NTS

- NOTES:
1. STABILIZE INLET, OUTLETS AND SLOPES.
 2. PROPERLY COMPACT THE SUBGRADE, IN CONFORMANCE WITH SECTION 19-5 OF THE CALTRANS STANDARD SPECIFICATIONS

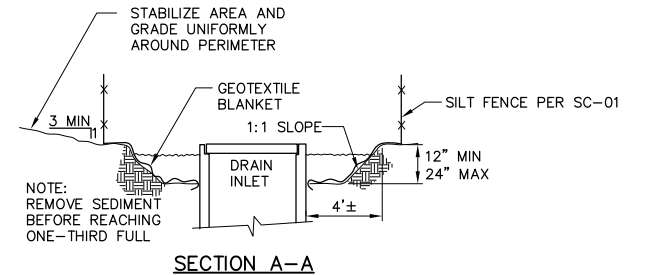


SECTION A-A

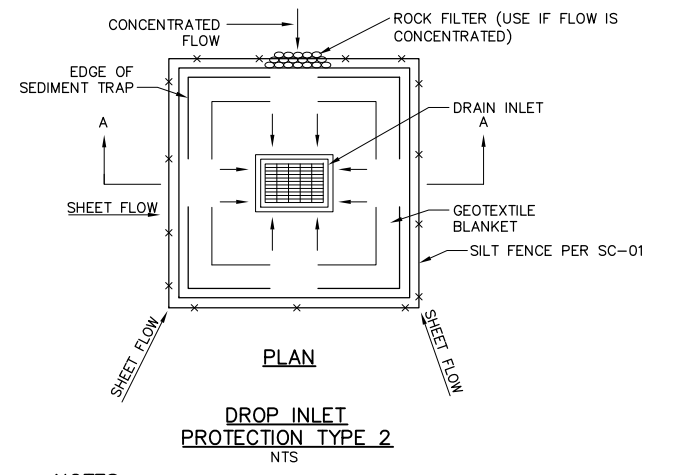


DROP INLET
PROTECTION TYPE 1
NTS

- NOTES:
1. FOR USE IN AREAS WHERE GRADING HAS BEEN COMPLETED AND FINAL SOIL STABILIZATION AND SEEDING ARE PENDING.
 2. NOT APPLICABLE IN PAVED AREAS.
 3. NOT APPLICABLE WITH CONCENTRATED FLOWS.



SECTION A-A



DROP INLET
PROTECTION TYPE 2
NTS

- NOTES:
1. FOR USE IN CLEARED AND GRUBBED AND IN GRADED AREAS.
 2. SHAPE BASIN SO THAT LONGEST INFLOW AREA FACES LONGEST LENGTH OF TRAP.
 3. FOR CONCENTRATED FLOWS, SHAPE BASIN IN 2:1 RATIO WITH LENGTH ORIENTED TOWARDS DIRECTION OF FLOW.

PLANS	BY	DATE
DESIGNED	---	---
CHECKED	---	---
DELINEATED	---	---

REGISTERED CIVIL ENGINEER

REGISTERED CIVIL ENGINEER

DATE

SAN DIEGO ENGINEERING
1234 COASTAL WAY
SAN DIEGO, CA 92123
619-555-4040

COUNTY OF SAN DIEGO
DEPARTMENT OF PUBLIC WORKS
5555 OVERLAND AVENUE, SAN DIEGO, CA 92123-1295



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340 N, 1730 E
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TYPICAL SAN DIEGO COUNTY ROAD
In the Vicinity of
WATER POLLUTION CONTROL DETAILS

SCALE: HOR. NONE VERT. NONE
W.A. RS12345 R.S. 12345
SP
SHEET XX OF SHEETS

-1 0 1 2 3 4 5 6 7 8 9 10

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES

----% SUBMITTAL
NOT FOR
CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER

REGISTERED ENG

No. 12345

Exp. 12-25-2099

CIVIL

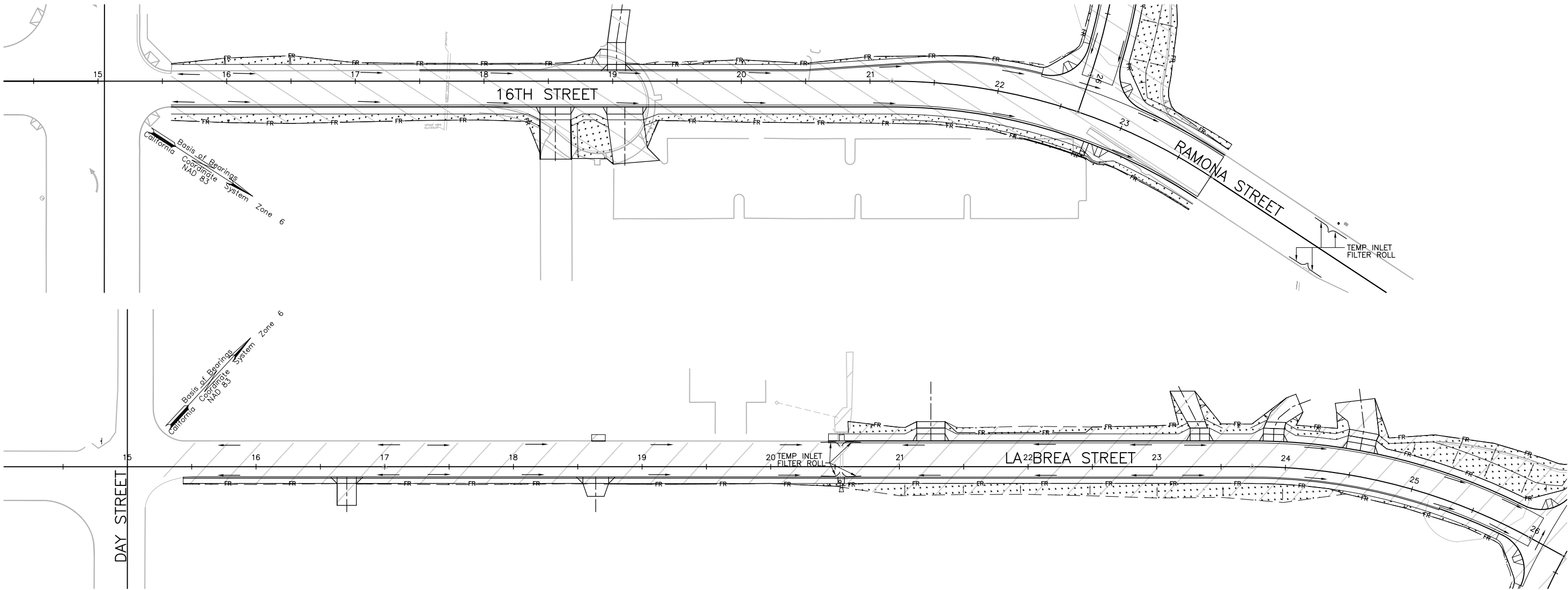
STATE OF CALIFORNIA

PLANS	BY	DATE
DESIGNED	----	----
CHECKED	----	----
DELINEATED	----	----

SAN DIEGO ENGINEERING
1234 COASTAL WAY
SAN DIEGO, CA 92123
619-555-4040

REGISTERED CIVIL ENGINEER

DATE



NOTES

1. NO WORK HAVING POTENTIAL TO CAUSE WATER POLLUTION, AS DETERMINED BY THE ENGINEER, SHALL BE PERFORMED UNTIL THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN SUBMITTED TO THE ENGINEER BY THE CONTRACTOR, AND APPROVED.
2. THE CONTRACTOR SHALL CONSIDER OTHER CONTROL MEASURES, AS NECESSARY, TO SUPPLEMENT THE CRITICAL TEMPORARY CONTROL MEASURES SHOWN ON THESE PLANS, IN ORDER TO MEET THE POLLUTION CONTROL OBJECTIVES OF THE SWPPP.
3. THE APPROXIMATE TOTAL AREA OF SOIL DISTURBANCE FOR THIS PROJECT IS 1.9 ACRES.

LEGEND

- AREA OF POTENTIAL EFFECT (APE)
- TEMPORARY FIBER ROLL
- SURFACE FLOW DIRECTION
- SLOPE/DAYLIGHT LINE
- EROSION CONTROL (TYPE D)

COUNTY OF SAN DIEGO
DEPARTMENT OF PUBLIC WORKS
5555 OVERLAND AVENUE, SAN DIEGO, CA 92123-1295



REVISIONS	BY	APPROVED	DATE

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FIELD REVISIONS	

TYPICAL SAN DIEGO COUNTY ROAD
In the Vicinity of
WATER POLLUTION CONTROL PLAN

SCALE: HOR. NONE VERT. NONE
W.A. RS12345 R.S. 12345
SP
SHEET XX OF SHEETS