CITY OF COSTA MESA

IMPROVEMENT PLANS
FOR
E. 19TH STREET
FROM CHURCH STREET TO IRVINE AVENUE
FEDERAL PROJECT NO. SRTSL-5312(089)
CITY PROJECT NO. 16-17

GENERAL NOTES

1. ALL WORK, LABOR AND MATERIALS SHALL BE IN CONFORMITY WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, (SPPWC), LATEST EDITION, THE STANDARD SPECIFICATIONS AND STANDARD DRAWINGS OF THE CITY OF COSTA MESA, (LATEST EDITION); THESE PLANS, THE PROJECT CONSTRUCTION DOCUMENTS; AND ALL SAFETY REGULATIONS, CODES, AND REQUIREMENTS PERTINENT TO THE PROJECT CONSTRUCTION.

2. THE CONTRACTOR SHALL MAINTAIN TRAFFIC IN CONFORMANCE WITH THE PROJECT CONSTRUCTION DOCUMENTS AND SHALL PROVIDE 24 HOUR SERVICE TO REMOVE, INSTALL, RELOCATE, AND MAINTAIN TRAFFIC DEVICES.

3. LOCATIONS OF EXISTING UTILITIES SHOWN ON THE PLANS ARE BASED ON INFORMATION RECEIVED FROM THE VARIOUS UTILITY COMPANIES, LOCAL AGENCIES AND FIELD INVESTIGATIONS. THE CONTRACTOR IS ADVISED THAT LOCATIONS SHOWN ARE APPROXIMATE, AND EXTREME CAUTION IS REQUIRED TO PROTECT THE EXISTING FACILITIES.

4. AT NO TIME IS ANY RESIDENT TO BE WITHOUT ANY ACCESS UNLESS OTHERWISE APPROVED.

5. THE CONTRACTOR SHALL NOTIFY THE PROJECT ADMINISTRATION DIVISION, TWO WORKING DAYS PRIOR TO START OF CONSTRUCTION.

6. IF DISCREPANCIES AND/OR DEVIATIONS ARISE DURING CONSTRUCTION, THE ENGINEER WILL DETERMINE AN ACCEPTABLE SOLUTION AND REVISE THE PLANS FOR APPROVAL BY THE DIRECTOR OF PUBLIC WORKS.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES TO ONSITE, OFFSITE AND ADJACENT UTILITIES, FACILITIES, AND PROPERTIES.

8. THE CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS TO PROTECT ADJACENT PROPERTY OWNERS FROM ANY AND ALL DAMAGES THAT MAY OCCUR FROM STORMWATER RUNOFF AND/OR DEPOSITION OF DEBRIS RESULTING FROM ANY AND ALL WORK IN CONJUNCTION WITH CONSTRUCTION OF THESE IMPROVEMENTS.

9. ALL SURVEY MONUMENTS SHALL NOT BE DISTURBED BY THE CONSTRUCTION OF THIS PROJECT, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ALL LOST OR OBLITERATED MONUMENTS, AS SPECIFIED BY THE SUBDIVISION MAP ACT.

10. THE CONTRACTOR SHALL OBTAIN ALL PERMITS AS REQUIRED FROM CITY OF COSTA MESA AND APPLICABLE GOVERNMENTAL AGENCIES BEFORE CONSTRUCTION STARTS.

11. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND ELEVATIONS PRIOR TO ANY CONSTRUCTION AND SHALL INFORM THE ENGINEER OF ANY CONFLICTS.

12. COORDINATION NOTE: CONTRACTOR IS RESPONSIBLE TO COORDINATE TIMING OF CONSTRUCTION WITH THE PROPERTY OWNERS AND THE ENGINEER.

13. CONTRACTOR SHALL PROTECT EXISTING FOOTING IN PLACE AND INTACT AND SHALL INFORM THE ENGINEER OF ANY CONFLICTS.

THE CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE CONSTRUCTION OF THE PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTIES, THAT THESE REQUIREMENTS SHALL BE APPLIED CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY, AND PROTECT THE DESIGN PROFESSIONAL AGAINST ALL REAL OR ALLEGED CLAIMS IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITIES ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL. UNAUTHORIZED CHANGES AND USES: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USE OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

BASIS OF BEARINGS:

STATE PLANE COORDINATE SYSTEM OF NAD 83, CALIFORNIA ZONE 6

BENCH MARK:

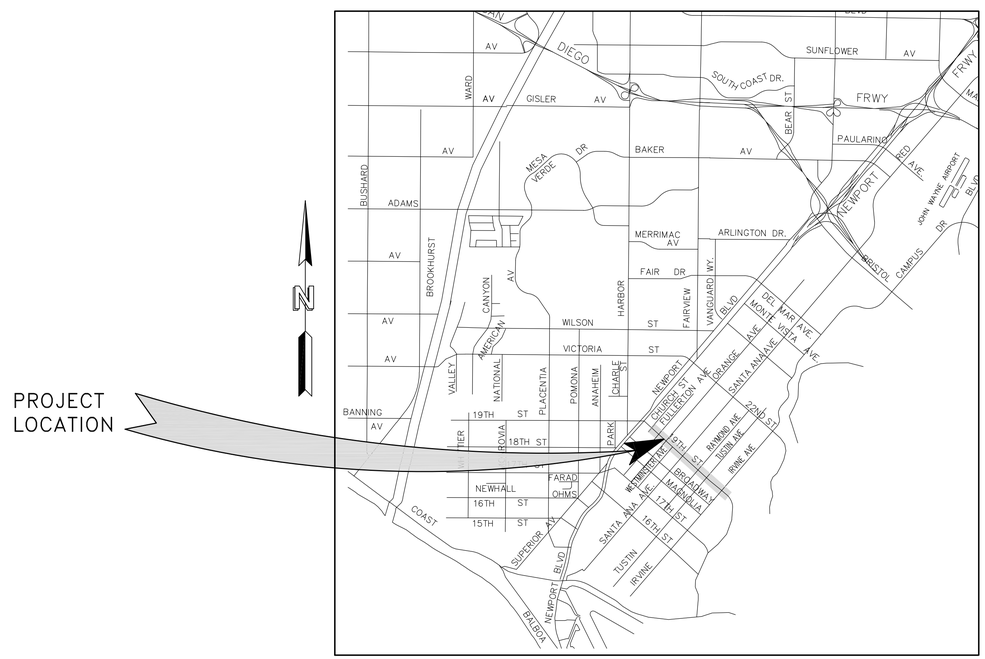
ORANGE COUNTY PUBLIC WORKS BMs:

CM-48-89, ELEVATION 98.838 FEET (NAVD88) YEAR 2005

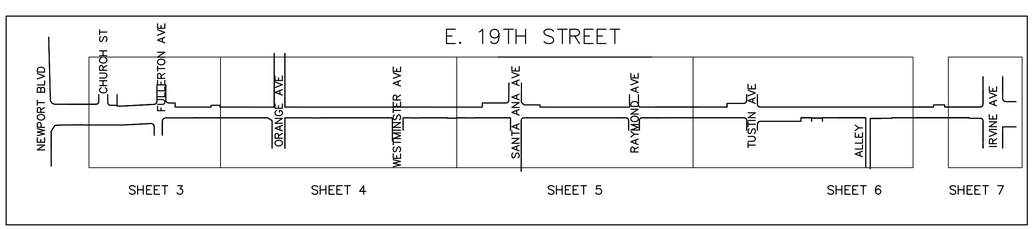
1E-100-74, ELEVATION 95.626 FEET (NAVD88) YEAR 2005

SURVEY

SURVEY PERFORMED BY CALVADA SURVEYING



VICINITY MAP
NOT TO SCALE



INDEX MAP
SCALE 1"=400'

LEGEND / SYMBOLS

BC	BEGIN HORIZONTAL CURVE
CB	CATCH BASIN
CF	CURB FACE
CL	CENTERLINE
DWY	DRIVEWAY
EC	END HORIZONTAL CURVE
EXIST	EXISTING
FL	FLOWLINE
G	GAS LINE
PP	POWER POLE
RFLTR	REFLECTOR
SMH	SEWER MANHOLE
SS	SANITARY SEWER LINE
TC	TOP OF CURB
TSPB	TRAFFIC SIGNAL PULLBOX
W	WATER LINE
	FIRE HYDRANT
	GUY ANCHOR
	STORM DRAIN MANHOLE
TW	TOP OF WALL
TF	TOP OF FOOTING
TH	TOP OF HEADER
TBM	TEMPORARY BENCH MARK
GM	GAS METER
GV	GAS VALVE
	GUY POLE
WM	WATER METER
WV	WATER VALVE
	UTILITY POLE
	SEWER MANHOLE
CN	CONSTRUCTION NOTE
GB	GRADE BREAK
OCSD	ORANGE COUNTY SANITATION DISTRICT
M	MONUMENT
FS	FINISHED SURFACE
LD	LOCAL DEPRESSION
SW	SIDEWALK
	FULL DEPTH AC
	COLD MILL
	ASPHALT RUBBER HOT MIX OVERLAY (ARHM)

CALL THE FOLLOWING UTILITY AGENCIES (2) WORKING DAYS PRIOR TO EXCAVATION

PUBLIC UTILITY AGENCY

SOUTHERN CALIFORNIA GAS CO. MR. DAVID BALDWIN	(714) 634-3267	IRWD LLC MALCOM CORTEZ	(949) 453-5515
SOUTHERN CALIFORNIA GAS CO. TRANS MS. ROSALYN SQUIRES	(818) 701-4546	VERIZON BUSINESS BRYAN CHURCH	(626) 430-4572
SOUTHERN CALIFORNIA EDISON COMPANY MR. JEFF GILBERT	(714) 895-0363	ORANGE COUNTY WATER DISTRICT CHUCK STEINBERGS	(714) 378-3229
MESA CONSOLIDATED WATER DISTRICT MR. MARK PELKA	(949) 631-1200	M POWER COMMUNICATIONS INC. MR. MARK DENNING	(949) 864-0296
COSTA MESA SANITARY DISTRICT MR. ROBIN HAMERS	(949) 631-1731	TIME WARNER MR. JOE BARRIOS	(714) 903-8337
AT&T TELEPHONE MR. CRAIG AKIN	(714) 237-6165	METROPOLITAN WATER DIST. OF SO. CA. MR. KIERAN CALLAHAN	(213) 217-7474
XO COMMUNICATIONS MR. STEWART McCAUSLAND	(949) 417-7762	OCTA / BUS SERVICES MR. MARK STRICKERT	(714) 560-5883
COUNTY SANITATION DISTRICTS OF O.C. MS. LYNN ELLIOTT	(714) 593-7333		

LIST OF DRAWINGS

SHT. NO.	DESCRIPTION
T-1	TITLE SHEET
C-2	TYPICAL SECTIONS AND DETAILS
C-3	PLAN AND PROFILE
C-4	PLAN AND PROFILE
C-5	PLAN AND PROFILE
C-6	PLAN AND PROFILE
C-7	PLAN AND PROFILE
C-8	STRIPING PLAN
LI-1	IRRIGATION PLAN
LI-2	IRRIGATION PLAN
LI-3	IRRIGATION PLAN
LI-4	IRRIGATION PLAN
LI-5	IRRIGATION NOTES AND LEGEND
LI-6	IRRIGATION DETAILS
LI-7	IRRIGATION DETAILS
L-1	PLANTING & CONSTRUCTION DETAILS PLAN
L-2	PLANTING & CONSTRUCTION DETAILS PLAN
L-3	PLANTING & CONSTRUCTION DETAILS PLAN
L-4	PLANTING PLAN
L-5	PLANTING LEGEND, NOTES AND DETAILS
S-1	PLANS, ELEVATIONS, DETAILS AND STRUCTURAL NOTES
E-0	GENERAL NOTES, SYMBOLS, INDEX & SINGLE LINE DIAGRAM
E-0.1	LIGHTING FIXTURE SCHEDULE & PANEL SCHEDULES
E-0.2	FXITURE SPECIFICATIONS
E-1	ELECTRICAL POWER PLAN-FULLERTON AVENUE INTERSECTION
E-2	ELECTRICAL POWER PLAN-IRVINE AVENUE INTERSECTION
TCP-1	TRAFFIC CONTROL PLAN
TCP-2	TRAFFIC CONTROL PLAN
TCP-3	TRAFFIC CONTROL PLAN
TCP-4	TRAFFIC CONTROL PLAN
TCP-5	TRAFFIC CONTROL PLAN
TCP-6	TRAFFIC CONTROL PLAN

PLANS PREPARED BY:
CivilSource
WWW.CIVIL-SOURCE.COM
9890 IRVINE CENTER DRIVE
IRVINE, CA 92618
TEL. (949) 585-0477
FAX. (949) 585-0433
AMIREH AMIRANI 34283
CIVIL ENGINEER: LICENSE NO.

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REFERENCES
SEE INDIVIDUAL SHEETS

DESIGNED BY: CS	DATE AUG 2015	CHECKED BY: STEVEN SCHAPEL	DATE AUG 2015
DRAWN BY: CS	AUG 2015	APPROVED BY:	
RECOMMENDED BY:		REC. BY:	
APPROVED BY:			

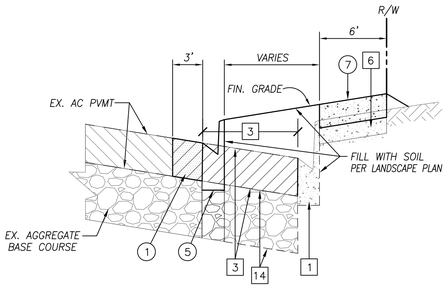
BALTAZAR MEJIA, CITY ENGINEER R.C.E. #50330

REGISTERED PROFESSIONAL ENGINEER
AMIREH AMIRANI
No. 34283
Amy Amiran
CIVIL
STATE OF CALIFORNIA
P.E. SEAL

EAST 19TH STREET TRAFFIC IMPROVEMENTS

TITLE SHEET

CITY OF COSTA MESA



SECTION 'A–A'
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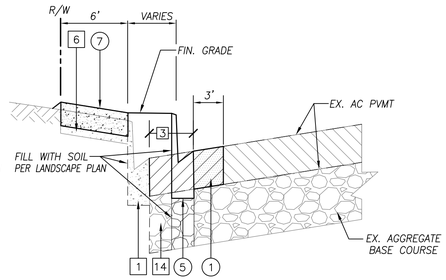

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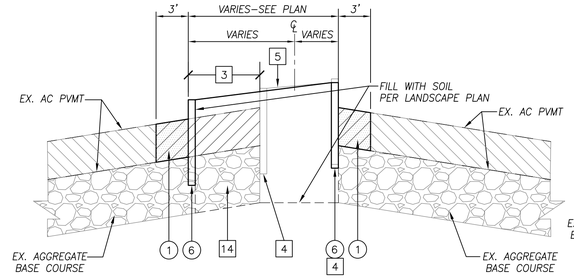

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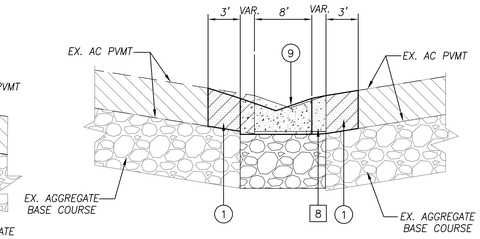

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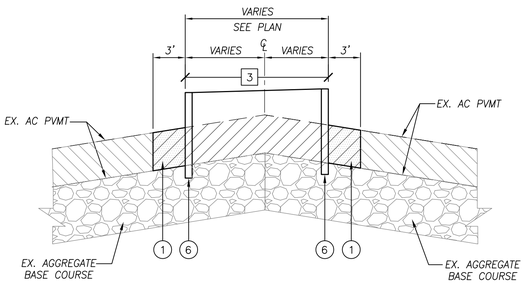

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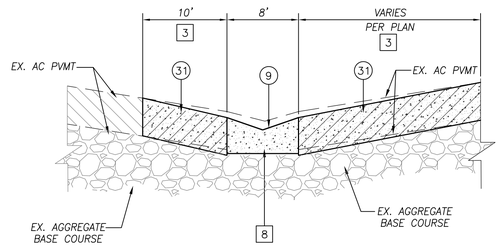

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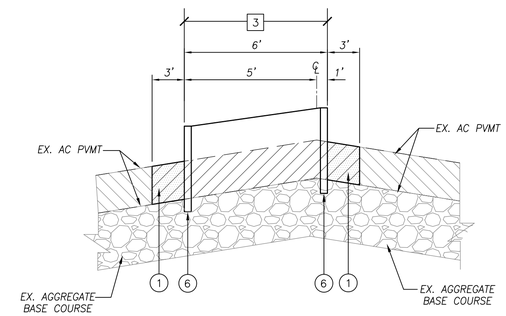

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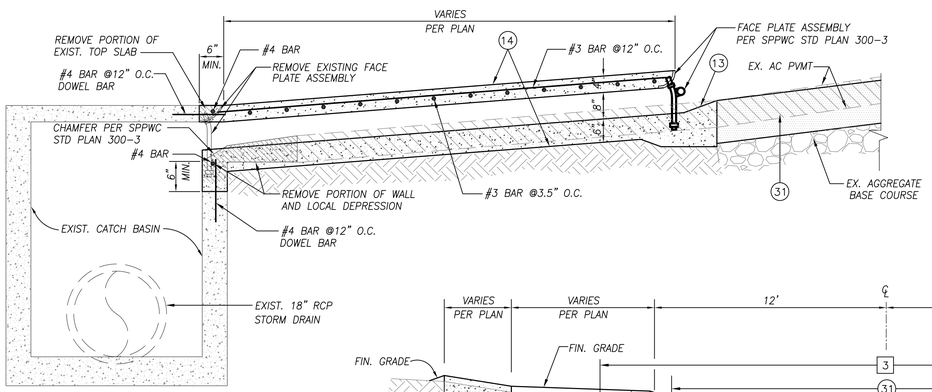

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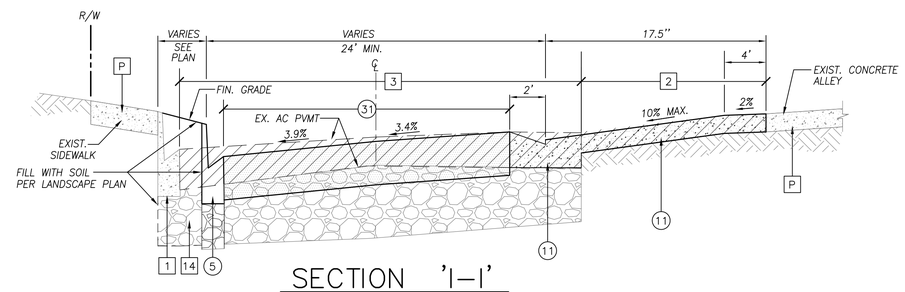

SECTION 'I–I'
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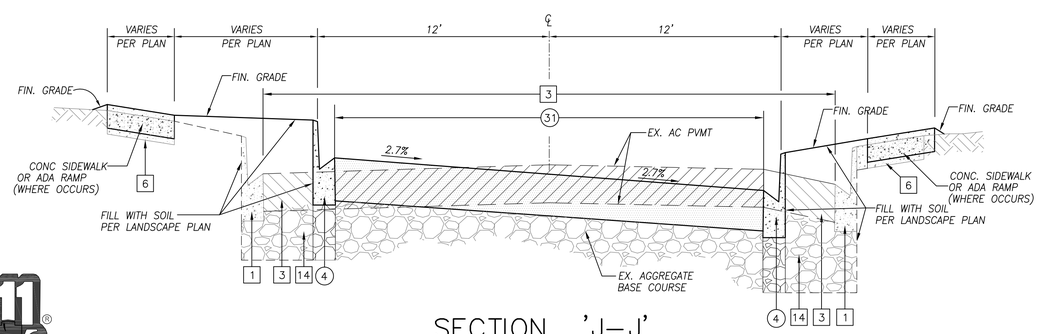

SECTION 'J–J'
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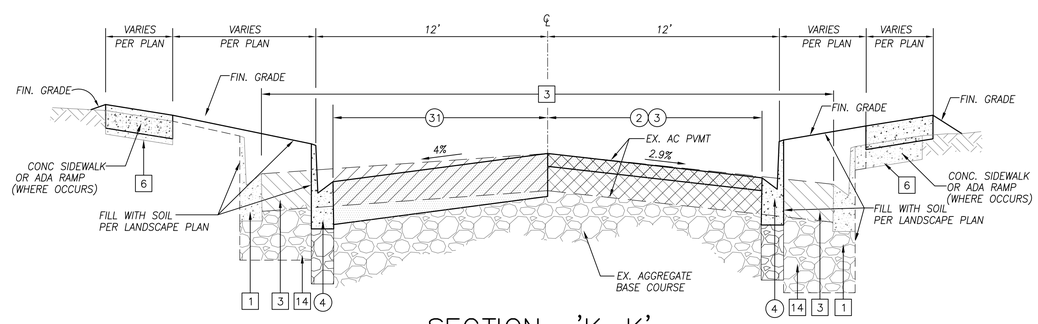

SECTION 'K–K'
N.T.S.

CONSTRUCTION NOTES

1. REMOVE AND CONSTRUCT 3' WIDE AC SLOT PAVEMENT FULL DEPTH, 6" DEEP AC WITH TOP 2" THICK ASPHALT RUBBER HOT MIX (ARHM) OVERLAY
2. COLD MILL 2" THICK MIN. EXISTING PAVEMENT SURFACE
3. CONSTRUCT 2" THICK MIN. ASPHALT RUBBER HOT MIX (ARHM) OVERLAY
4. CONSTRUCT 6" CURB & GUTTER, TYPE "C–6" (W=18"), OVER 6" CMB PER CITY OF COSTA MESA STD. DWG. NO. 312
5. CONSTRUCT 8" CURB & GUTTER TYPE "C–8" (W=24"), OVER 6" CMB PER CITY OF COSTA MESA STD. DWG. NO. 312
6. CONSTRUCT 8" MEDIAN CURB, PER SPPWC STD. PLAN 120–2, A1–8(200)
7. CONSTRUCT 4" THICK PCC SIDEWALK OVER 4" CMB PER CITY OF COSTA MESA STD. DRAWING NO. 411
9. CONSTRUCT CROSS GUTTER PER CITY OF COSTA MESA STD. DWG. NO. 415
11. CONSTRUCT DRIVEWAY, TYPE "C", PER SPPWC STD. PLAN 110–2
13. CONSTRUCT LOCAL DEPRESSION PER CITY OF COSTA MESA STD. DWG. NO. 315
14. CONSTRUCT PARKWAY DRAIN PER SPPWC STD. PLAN 151–2, (MODIFIED)
31. CONSTRUCT 6" DEEP A.C. WITH TOP 2" THICK ASPHALT RUBBER HOT MIX (ARHM) OVERLAY

REMOVAL NOTES

1. REMOVE AND DISPOSE EXISTING CURB & GUTTER
2. REMOVE AND DISPOSE EXISTING CONCRETE DRIVEWAY
3. REMOVE AND DISPOSE EXISTING ROADWAY SECTION
4. REMOVE AND DISPOSE EXISTING MEDIAN CURB
5. REMOVE AND SALVAGE EXISTING PAVER BLOCK
6. REMOVE AND DISPOSE EXISTING CONCRETE SIDEWALK
8. REMOVE AND DISPOSE PORTION OF EXISTING CROSS–GUTTER
14. REMOVE EXISTING MISCELLANEOUS BASE

DISPOSITION NOTES

P. PROTECT IN PLACE

PLANS PREPARED BY:
CivilSource
WWW.CIVIL–SOURCE.COM
9890 IRVINE CENTER DRIVE
IRVINE, CA 92618
TEL. (949) 585–0477
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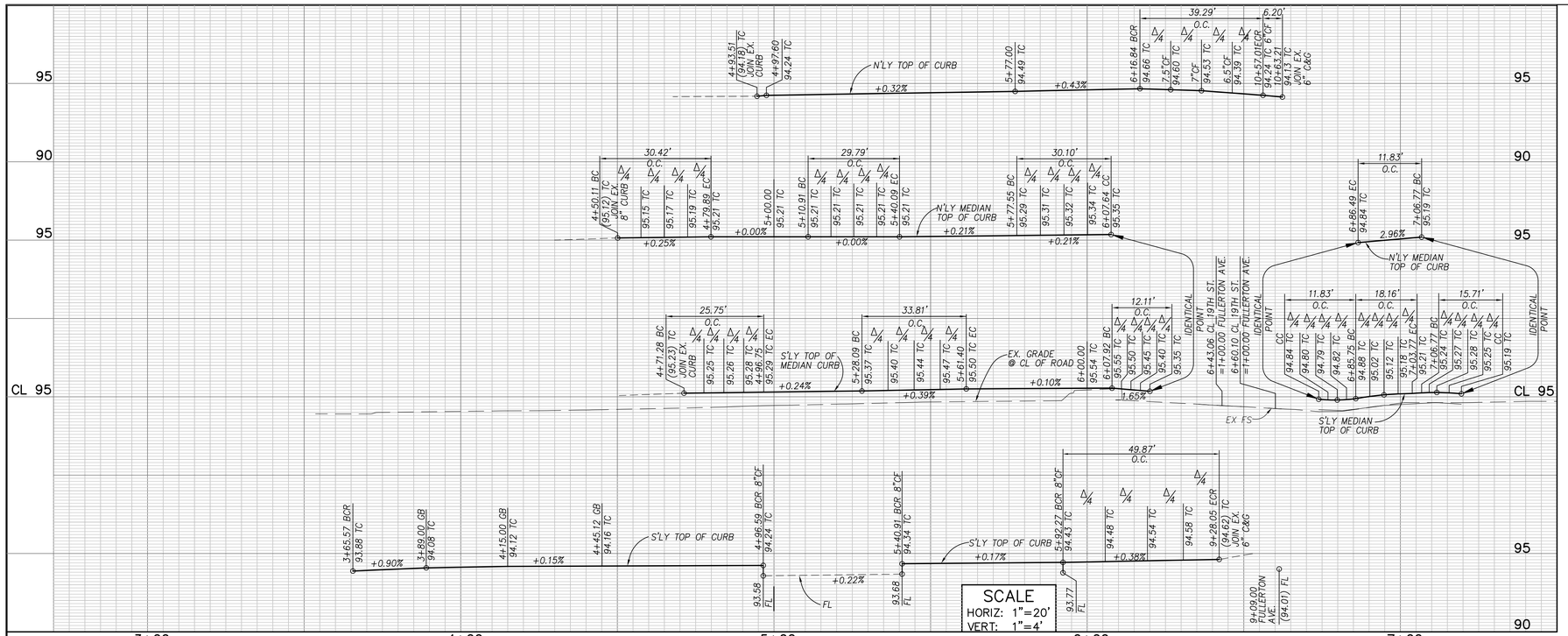
RECOMMENDED BY:		REC. BY:	
APPROVED BY:			

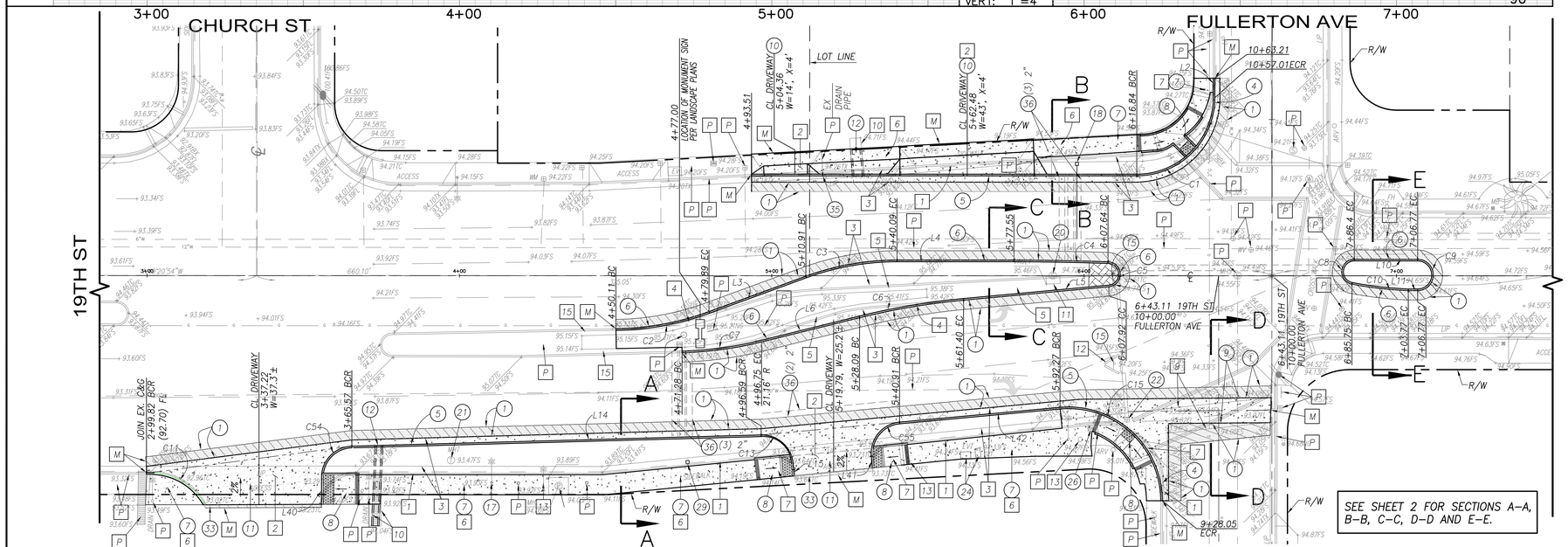
BALTAZAR MEJIA, CITY ENGINEER R.C.E. #50330

REGISTERED PROFESSIONAL ENGINEER
AMIREH AMIRANI
No. 34283
CIVIL
STATE OF CALIFORNIA
P.E. SEAL

EAST 19TH STREET TRAFFIC IMPROVEMENTS
SECTIONS AND DETAILS

CITY OF COSTA MESA





CONSTRUCTION NOTES

1. REMOVE AND CONSTRUCT 3' WIDE AC SLOT PAVEMENT FULL DEPTH, 6" DEEP AC WITH TOP 2" THICK ASPHALT RUBBER HOT MIX (ARHM) OVERLAY
4. CONSTRUCT 6" CURB & GUTTER, TYPE "C–6" (W=18"), OVER 6" CMB PER CITY OF COSTA MESA STD. DWG. NO. 312
5. CONSTRUCT 8" CURB & GUTTER TYPE "C–8" (W=24"), OVER 6" CMB PER CITY OF COSTA MESA STD. DWG. NO. 312
6. CONSTRUCT 8" MEDIAN CURB, PER SPPWC STD. PLAN 120–2, A1–8(200)
7. CONSTRUCT 4" THICK PCC SIDEWALK OVER 4" CMB PER CITY OF COSTA MESA STD. DRAWING NO. 411
8. CONSTRUCT CURB RAMP PER CALTRANS STD. PLAN RSP A88A
9. CONSTRUCT CROSS GUTTER PER CITY OF COSTA MESA STD. DWG. NO. 415
10. CONSTRUCT DRIVEWAY APPROACH TYPE 1 PER CITY OF COSTA MESA STD. DWG. NO. 513
11. CONSTRUCT DRIVEWAY, TYPE "C", PER SPPWC STD. PLAN 110–2
12. CONSTRUCT PARKWAY DRAIN 1 (MODIFIED) PER CITY OF COSTA MESA STD. DWG. NO. 417
15. RELOCATE EXISTING STREET SIGN
16. RELOCATE EXISTING MAIL BOX
17. RELOCATE EXISTING STREET LIGHT
18. INSTALL WATER SERVICE AND METER PER MESA WATER DISTRICT STD. DWG. #1 TRENCH DET. PER CITY OF COSTA MESA STD. DWG. NO. 813. SIZE PER L.S. PLAN
20. ADJUST TO GRADE EXISTING SEWER MANHOLE
21. ADJUST TO GRADE EXISTING TELEPHONE MANHOLE (BY TEL. COMPANY)
22. ADJUST TO GRADE EXISTING WATER VALVE
24. ADJUST TO GRADE EXISTING TV/CABLE BOX (CABLE COMPANY)
25. ADJUST TO GRADE EXISTING ELECTRIC MANHOLE (BY ELECTRIC COMPANY)
26. ADJUST TO GRADE EXISTING ELECTRIC PULL BOX (BY ELECTRIC COMPANY)
29. INSTALL IRRIGATION CONTROLLER PER LANDSCAPE PLAN
33. REMOVE AND CONSTRUCT 12" WIDE AC SLOT PAVEMENT FULL DEPTH, (MIN 6" DEEP AC), RECOMPACT EXISTING BASE COURSE
35. INSTALL 4" PVC SCH 40 DRAIN PIPE (JOIN EXISTING DRAIN PIPE)
36. INSTALL SLEEVES AS SHOWN ON THIS PLAN AND ON LANDSCAPE/IRRIGATION PLANS (NUMBER AND SIZE OF SLEEVES PER PLAN)

DISPOSITION NOTES

- M MATCH/JOIN EXISTING
- P PROTECT IN PLACE

REMOVAL NOTES

1. REMOVE AND DISPOSE EXISTING CURB & GUTTER
2. REMOVE AND DISPOSE EXISTING CONCRETE DRIVEWAY
3. REMOVE AND DISPOSE EXISTING ROADWAY SECTION
4. REMOVE AND DISPOSE EXISTING MEDIAN CURB
5. REMOVE AND SALVAGE EXISTING PAVER BLOCK
6. REMOVE AND DISPOSE EXISTING CONCRETE SIDEWALK
7. REMOVE AND DISPOSE EXISTING CONCRETE CURB RAMP
9. REMOVE AND DISPOSE EXISTING CROSS–GUTTER
10. REMOVE AND DISPOSE EXISTING PARKWAY DRAIN
11. REMOVE AND DISPOSE EXISTING SMH ACCESS
12. REMOVE AND DISPOSE EXISTING CONC. BUMPERS
13. REMOVE EXISTING STREET LIGHT/POWER POLE AND DELIVER TO CITY YARD. COORDINATE WITH THE CITY PRIOR TO REMOVAL.
15. REMOVE PORTION OF EXISTING MOW STRIP

CURVE DATA

SEGMENT	LENGTH	RADIUS	TANGENT	DELTA
C1	39.29	25.00	25.02	90°02'36"
C2	30.42	90.00	15.36	19°22'06"
C3	29.79	85.00	15.05	20°04'52"
C4	30.10	965.46	15.05	1°47'10"
C5	12.11	4.00	69.66	173°25'38"
C6	33.81	225.00	16.94	8°36'32"
C7	25.64	120.00	12.92	12°17'41"
C8	11.83	4.00	43.10	169°23'41"
C9	15.71	5.00	–	180°00'15"
C10	18.16	119.18	9.10	8°43'51"
C11	19.97	20.00	10.91	57°13'04"
C13	15.06	10.00	9.37	86°17'48"
C15	49.87	30.00	32.88	95°14'45"
C54	14.58	10.00	8.93	83°33'05"
C55	15.71	10.00	10.00	90°00'00"

LINE DATA

SEGMENT	LENGTH	DIRECTION
L1	122.25	N49° 22' 23"W
L2	6.20	N40° 17' 08"E
L3	33.03	N69° 25' 45"W
L4	37.45	N49° 20' 54"W
L5	46.72	S54° 37' 14"E
L6	32.28	S63° 13' 46"E
L7	1.74	N39° 28' 01"E
L8	21.02	S50° 31' 59"E
L9	6.34	S39° 28' 01"W
L10	20.29	N49° 20' 54"W
L11	3.00	S49° 20' 54"E
L12	2.52	N45° 55' 11"W
L14	131.07	N50° 56' 05"W
L15	4.04	N35° 21' 43"E
L40	9.45	S40° 51' 26"W
L41	3.80	N35° 22' 43"E
L42	57.06	N54° 37' 17"W

FULL DEPTH AC

GRAPHIC SCALE
20 0 10 20 40
1 inch = 20 ft.

NOTES:
1. UNLESS OTHERWISE NOTED, ALL EXISTING TREES SHALL REMAIN AND BE PROTECTED IN PLACE.
2. ALL EXISTING IMPROVEMENTS, HARDSCAPE, LAWNS, IRRIGATION SYSTEM, FENCE, WALLS, ETC., DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITION AT NO COST TO THE OWNER OR CITY.

PLANS PREPARED BY:
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WWW.CIVIL-SOURCE.COM
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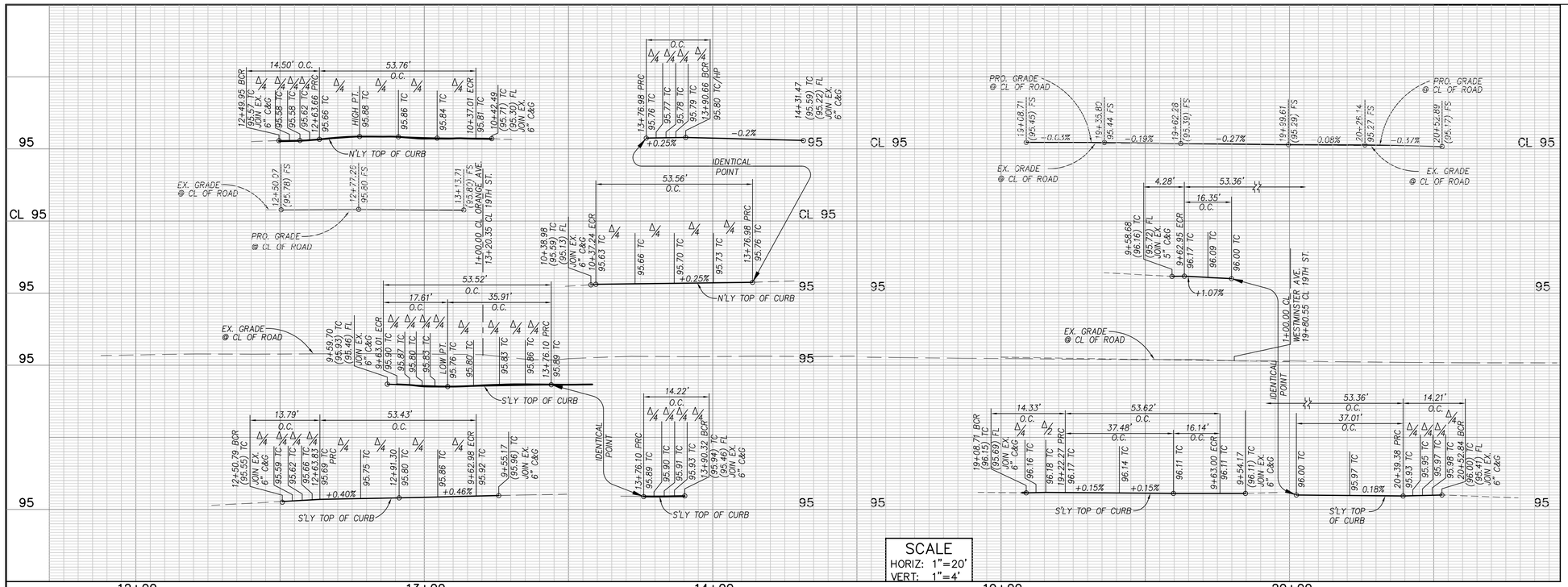
APPROVED BY:			
BALTAZAR MEJIA, ACTING CITY ENGINEER			

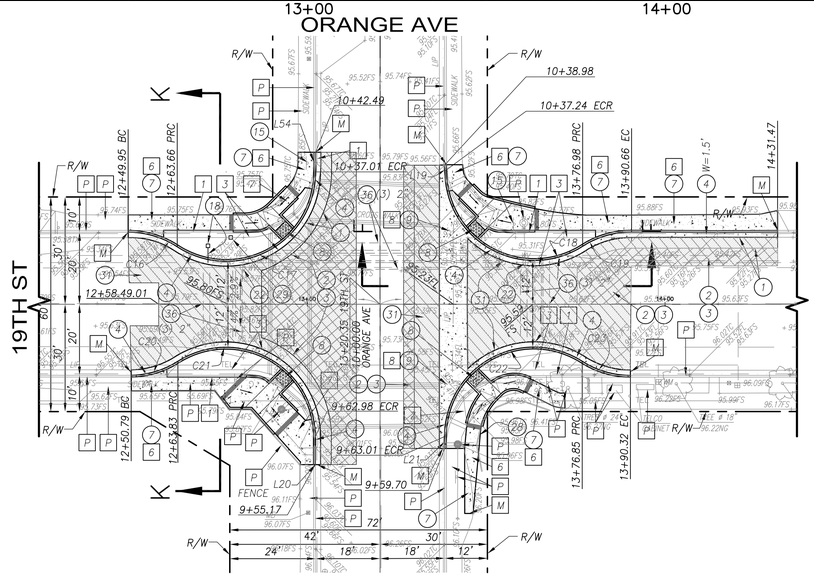
REGISTERED PROFESSIONAL ENGINEER AMIREH A MIRANI No. 34283 CIVIL STATE OF CALIFORNIA
P.E. SEAL

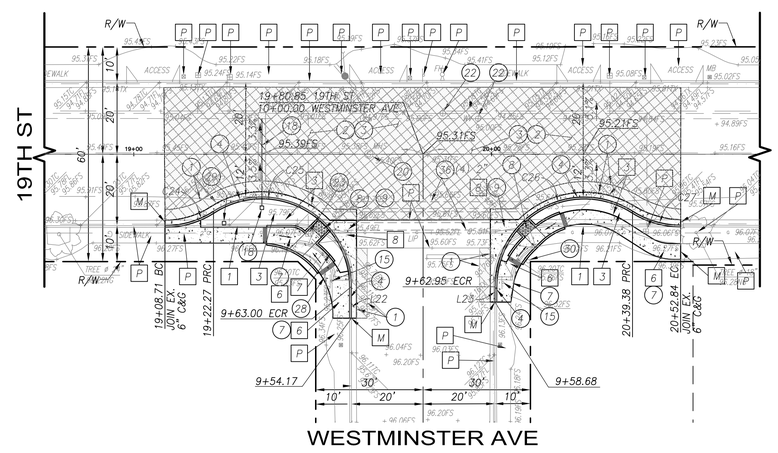
EAST 19TH STREET TRAFFIC IMPROVEMENTS
19TH ST. AT CHURCH ST. AND FULLERTON AVE.
PLAN

CITY OF COSTA MESA

PLAN NUMBER C–3







CONSTRUCTION NOTES

1. REMOVE AND CONSTRUCT 3' WIDE AC SLOT PAVEMENT FULL DEPTH, 6" DEEP AC WITH TOP 2" THICK ASPHALT RUBBER HOT MIX (ARHM) OVERLAY
2. COLD MILL 2" THICK MIN. EXISTING PAVEMENT SURFACE
3. CONSTRUCT 2" THICK MIN. ASPHALT RUBBER HOT MIX (ARHM) OVERLAY
4. CONSTRUCT 6" CURB & GUTTER, TYPE "C-6" (W=18"), OVER 6" CMB PER CITY OF COSTA MESA STD. DWG. NO. 312
7. CONSTRUCT 4" THICK PCC SIDEWALK OVER 4" CMB PER CITY OF COSTA MESA STD. DRAWING NO. 411
8. CONSTRUCT CURB RAMP PER CALTRANS STD. PLAN RSP A88A
9. CONSTRUCT CROSS GUTTER PER CITY OF COSTA MESA STD. DWG. NO. 415
15. RELOCATE EXISTING STREET SIGN
18. INSTALL WATER SERVICE AND METER PER MESA WATER DISTRICT STD. DWG. #1 TRENCH DET. PER CITY OF COSTA MESA STD. DWG. NO. 813. SIZE PER L.S. PLAN
20. ADJUST TO GRADE EXISTING SEWER MANHOLE
22. ADJUST TO GRADE EXISTING WATER VALVE
23. ADJUST TO GRADE EXISTING WATER METER
28. REMOVE AND RELOCATE EXIST. FENCE (AS NEEDED), COORDINATE WITH THE CITY PRIOR TO REMOVAL
29. INSTALL IRRIGATION CONTROLLER PER LANDSCAPE PLAN
30. REMOVE AND RELOCATE EXIST. CLOCK (AS NEEDED)
31. CONSTRUCT 6" DEEP A.C. WITH TOP 2" THICK ASPHALT RUBBER HOT MIX (ARHM) OVERLAY
36. INSTALL SLEEVES AS SHOWN ON THIS PLAN AND ON LANDSCAPE/IRRIGATION PLANS (NUMBER AND SIZE OF SLEEVES PER PLAN)

REMOVAL NOTES

1. REMOVE AND DISPOSE EXISTING CURB & GUTTER
3. REMOVE AND DISPOSE EXISTING ROADWAY SECTION
6. REMOVE AND DISPOSE EXISTING CONCRETE SIDEWALK
7. REMOVE AND DISPOSE EXISTING CONCRETE CURB RAMP
8. REMOVE AND DISPOSE PORTION OF EXISTING CROSS-GUTTER

DISPOSITION NOTES

M. MATCH/JOIN EXISTING
P. PROTECT IN PLACE

CURVE DATA				
SEGMENT	LENGTH	RADIUS	TANGENT	DELTA
C16	14.50	25.00	7.46	33°14'20"
C17	53.76	25.00	46.24	123°12'30"
C18	53.56	25.00	45.80	122°44'41"
C19	14.44	25.00	7.43	33°05'42"
C20	13.79	25.00	7.08	31°36'45"
C21	53.43	25.00	45.53	122°27'19"
C22	53.52	25.00	45.71	122°38'54"
C23	14.22	25.00	7.31	32°35'59"
C24	14.33	25.00	7.37	32°50'14"
C25	53.62	25.00	45.93	122°52'40"
C26	53.36	25.00	45.37	122°17'20"
C27	14.21	25.00	7.30	32°33'56"

LINE DATA		
SEGMENT	LENGTH	DIRECTION
L19	1.73	N40° 38' 09"E
L20	7.81	N40° 33' 07"E
L21	3.31	N40° 38' 15"E
L22	8.83	S40° 40' 30"W
L23	4.28	S40° 49' 47"W
L54	5.49'	N20° 38' 56"E

FULL DEPTH AC
COLD MILL
ASPHALT RUBBER HOT MIX OVERLAY (ARHM)

20 0 10 20 40
1 inch = 20 ft.

SEE SHEET 2 FOR SECTION F-F AND K-K

NOTES:
1. UNLESS OTHERWISE NOTED, ALL EXISTING TREES SHALL REMAIN AND BE PROTECTED IN PLACE.
2. ALL EXISTING IMPROVEMENTS, HARDSCAPE, LAWNS, IRRIGATION SYSTEM, FENCE, WALLS, ETC., DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITION AT NO COST TO THE OWNER OR CITY.

PLANS PREPARED BY:
CivilSource
WWW.CIVIL-SOURCE.COM
9890 IRVINE CENTER DRIVE
IRVINE, CA 92618
TEL. (949) 585-0477
FAX. (949) 585-0433
AMIREH AMIRANI 34283
CIVIL ENGINEER: LICENSE NO.

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Underground Service Alert

REVISIONS

NO.	DATE	DESCRIPTION	APP.

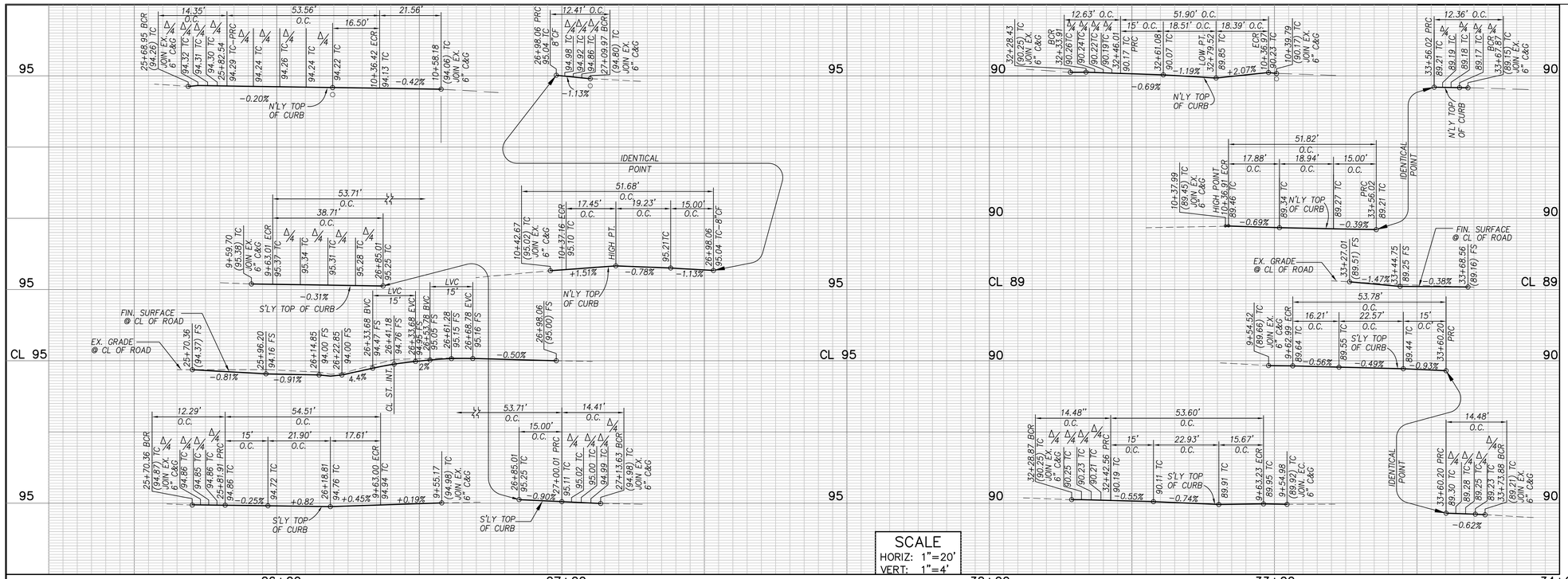
CONTRACTOR LIC #
DATE OF CONSTRUCTION
BEG. END
DATE ACCEPTED BY CITY COUNCIL

REFERENCES
SEE INDIVIDUAL SHEETS

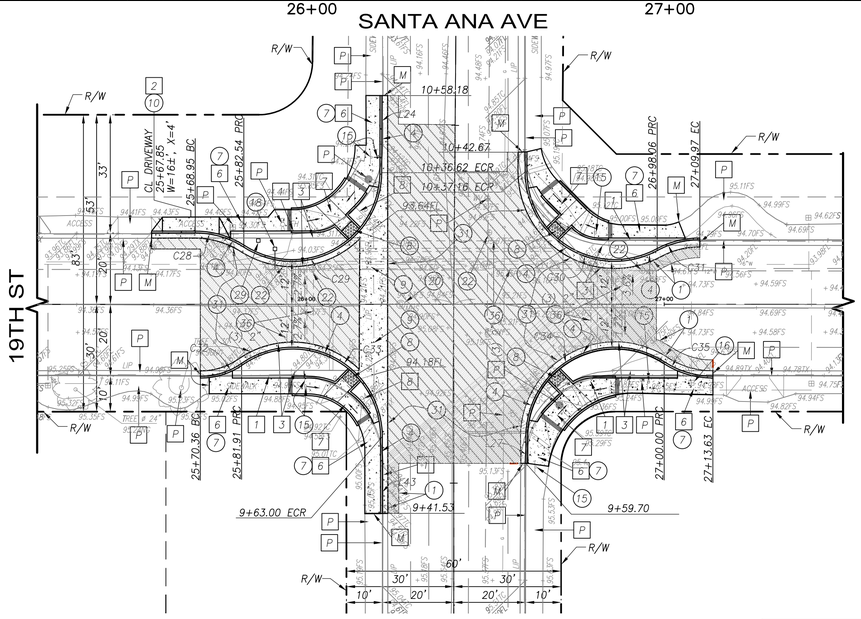
DESIGNED BY: CS	DATE AUG 2015	CHECKED BY: STEVEN SCHAPEL	DATE AUG 2015
DRAWN BY: CS	AUG 2015	APPROVED BY:	
RECOMMENDED BY:		REC. BY:	
APPROVED BY:			
BALTAZAR MEJIA, ACTING CITY ENGINEER			

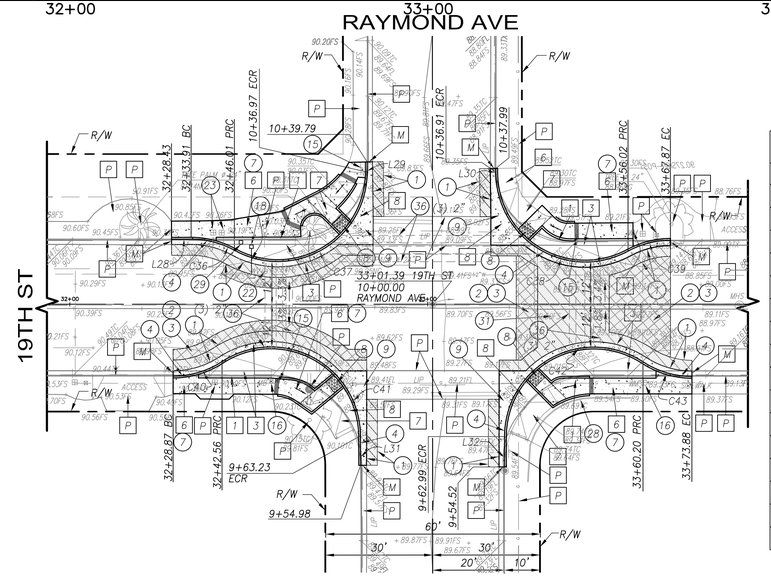
REGISTERED PROFESSIONAL ENGINEER AMIREH AMIRANI No. 34283 CIVIL STATE OF CALIFORNIA
P.E. SEAL

EAST 19TH STREET TRAFFIC IMPROVEMENTS
19TH ST. AT ORANGE AND WESTMINSTER AVE.
PLAN AND PROFILE
CITY OF COSTA MESA



SCALE
HORIZ: 1"=20'
VERT: 1"=4'





CONSTRUCTION NOTES

1. REMOVE AND CONSTRUCT 3' WIDE AC SLOT PAVEMENT FULL DEPTH, 6" DEEP AC WITH TOP 2" THICK ASPHALT RUBBER HOT MIX (ARHM) OVERLAY
2. COLD MILL 2" THICK MIN. EXISTING PAVEMENT SURFACE
3. CONSTRUCT 2" THICK MIN. ASPHALT RUBBER HOT MIX (ARHM) OVERLAY
4. CONSTRUCT 6" CURB & GUTTER, TYPE "C-6" (W=18"), OVER 6" CMB PER CITY OF COSTA MESA STD. DWG. NO. 312
7. CONSTRUCT 4" THICK PCC SIDEWALK OVER 4" CMB PER CITY OF COSTA MESA STD. DRAWING NO. 411
8. CONSTRUCT CURB RAMP PER CALTRANS STD. PLAN RSP A88A
9. CONSTRUCT CROSS GUTTER PER CITY OF COSTA MESA STD. DWG. NO. 415
10. CONSTRUCT DRIVEWAY APPROACH TYPE 1 PER CITY OF COSTA MESA STD. DWG. NO. 5
15. RELOCATE EXISTING STREET SIGN
16. RELOCATE EXISTING MAIL BOX
18. INSTALL WATER SERVICE AND METER PER MESA WATER DISTRICT STD. DWG. #1 TRENCH DET. PER CITY OF COSTA MESA STD. DWG. NO. 813. SIZE PER L.S. PLAN
20. ADJUST TO GRADE EXISTING SEWER MANHOLE
22. ADJUST TO GRADE EXISTING WATER VALVE
23. ADJUST TO GRADE EXISTING WATER METER
28. REMOVE AND RELOCATE EXIST. FENCE (AS NEEDED), COORDINATE WITH THE CITY PRIOR TO REMOVAL
29. INSTALL IRRIGATION CONTROLLER PER LANDSCAPE PLAN
31. CONSTRUCT 6" DEEP A.C. WITH TOP 2" THICK ASPHALT RUBBER HOT MIX (ARHM) OVERLAY
36. INSTALL SLEEVES AS SHOWN ON THIS PLAN AND ON LANDSCAPE/IRRIGATION PLANS (NUMBER AND SIZE OF SLEEVES PER PLAN)

REMOVAL NOTES

1. REMOVE AND DISPOSE EXISTING CURB & GUTTER
2. REMOVE AND DISPOSE EXISTING CONCRETE DRIVEWAY
3. REMOVE AND DISPOSE EXISTING ROADWAY SECTION
6. REMOVE AND DISPOSE EXISTING CONCRETE SIDEWALK
7. REMOVE AND DISPOSE EXISTING CONCRETE CURB RAMP
8. REMOVE AND DISPOSE PORTION OF EXISTING CROSS-GUTTER

DISPOSITION NOTES

- M MATCH/JOIN EXISTING
- P PROTECT IN PLACE

PARCEL CURVE DATA				
SEGMENT	LENGTH	RADIUS	TANGENT	DELTA
C28	14.35	25.00	7.38	32°53'11"
C29	53.36	25.00	45.38	122°18'13"
C30	51.68	25.00	41.97	118°26'00"
C31	12.41	25.00	6.33	28°26'08"
C32	12.29	20.00	6.34	35°12'03"
C33	54.51	25.00	47.96	124°56'04"
C34	53.71	25.00	46.14	123°06'16"
C35	14.41	25.00	7.41	33°01'53"
C36	12.63	25.00	6.45	28°56'48"
C37	51.90	25.00	42.40	118°56'48"
C38	51.82	25.00	42.24	118°45'51"
C39	12.36	25.00	6.31	28°19'45"
C40	14.48	25.00	7.45	33°10'59"
C41	53.60	25.00	45.89	122°50'05"
C42	53.78	25.00	46.28	123°14'54"
C43	14.48	25.00	7.45	33°10'30"

LINE DATA		
SEGMENT	LENGTH	DIRECTION
L28	5.48	N49° 30' 44"W
L29	2.82	N40° 39' 02"E
L30	1.08	N40° 52' 20"E
L31	8.24	N40° 18' 26"E
L32	8.48	S40° 38' 42"W
L24	21.56	N40° 46' 32"E
L25	5.51	S40° 39' 21"4
L27	7.48	S40° 39' 21"E
L43	21.47	N40° 38' 30"E

FULL DEPTH AC

COLD MILL

ASPHALT RUBBER HOT MIX OVERLAY (ARHM)

GRAPHIC SCALE
20 0 10 20 40
1 inch = 20 ft.

SEE SHEET 2 FOR SECTION J-J

NOTES:
1. UNLESS OTHERWISE NOTED, ALL EXISTING TREES SHALL REMAIN AND BE PROTECTED IN PLACE.
2. ALL EXISTING IMPROVEMENTS, HARDSCAPE, LAWNS, IRRIGATION SYSTEM, FENCE, WALLS, ETC., DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITION AT NO COST TO THE OWNER OR CITY.

PLANS PREPARED BY:
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IRVINE, CA 92618
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WWW.CIVIL-SOURCE.COM
AMIREH AMIRANI 34283
CIVIL ENGINEER: LICENSE NO.

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REVISIONS

NO.	DATE	DESCRIPTION	APP.

CONTRACTOR LIC #
DATE OF CONSTRUCTION
BEG. END
DATE ACCEPTED BY CITY COUNCIL

REFERENCES
SEE INDIVIDUAL SHEETS

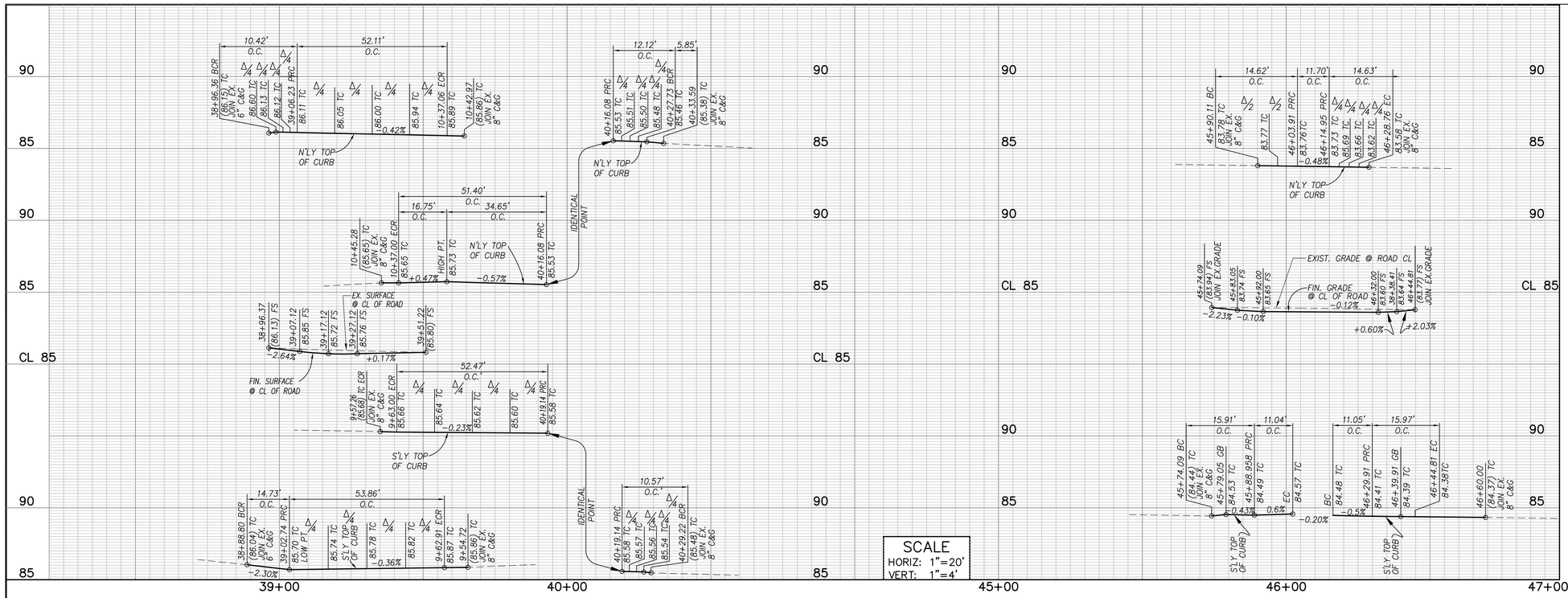
DESIGNED BY: CS	DATE AUG 2015	CHECKED BY: STEVEN SCHAPEL	DATE AUG 2015
DRAWN BY: CS	AUG 2015	APPROVED BY:	
RECOMMENDED BY:		REC. BY:	
APPROVED BY:			
BALTAZAR MEJIA, ACTING CITY ENGINEER			

REGISTERED PROFESSIONAL ENGINEER
AMIREH AMIRANI
No. 34283
CIVIL
STATE OF CALIFORNIA
P.E. SEAL

EAST 19TH STREET TRAFFIC IMPROVEMENTS

19TH ST. AT SANTA ANA AND RAYMOND AVE.
PLAN AND PROFILE

CITY OF COSTA MESA



SCALE
HORIZ: 1"=20'
VERT: 1"=4'

CONSTRUCTION NOTES

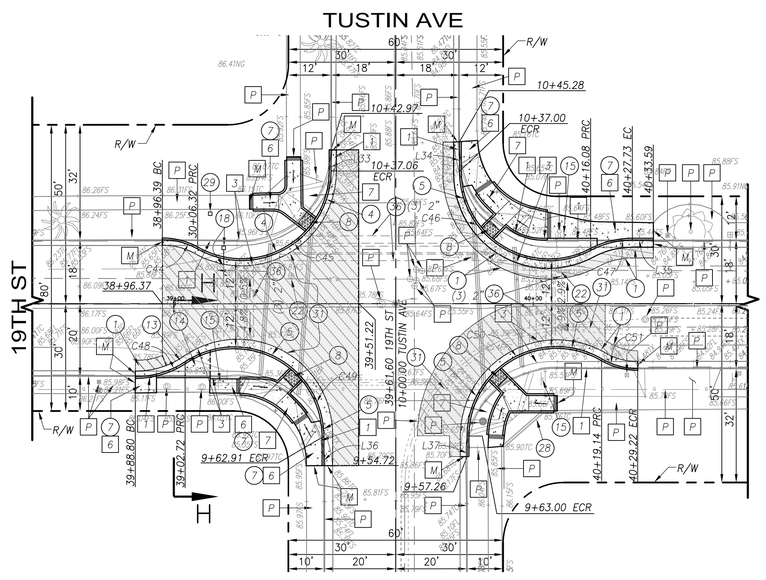
1. REMOVE AND CONSTRUCT 3' WIDE AC SLOT PAVEMENT FULL DEPTH, 6" DEEP AC WITH TOP 2" THICK ASPHALT RUBBER HOT MIX (ARHM) OVERLAY
5. CONSTRUCT 8" CURB & GUTTER TYPE "C-8" (W=24"), OVER 6" CMB PER CITY OF COSTA MESA STD. DWG. NO. 312
7. CONSTRUCT 4" THICK PCC SIDEWALK OVER 4" CMB PER CITY OF COSTA MESA STD. DRAWING NO. 411
8. CONSTRUCT CURB RAMP PER CALTRANS STD. PLAN RSP A88A
11. CONSTRUCT DRIVEWAY, TYPE "C", PER SPPWC STD. PLAN 110-2
13. CONSTRUCT LOCAL DEPRESSION PER CITY OF COSTA MESA STD. DWG. NO. 315
14. CONSTRUCT PARKWAY DRAIN PER SPPWC STD. PLAN 151-2, (MODIFIED)
15. RELOCATE EXISTING STREET SIGN
16. RELOCATE EXISTING MAIL BOX
18. INSTALL WATER SERVICE AND METER PER MESA WATER DISTRICT STD. DWG. #1 TRENCH DET. PER CITY OF COSTA MESA STD. DWG. NO. 813. SIZE PER L.S. PLAN
22. ADJUST TO GRADE EXISTING WATER VALVE
28. REMOVE AND RELOCATE EXIST. FENCE (AS NEEDED), COORDINATE WITH THE CITY PRIOR TO REMOVAL
29. INSTALL IRRIGATION CONTROLLER PER LANDSCAPE PLAN
31. CONSTRUCT 6" DEEP A.C. WITH TOP 2" THICK ASPHALT RUBBER HOT MIX (ARHM) OVERLAY
32. CONSTRUCT ALLEY INTERSECTION PER SPPWC STD. PLAN 130-2
36. INSTALL SLEEVES AS SHOWN ON THIS PLAN AND ON LANDSCAPE/IRRIGATION PLANS (NUMBER AND SIZE OF SLEEVES PER PLAN)

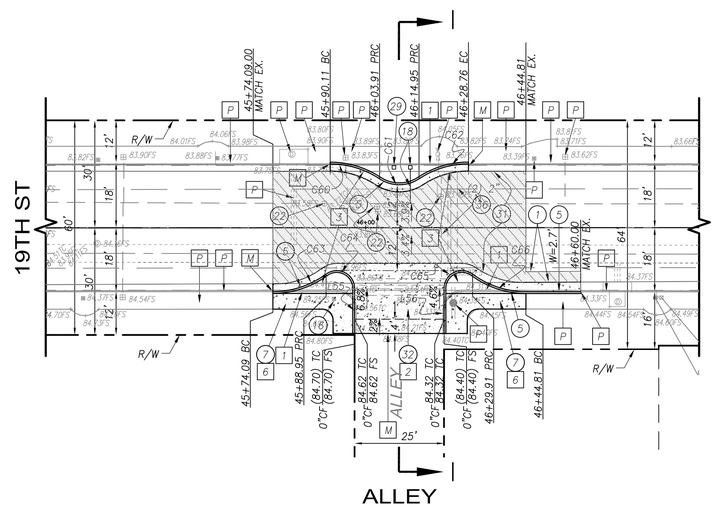
REMOVAL NOTES

1. REMOVE AND DISPOSE EXISTING CURB & GUTTER
2. REMOVE AND DISPOSE EXISTING CONCRETE DRIVEWAY
3. REMOVE AND DISPOSE EXISTING ROADWAY SECTION
6. REMOVE AND DISPOSE EXISTING CONCRETE SIDEWALK
7. REMOVE AND DISPOSE EXISTING CONCRETE CURB RAMP

DISPOSITION NOTES

M MATCH/JOIN EXISTING
P PROTECT IN PLACE





CURVE DATA

SEGMENT	LENGTH	RADIUS	TANGENT	DELTA
C44	10.32	20.00	5.28	29°34'24"
C45	52.11	25.00	42.80	119°25'08"
C46	51.40	25.00	41.45	117°48'22"
C47	12.12	25.00	6.18	27°46'58"
C48	14.73	25.00	7.58	33°45'20"
C49	53.86	25.00	46.47	123°26'18"
C50	52.47	25.00	43.53	120°15'32"
C51	10.57	20.00	5.41	30°16'36"
C60	14.62	25.00	7.52	33°29'57"
C61	11.70	10.00	6.62	67°01'45"
C62	14.63	25.00	7.53	33°31'48"
C63	15.91	25.00	8.24	36°28'13"
C64	11.04	5.00	9.91	126°28'13"
C65	11.05	5.00	9.94	126°35'57"
C66	15.97	25.00	8.27	36°35'57"

LINE DATA

SEGMENT	LENGTH	DIRECTION
L33	5.98	N40° 31' 33"E
L34	8.27	N40° 37' 21"E
L35	5.85	S49° 22' 14"E
L36	8.19	N40° 36' 46"E
L37	5.74	N40° 40' 47"E
L55	12.58	N40° 38' 23"E
L56	12.59	N40° 38' 23"E

SEE SHEET 2 FOR SECTION H-H AND I-1

FULL DEPTH AC
COLD MILL
ASPHALT RUBBER HOT MIX OVERLAY (ARHM)

GRAPHIC SCALE
20 0 10 20 40
1 inch = 20 ft.

PLANS PREPARED BY:
CivilSource
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AMIREH AMIRANI 34283
CIVIL ENGINEER: LICENSE NO.

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NOTES:
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2. ALL EXISTING IMPROVEMENTS, HARDSCAPE, LAWNS, IRRIGATION SYSTEM, FENCE, WALLS, ETC., DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITION AT NO COST TO THE OWNER OR CITY.

REVISIONS

NO.	DATE	DESCRIPTION	APP.

CONTRACTOR LIC #
DATE OF CONSTRUCTION
BEG. END
DATE ACCEPTED BY CITY COUNCIL

REFERENCES
SEE INDIVIDUAL SHEETS

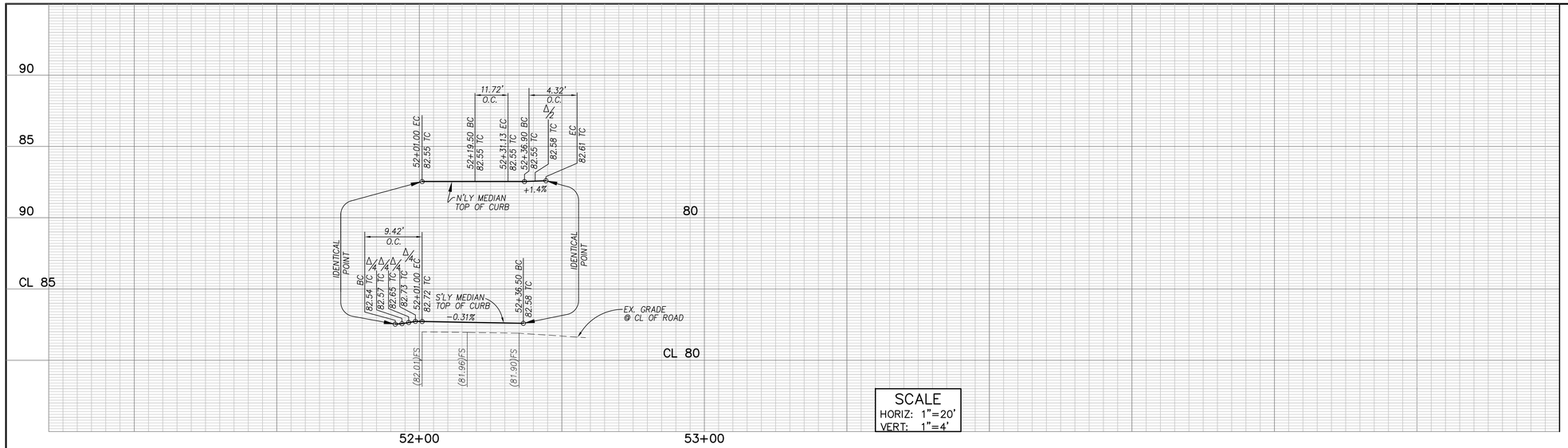
DESIGNED BY: CS	DATE AUG 2015	CHECKED BY: STEVEN SCHAPEL	DATE AUG 2015
DRAWN BY: CS	AUG 2015	APPROVED BY:	
RECOMMENDED BY:		REC. BY:	
APPROVED BY:			
BALTAZAR MEJIA, ACTING CITY ENGINEER			

REGISTERED PROFESSIONAL ENGINEER AMIREH AMIRANI No. 34283 CIVIL STATE OF CALIFORNIA
P.E. SEAL

EAST 19TH STREET TRAFFIC IMPROVEMENTS

19TH ST. AT TUSTIN AVE & ALLEY
PLAN AND PROFILE

CITY OF COSTA MESA



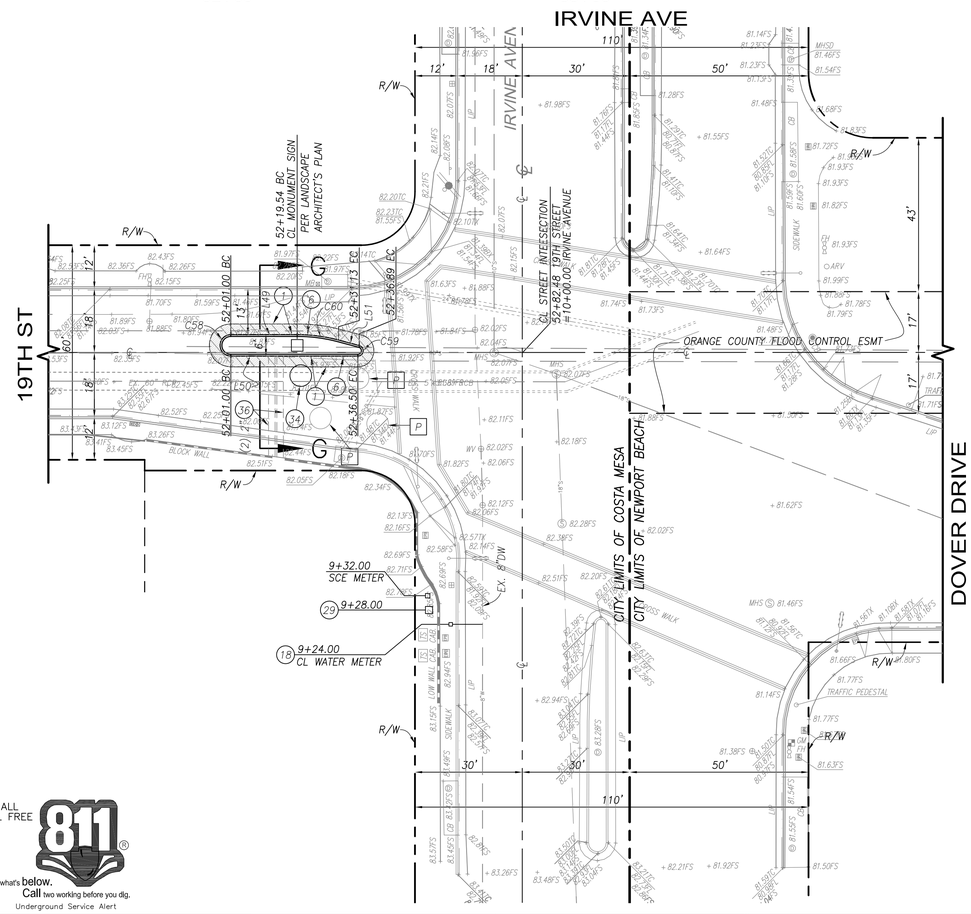
CONSTRUCTION NOTES

1. REMOVE AND CONSTRUCT 3' WIDE AC SLOT PAVEMENT FULL DEPTH, 6" DEEP AC WITH TOP 2" THICK ASPHALT RUBBER HOT MIX (ARHM) OVERLAY
6. CONSTRUCT 8" MEDIAN CURB, PER SPPWC STD. PLAN 120-2, A1-8(200)
18. INSTALL WATER SERVICE AND METER PER MESA WATER DISTRICT STD. DWG. #1 TRENCH DET. PER CITY OF COSTA MESA STD. DWG. NO. 813. SIZE PER L.S. PLAN
29. INSTALL IRRIGATION CONTROLLER PER LANDSCAPE PLAN
34. INSTALL TYPE E TRAFFIC LOOP PER CALTRANS STD PLAN ES-5B
36. INSTALL SLEEVES AS SHOWN ON THIS PLAN AND ON LANDSCAPE/IRRIGATION PLANS (NUMBER AND SIZE OF SLEEVES PER PLAN)

CURVE DATA				
SEGMENT	LENGTH	RADIUS	TANGENT	DELTA
C58	9.42	3.00	INFINITY	180°00'00"
C59	4.32	1.50	11.46	165°05'01"
C60	11.72	45.00	5.89	14°54'59"

LINE DATA		
SEGMENT	LENGTH	DIRECTION
L49	18.54	N49° 20' 50"W
L50	35.50	S49° 20' 50"E
L51	5.96	N34° 25' 52"W

SEE SHEET 2 FOR SECTION G-G



FULL DEPTH AC

COLD MILL

ASPHALT RUBBER HOT MIX OVERLAY (ARHM)

GRAPHIC SCALE

20 0 10 20 40

1 inch = 20 ft.

PLANS PREPARED BY:
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REVISIONS			
NO.	DATE	DESCRIPTION	APP.

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BEGIN END

DATE ACCEPTED BY CITY COUNCIL

REFERENCES
SEE INDIVIDUAL SHEETS

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DRAWN BY: CS	AUG 2015	APPROVED BY:	
RECOMMENDED BY:		REC. BY:	
APPROVED BY:			

BALTAZAR MEJIA, CITY ENGINEER R.C.E. #50330

REGISTERED PROFESSIONAL ENGINEER
AMIREH AMIRANI
No. 34283
Amy Amiran
CIVIL
STATE OF CALIFORNIA

P.E. SEAL

EAST 19TH STREET TRAFFIC IMPROVEMENTS

IRVINE AVENUE
PLAN AND PROFILE

CITY OF COSTA MESA