

**GENERAL NOTES:**

- ALL WORK AND MATERIALS SHALL COMPLY WITH THE 2010 CALTRANS STANDARD PLAN AND SPECIFICATIONS, LATEST EDITION OF STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK), CITY OF GARDEN GROVE STANDARD PLANS, ORANGE COUNTY STANDARD PLANS, RESOURCE AND DEVELOPMENT MANAGEMENT DEPARTMENT (RDMD) DESIGN MANUALS, AND THESE PROJECT PLANS, SPECIFICATIONS, AND SPECIAL PROVISIONS.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND NOTIFY THE CITY OF GARDEN GROVE WATER DEPARTMENT AND ALL OTHER UTILITY COMPANIES A MINIMUM OF 48 HOURS PRIOR TO START OF CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ALL PHASES OF CONSTRUCTION WITH THE VARIOUS UTILITY COMPANIES INVOLVED.
- WATER VALVES SHALL BE ADJUSTED TO GRADE OR RECONSTRUCTED BY THE CONTRACTOR PER CITY STD. PLAN B-752 WITHIN 5 WORKING DAYS OF PAVING THE SURFACE COURSE. SEWER AND STORM DRAIN MANHOLES SHALL BE ADJUSTED TO GRADE BY THE CONTRACTOR, WITHIN 10 WORKING DAYS AFTER COMPLETION OF FINAL ASPHALT PAVING. CONTRACTOR SHALL NOT OPERATE ANY WATER VALVES ASSOCIATED WITH THE PROJECT. CONTRACTOR SHALL CONTACT MIKE GRAY AT (714) 719-1284 FOR ANY WATER VALVE OPERATION.
- TRAFFIC CONTROL SHALL CONFORM TO THE TRAFFIC ENGINEERING POLICY TE 32, THE PROVISIONS IN SECTION 7-10, "PUBLIC CONVENIENCE AND SAFETY," OF CALTRANS STANDARD SPECIFICATIONS, THE LATEST EDITION MANUAL ON UNIFORM OF TRAFFIC CONTROL DEVICES (MUTCD), THE LATEST EDITIONS OF WORK AREA TRAFFIC CONTROL HANDBOOK (WATCH MANUAL) AND WITH CALTRANS STANDARD PLAN T-11 TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON MULTI-LANE CONVENTIONAL HIGHWAYS. NOTES 2 AND 6 ON THE CALTRANS STANDARD PLAN T-11 REGARDING ILLUMINATED ADVANCED WARNING SIGNS AND CONES SHALL NOT APPLY.
- THE CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT (1-800-422-4133) TWO WORKING DAYS PRIOR TO DOING ANY EXCAVATION. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE LOCATION OF ALL EXISTING UTILITIES AND VERIFY LOCATION AND DEPTH OF ALL UTILITIES WITHIN THE CONSTRUCTION AREA PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES. PROTECT IN-PLACE ALL UNDERGROUND AND OVERHEAD UTILITY LINES AND APPURTENANCES. CONTRACTORS SHALL NOTIFY CITY OF ANY POTENTIAL CONFLICT PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES. REMOVE ALL USA MARKINGS AFTER CONSTRUCTION.
- CONTRACTOR SHALL MAKE INVENTORY OF, AND PROTECT ALL SURVEY MONUMENTS AND CENTERLINE TIES IN PLACE. CONTRACTOR SHALL TRANSMIT CENTERLINE TIE DOCUMENTS TO THE ORANGE COUNTY SURVEY OFFICE AND THE ENGINEER, TO VERIFY ALL CENTERLINE TIES HAVE BEEN LOCATED PRIOR TO START OF ANY WORK.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR INSPECTION TWO WORKING DAYS PRIOR TO STARTING WORK AT (714) 741-5179.
- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN AT ALL TIMES DURING CONSTRUCTION AMPLE MEANS AND DEVICES WITH WHICH TO PROMPTLY REMOVE AND PROPERLY DISPOSE OF ALL WATER FROM ANY SOURCE ENTERING THE EXCAVATION OR OTHER PARTS OF THE WORK.
- PROTECT-IN-PLACE ALL EXISTING IMPROVEMENTS, STRUCTURES, INFRASTRUCTURE, UTILITIES, AND ALL OTHER ITEMS NOT BEING CALLED OUT TO BE REMOVED OR RELOCATED, OR NOT PART OF SCOPE. ALL EXISTING IMPROVEMENTS THAT ARE DAMAGED OR REMOVED DURING CONSTRUCTION INCLUDING STRIPING, C&G, DRIVEWAYS, UTILITIES, ETC. SHALL BE REPLACED IN KIND, OR AS SPECIFIED IN THE CONTRACT DOCUMENTS.
- REMOVE ALL USA MARKINGS FROM PUBLIC RIGHT-OF-WAY AFTER CONSTRUCTION IS COMPLETE.
- CONTRACTOR SHALL HAVE SUFFICIENT MATERIALS ON HAND AT ALL TIMES TO EXPEDITE ANY EMERGENCY REPAIR.
- ALL MEASUREMENTS ARE HORIZONTAL. CONTRACTOR IS RESPONSIBLE FOR CONVERTING HORIZONTAL DISTANCES TO SLOPED DISTANCES.
- PAVEMENT LEGENDS AND CROSSWALKS SHALL BE THERMOPLASTIC.
- IF CULTURAL MATERIALS OR RESOURCES ARE DISCOVERED DURING THE PROJECT CONSTRUCTION, ALL WORK IN THE VICINITY OF THE DISCOVERY SHALL IMMEDIATELY CEASE.

**UTILITY CONTACT INFORMATION**

UTILITY	CONTACT	PHONE NO.
GARDEN GROVE SEWER DIVISION	SAMUEL KIM	(714) 741-5534
GARDEN GROVE WATER DIVISION	SAMUEL KIM	(714) 741-5534
GARDEN GROVE TRAFFIC DIVISION	DAI VU	(714) 741-5189
SOUTHERN CALIFORNIA EDISON CO.	CECILIA CAMPOS	(714) 973-5445
THE GAS CO.	DON AMADOR	(714) 634-3039
AT&T	YVETTE MARTINEZ-GARAFANO	(714) 666-5692
O.C.T.A.	BILL BATORY	(714) 560-5912
SPECTRUM	CURTIS VASQUEZ	(714) 719-9880
COUNTY SANITATION DISTRICT OF O.C.	RUDY DAVILA	(714) 593-7348
FRONTIER / VERIZON	PHILLIP OLIVAS	(626) 813-4573
REFLEX TRAFFIC SYSTEMS INC.	KEITH UNDERWOOD	(310) 490-7050

CAUTION: THE ENGINEER OF RECORD WILL NOT BE RESPONSIBLE FOR OR LIABLE FOR ANY UNAUTHORIZED CHANGES TO THESE PLANS. ALL CHANGES MUST BE APPROVED BY THE PLAN PREPARER.

**Underground Service Alert**

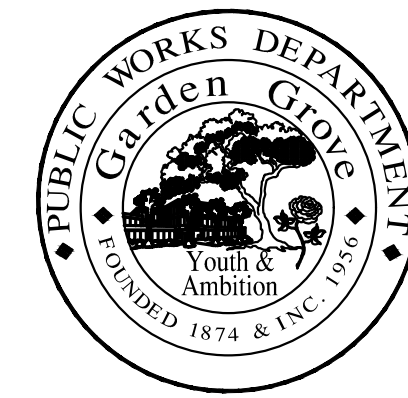


CALL 811 TWO WORKING DAYS BEFORE YOU DIG.

**F.D.R. NOTE TO CONTRACTOR:**

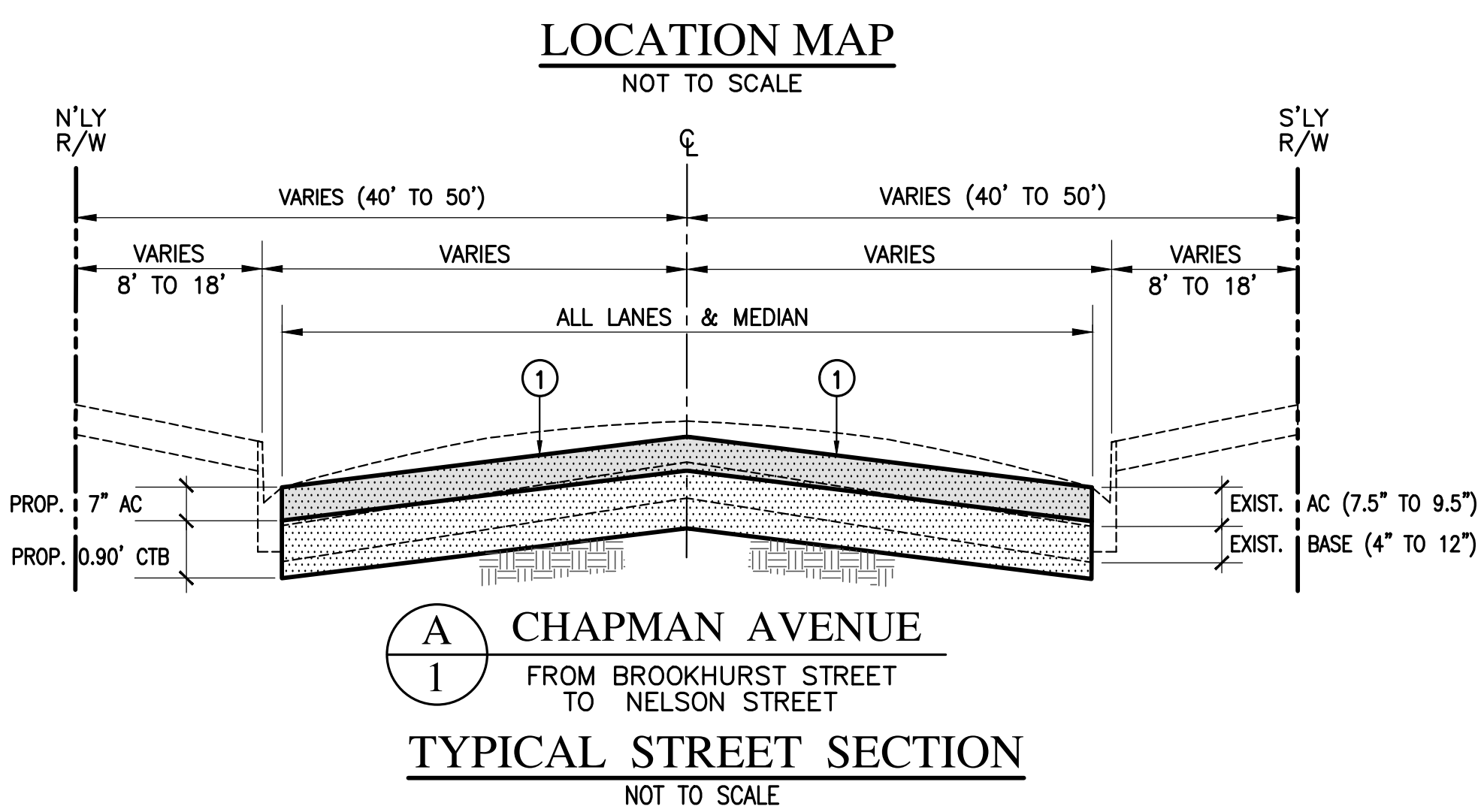
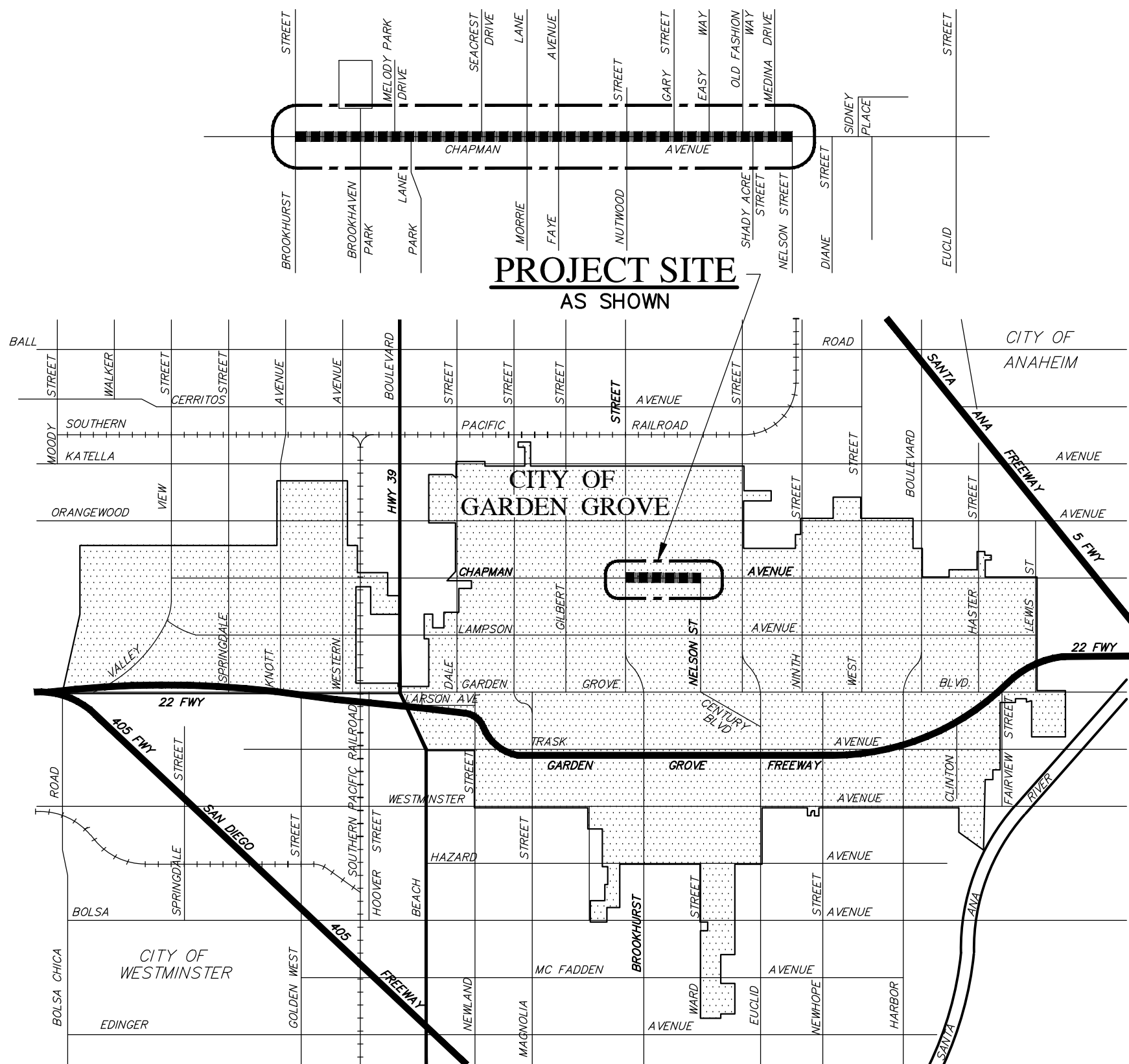
APPROXIMATELY FROM STA 23+00 TO STA 35+00: TO ACHIEVE THE REQUIRED EXISTING A.C./A.B. TO BE RECYCLED/RECLAIMED FOR STRUCTURAL SECTION PER FULL DEPTH RECLAMATION (FDR) SPECIFICATION, THE CONTRACTOR SHALL PRESERVE, AND TEMPORARILY STORE A.C. MATERIAL TO DIFFERENT LOCATION; HAUL OUT EXCESS SUBGRADE/DIRT MATERIAL UNDERNEATH; THEN BRING BACK PRESERVED EXISTING A.C. TO THE SITE FOR THE RECLAMATION & C.T.B. PROCESS. VERIFY-IN-FIELD UPON COLDMILLING/EXCAVATION /PULVERIZATION. HAUL-OUT AND DISPOSE EXCESS RESTORED A.C. OR USE IT ON OTHER AREAS BEYOND THE SPECIFIED STATION.

**City Of Garden Grove**  
**Department Of Public Works**



**CHAPMAN AVENUE**  
**STREET REHABILITATION**  
**FROM BROOKHURST ST. TO NELSON ST.**

**PROJECT NO. 7280**



**CONSTRUCTION NOTES:**

- PROTECT EXISTING IMPROVEMENT IN PLACE.
- PULVERIZE AND MIX EXISTING AC/AB PER CROSS SECTIONS FOUND ON SHEETS 7 & 8. REMOVE AND DISPOSE OF EXCESS PULVERIZED MATERIAL. CONSTRUCT 0.17' ARHM SURFACE COURSE OVER 0.42' AC BASE COURSE OVER 0.90' CEMENT TREATED BASE (CEMENT CONTENT=3% TO 3.5%) DESIGN CHANGE
- COLD MILL EXISTING AC PAVEMENT 0.17' UNIFORM DEPTH AND CONSTRUCT 0.17' ARHM SURFACE COURSE.
- REMOVE AND DISPOSE OF EXISTING AC/AB PAVEMENT TO A TOTAL DEPTH OF 1.5' AND CONSTRUCT 0.17' ARHM SURFACE COURSE OVER 0.42' AC BASE COURSE OVER 0.9' AGGREGATE BASE, CLASS 2.
- SAW CUT & REMOVE EXISTING DAMAGED SIDEWALK AND CONSTRUCT 0.33' THICK PCC SIDEWALK PER CITY STD. PLAN NO. B-106, TO MATCH EXISTING.
- SAW CUT & REMOVE EXISTING DAMAGED CURB & GUTTER. CONSTRUCT NEW CONCRETE CURB AND GUTTER PER DETAIL 1/SHEET 2 AND PER CITY STD. PLAN NO. B-113, TYPE C-8. JOIN TO EXISTING ELEVATIONS TO ALLOW CONTINUOUS FLOW LINE.
- SAW CUT, REMOVE EXISTING AND CONSTRUCT PCC CURB RAMP PER CALTRANS STD. PLAN AB8A. CASE TO BE DETERMINED BY THE CONTRACTOR AND SHALL FIT EXISTING CONDITION.
- SAW CUT, REMOVE EXISTING AND CONSTRUCT PCC CROSS GUTTER PER CITY STD. PLAN NO. B-119, MATCH EXISTING.
- ADJUST SEWER MANHOLE FRAME AND COVER TO NEW FINISHED GRADE PER CITY STD PLANS S-100 & S-103.
- ADJUST STORM DRAIN MANHOLE FRAME & COVER TO NEW FINISH GRADE PER CITY STD. PLAN B-206.
- ADJUST WATER VALVE, FRAME AND COVER TO NEW FINISHED GRADE PER CITY STD PLANS B-752 & B-753.
- RE-ESTABLISH SURVEY MONUMENT PER PROJECT SPECIFICATIONS.
- REMOVE EXISTING TREE, TREE STUMP, AND/OR TREE ROOTS AND CONSTRUCT 0.33' THICK PCC SIDEWALK PER CITY STD. PLAN NO. B-106, TO MATCH EXISTING.
- REMOVE EXISTING TREE, TREE STUMP AND/OR TREE ROOTS. KEEP TREE WELL IN PLACE.
- SAWCUT, REMOVE EXISTING MATERIAL AS NEEDED, AND EXTEND EXISTING TREE WELL 1 FT. ON BOTH SIDES.
- ADJUST UTILITY BOX, VALVE, HANDHOLE, TO GRADE. CONTRACTOR TO COORDINATE WITH UTILITY OWNERS.
- EXISTING CURB OPENING CATCH BASIN TO REMAIN. INSTALL BIO CLEAN CURB INLET FILTER INSERT WITH BYPASS FLOW (MODEL BC-CURB). CONTRACTOR SHALL MEASURE REQUIRED WIDTH IN THE FIELD.
- REMOVE & REPLACE EXISTING MANHOLE COVER & FRAME/RING. THE CITY WILL SUPPLY THE NEW MATERIAL, TO BE PICKED-UP BY THE CONTRACTOR AT THE CITY YARD.

**PAVEMENT KEY**

	A.C. AT F.D.R. AREA		CEMENT-TREATED BASE (SECTION)
	A.C. AT MILL & OVERLAY AREA		LANDSCAPE AREA
	A.C. AT REMOVE & REPLACE AREA		UNDISTURBED SOIL/SUBBASE
	CONCRETE PAVEMENT		AGGREGATE BASE (SECTION)

**SHEET INDEX**

SHEET NO.	SHEET TITLE	STREET NAME	FROM STA.	TO STA.
1	TITLE SHEET	---	---	---
2	NOTES AND DETAILS	---	---	---
3	PLAN AND PROFILE	CHAPMAN AVENUE	10+00	18+90
4	PLAN AND PROFILE	CHAPMAN AVENUE	18+90	29+25
5	PLAN AND PROFILE	CHAPMAN AVENUE	29+25	39+50
6	PLAN AND PROFILE	CHAPMAN AVENUE	29+25	49+58
7	DESIGN CROSS SECTIONS	CHAPMAN AVENUE	10+00	30+00
8	DESIGN CROSS SECTIONS	CHAPMAN AVENUE	31+00	49+00
9	STRIPING PLAN	CHAPMAN AVENUE	10+00	34+50
10	STRIPING PLAN	CHAPMAN AVENUE	34+50	49+58



MARK P. UPHUS

DATE

**AS-BUILT**

BENCHMARK:  
VERTICAL DATUM: ORANGE COUNTY; NAVD83 (2012 GG AD4)  
BENCH MARK: GG-130  
ELEVATION: 85.727  
DESCRIPTION: FOUND 2-1/2" BRONZE CITY BENCHMARK DISK WITH PRUNCH IN TRUNKLE, SET IN THE SOUTHWEST CORNER OF A 12' BY 4' CONC. CATCH BASIN, MONUMENT LOCATED IN THE NORTHEAST CORNER OF THE INTERSECTION OF LAMPSON AVE. AND BROOKHURST ST., 15' EAST OF THE B.C.R. AND 1' NORTH OF THE CURB FACE.

DESIGNED BY:	DRAWN BY:	CHECKED BY:
M.SANTOS	M.SANTOS	M.UPHUS
APPROVED BY:		
MARK UPHUS		
SENIOR ENGINEER		

REVISIONS			
REV.	DATE	DESCRIPTION	ISSUED BY
1	AUG-2018	DESIGN CHANGE, ADDED, OR DELETED ITEM	MS

CITY TRAFFIC ENGINEER	
STREET DIVISIONS MGR.	WATER SERVICES MGR.
XX	XX

APPROVED BY:	APPROVED BY:
DAN CANDELARIA, PE, TE, CITY ENGINEER	WILLIAM MURRAY, PE, DIRECTOR OF PUBLIC WORKS

**STREET REHABILITATION**  
**CHAPMAN AVENUE**  
**FROM BROOKHURST ST. TO NELSON ST.**

DRAWING NUMBER  
**A-1873**  
SHEET 1 OF 10



**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) NOTES**

- IN CASE OF EMERGENCY, CALL \_\_\_\_\_; AT PHONE NUMBERS: \_\_\_\_\_;
- SEDIMENT FROM AREAS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE RETAINED ON SITE USING AN EFFECTIVE COMBINATION OF EROSION AND SEDIMENT CONTROLS, TO INCLUDE STRUCTURAL AND NON-STRUCTURAL BEST MANAGEMENT PRACTICES (BMPs) TO THE MAXIMUM EXTENT PRACTICABLE.
- STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO MINIMIZE SEDIMENT TRANSPORT TO THE STREET, DRAINAGE FACILITIES OR ADJACENT PROPERTIES VIA RUNOFF, TRACKING OR WIND.
- ALL CONTRACTORS AND SUBCONTRACTORS SHALL BE MADE AWARE OF BMPs FOR THE CONSTRUCTION SITE AND STAGING AREA(S).
- AT THE END OF EACH WORKING DAY ALL CONSTRUCTION DEBRIS AND WASTE MATERIALS SHALL BE COLLECTED AND PROPERLY DISPOSED IN TRASH OR RECYCLE BINS.
- THE CONSTRUCTION SITE SHALL BE MAINTAINED WITH BMPs IN PLACE FOR ALL STORM EVENTS AND ANTICIPATED STORM EVENTS. THIS WILL INSURE CONSTRUCTION RELATED POLLUTANTS DO NOT TRAVEL OFF SITE.
- EQUIPMENT AND WORKERS SHALL BE MADE AVAILABLE FOR EMERGENCIES DURING RAIN OR WIND EVENTS. NECESSARY MATERIALS SHALL BE AVAILABLE ON SITE AND STOCK PILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID DEPLOYMENT AND CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
- ALL EROSION CONTROL DEVICES SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE 5-DAY FORECAST PROBABILITY OF RAIN EXCEEDS 40%.
- ALL NON-STORM WATER DISCHARGES MUST BE IN ACCORDANCE WITH ALL APPLICABLE LAWS, REGULATIONS AND ORDINANCES. DISCHARGES OF NONSTORM WATER CAN NOT: CAUSE OR CONTRIBUTE TO A VIOLATION OF ANY WATER QUALITY STANDARD; THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR NUISANCE; OR CONTAIN A HAZARDOUS SUBSTANCE IN A QUANTITY REPORTABLE UNDER 40 CFR 117 AND 302.
- POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SOLID OR LIQUID CHEMICAL SPILLS; WASTES FROM PAINTS, STAINS, SEALANTS, PESTICIDES, HERBICIDES, LUBRICANTS, HYDRAULIC, BATTERY OR RADIATOR FLUIDS; VEHICLE AND EQUIPMENT WASH WATER, ENGINE AND EQUIPMENT STEAM CLEANING WATER, CHEMICAL DEGREASERS AND CONCRETE WASH WATER; TRASH, DEBRIS AND FLOATABLE WASTES.
- DISPOSAL OF HAZARDOUS WASTES SHALL BE AT SPECIFIED LOCATIONS ON SITE, IN SEALED CONTAINERS, STORED IN SECONDARY CONTAINED AREAS AND PROTECTED FROM STORM WATER. WASTES ARE TO BE DISPOSED IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
- DEWATERING OF CONTAMINATED GROUND WATER OR DISCHARGE OF CONTAMINATED SOILS IS PROHIBITED. DEWATERING OF NON-CONTAMINATED GROUND WATER REQUIRES A NPDES PERMIT.
- CONSTRUCTION SITE PERIMETERS MUST BE GRADED TO DRAIN AWAY FROM THE FACE OF SLOPES AT THE END OF EACH WORKING DAY. DRAINAGE IS TO BE DIRECTED TOWARD DESILTING FACILITIES IF AVAILABLE.
- EROSION CONTROLS SHALL BE INSPECTED TO INSURE THAT ALL BMPs ARE IMPLEMENTED IN ACCORDANCE WITH APPROVED PLANS.
- THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDMENT OF WATER CREATES A HAZARDOUS CONDITION.

**GENERAL SIGNING AND STRIPING NOTES**

- TRAFFIC STRIPES, PAVEMENT LEGENDS, AND RAISED PAVEMENT MARKERS SHALL BE PER THE CALIFORNIA MUTCD, CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS AND CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS AND STANDARD SPECIFICATIONS, LATEST EDITION.
- ALL CONFLICTING STRIPING SHALL BE REMOVED BY SANDBLASTING.
- INSTALL BLUE RPM'S AT FIRE HYDRANT LOCATIONS PER CALIFORNIA MUTCD, LATEST EDITION.
- A TYPE "K" MARKER AND POST SHALL BE PLACED WITHIN ALL MEDIAN NOSES, WITHIN THE PROJECT LIMITS, WHICH CURRENTLY DO NOT HAVE SUCH MARKERS. MARKER AND POST SHALL BE INSTALLED PER CITY STANDARD PLAN NO. B-305.
- ALL STRIPING SHALL BE APPROVED BY THE TRAFFIC ENGINEER PRIOR TO FINAL APPLICATION.
- TRAFFIC SIGNAL DETECTOR LOOP LOCATIONS SHALL BE PAINTED FOR APPROVAL PRIOR TO SAW CUTTING.
- DETECTOR LOOPS SHALL BE SPACED 10' IN DIRECTION OF TRAVEL AND DIRECTLY BEHIND THE LIMIT LINE.
- ALL SIGN LOCATIONS SHOWN ARE APPROXIMATE AND SHOULD BE ADJUSTED AS NECESSARY TO MEET EXISTING FIELD CONDITIONS.
- REFLECTORIZE ALL STRIPES. PAVEMENT LEGENDS SHALL MATCH CITY STENCILS.
- THE CONTRACTOR SHALL REMOVE ANY CONFLICTING STRIPES, MARKINGS AND RAISED PAVEMENT MARKERS. BLACK-OUT PAINT WILL BE ALLOWED NO LONGER THAN 2 WEEKS FOR TEMPORARY PURPOSES ONLY. REMOVE ALL USA MARKINGS AFTER CONSTRUCTION.

**PAVEMENT KEY**

- A.C. AT F.D.R. AREA
- A.C. AT MILL & OVERLAY AREA
- A.C. AT REMOVE & REPLACE AREA
- CONCRETE PAVEMENT
- LANDSCAPE AREA

**SPOT ELEVATION AND SLOPE SYMBOL:**

- (100) - DENOTES EXISTING ELEVATION, VERIFY-IN-FIELD
- 100 - DENOTES PROPOSED ELEVATION
- (S%) - DENOTES EXISTING SLOPE & FLOW DIRECTION, VERIFY-IN-FIELD
- S% - DENOTES PROPOSED SLOPE & FLOW DIRECTION

**ABBREVIATIONS**

AC	ASPHALT CONCRETE (PAVEMENT)	P/L	PROPERTY LINE
CB	CATCH BASIN	PB	PULLBOX
CL	CENTERLINE	PIP	PROTECT-IN-PLACE
CMU	CONCRETE MASONRY UNIT (WALL)	R/W, ROW	RIGHT OF WAY LINE
CTB	CEMENT TREATED BASE	RIDGE	RIDGE
CMB	CRUSHED MISCELLANEOUS BASE	SD	STORM DRAIN LINE
DWY	DRIVEWAY, DRIVEWAY APPROACH	SS	SANITARY SEWER LINE
EL/ELEV	ELEVATION	TC	TOP OF CURB
EX	EXISTING	TSPB	TRAFFIC SIGNAL PULLBOX
EG	EXISTING GRADE	TYP	TYPICAL
EOG	EDGE OF GUTTER	UNO	UNLESS NOTED OTHERWISE
FDR	FULL DEPTH RECLAMATION	W	WATERLINE
FS	FINISHED SURFACE	WM	WATER METER
FL	FLOW LINE	WV	WATER VALVE
GB	GRADE BREAK	N/O, S/O	NORTH OF, SOUTH OF
PCC	PORTLAND CEMENT CONCRETE	E/O, W/O	EAST OF, WEST OF

**LEGEND & SYMBOLS**

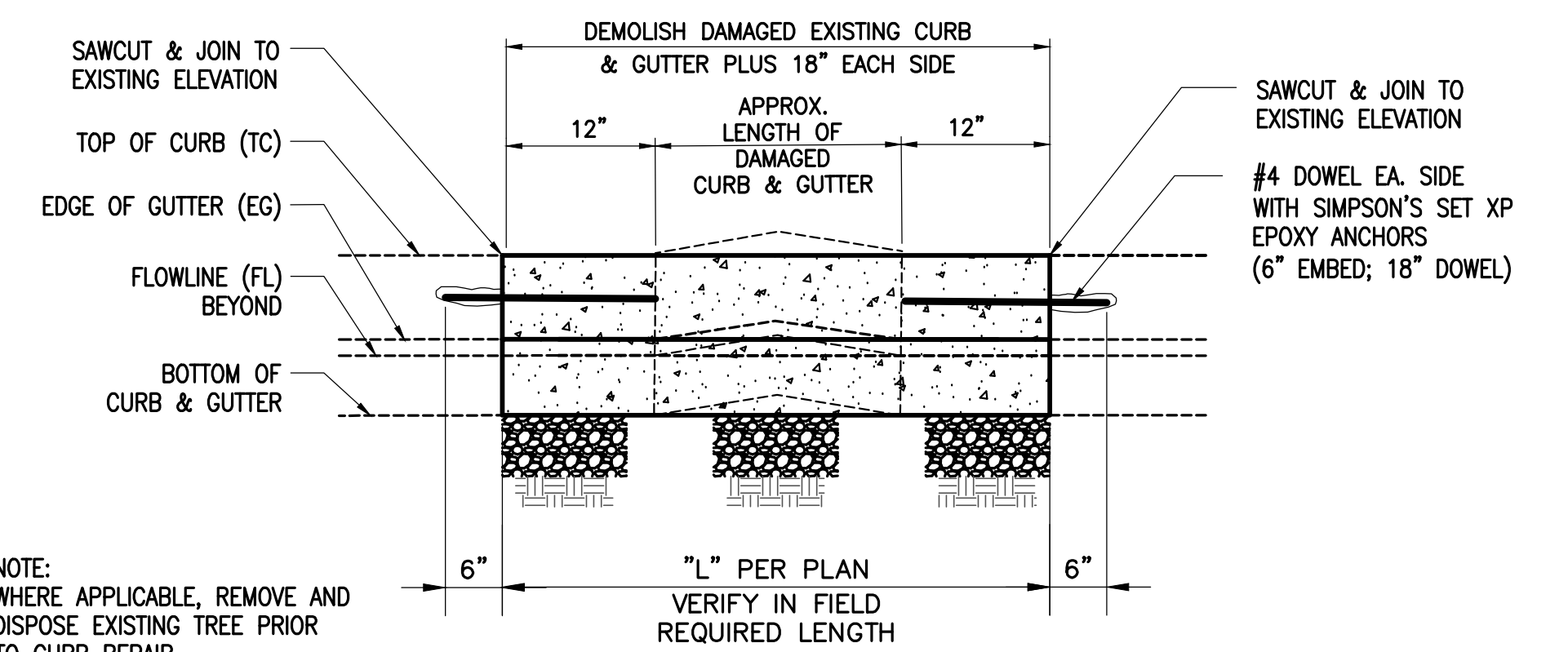
⊙	STORM DRAIN MANHOLE	⊙	UNKNOWN VAULT	⊙	SEWER CLEANOUT
⊙	CATCH BASIN MANHOLE	⊙	ELECTRIC VAULT	⊙	UTILITY POLE
⊙	SEWER MANHOLE	⊙	WATER VAULT	⊙	GUY ANCHOR
⊙	ELECTRIC MANHOLE	⊙	BACKFLOW VALVE	⊙	FIRE HYDRANT
⊙	IRRIGATION CONTROL VALVE	⊙	SIGN	⊙	CURB DRAIN
⊙	STREET LIGHT PULLBOX	⊙	VENT	⊙	TRAFFIC LOOP CIRCLE
⊙	TRAFFIC SIGNAL PULLBOX	⊙	SPIGOT	⊙	TRAFFIC LOOP SQUARE
⊙	ELECTRIC PULLBOX	⊙	UNKNOWN METER	⊙	MAILBOX
⊙	UNKNOWN PULLBOX	⊙	GAS VALVE	⊙	O.H. TRAFFIC SIGNAL POLE
⊙	TELEPHONE PULLBOX	⊙	WATER VALVE	⊙	TREE
⊙	CABLE TV PULLBOX	⊙	UNKNOWN VALVE	⊙	PALM TREE
⊙	GAS METER	⊙	NEWSPAPER RACK	⊙	SURVEY CONTROL (WELL MONUMENT)
⊙	WATER METER	⊙	UNKNOWN ROUND PEDESTAL	⊙	SURVEY CONTROL POINT
⊙	STREET LIGHT	⊙	ELECTRIC PEDESTAL	⊙	CENTERLINE TIE
⊙	DOUBLE STREET LIGHT	⊙	CABLE TV VAULT		

**UTILITY LINE TYPES**

---	EXISTING GAS LINE
---	EXISTING SEWER LINE
---	EXISTING STORM DRAIN LINE
---	EXISTING COMMUNICATION
---	EXISTING WATER LINE
---	EXISTING EDISON/ELECTRICAL
---	EXISTING OIL LINE
---	EXISTING FIBER OPTIC CABLE
---	EXISTING S.D. ≤ 48"φ
---	EXISTING S.D. > 48"φ
---	EXISTING S.S. ≤ 48"φ
---	EXISTING S.S. > 48"φ
---	PROPOSED SD LINE
---	PROPOSED SS LINE

**LINE TYPE**

---	CHAIN LINK FENCE
---	WROUGHT IRON FENCE
---	BLOCK FENCE WALL
---	BUILDING OUTLINE



1 PROFILE VIEW -CURB REPAIR  
2 SCALE NTS

4 units for Chapman Ave. (2 Along Chapman, 2 Along Brookhurst):

**CITY OF GARDEN GROVE**  
DEPARTMENT OF PUBLIC WORKS

**CHAPMAN AVENUE**  
PAVEMENT REHABILITATION PROJECT

START DATE: JULY 27, 2018  
ANTICIPATED COMPLETION DATE: OCT. 19, 2018  
CONTRACTOR: R.J. NOBLE COMPANY, 714-313-6590  
For More Information, Call: 714-741-5179

**USE CAUTION AHEAD**  
THANK YOU FOR YOUR PATIENCE

96"X48"

18"  
2.25"  
2.25"  
2.25"  
2.25"  
1.5"

2 units for residential:

**CITY OF GARDEN GROVE**  
DEPARTMENT OF PUBLIC WORKS

**SAPPHIRE, SANTA RITA, WILD GOOSE**  
PAVEMENT REHABILITATION PROJECT

START DATE: JULY 16, 2018  
ANTICIPATED COMPLETION DATE: SEPT. 1, 2018  
CONTRACTOR: R.J. NOBLE COMPANY, 714-313-6590  
For More Information, Call: 714-741-5179

**USE CAUTION AHEAD**  
THANK YOU FOR YOUR PATIENCE

96"X48"

18"  
2.25"  
2.25"  
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2.25"  
1.5"

2 PROJECT SIGN  
2 SCALE NTS

**AS-BUILT**



**G** City Of Garden Grove  
Department Of Public Works

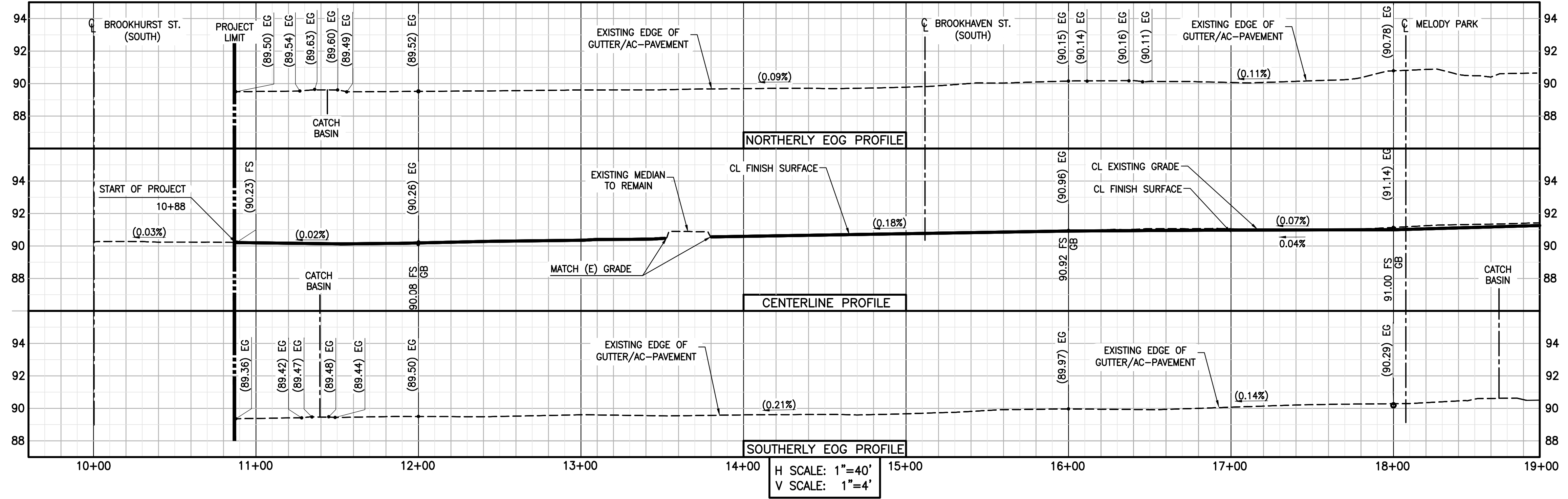
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REV.	DATE	DESCRIPTION	ISSUED BY	APP'D
1	AUG-2018	DESIGN CHANGE, ADDED, OR DELETED ITEM	MS	MU

STREET REHABILITATION  
**CHAPMAN AVENUE**  
FROM BROOKHURST ST. TO NELSON ST.

DRAWING NUMBER  
**A-1873**  
SHEET 2 OF 10

CHAPMAN AVENUE STREET REHABILITATION - PROJ. NO. 7280-2018  
AS-BUILT

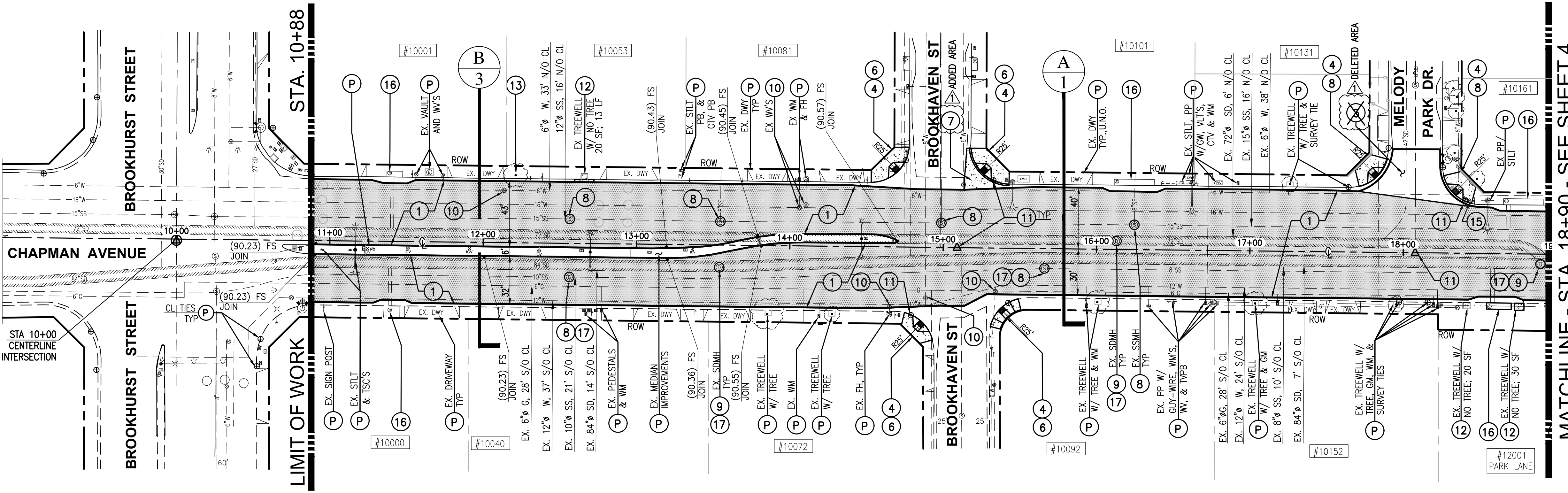




H SCALE: 1"=40'  
V SCALE: 1"=4'

**CONSTRUCTION NOTES:**

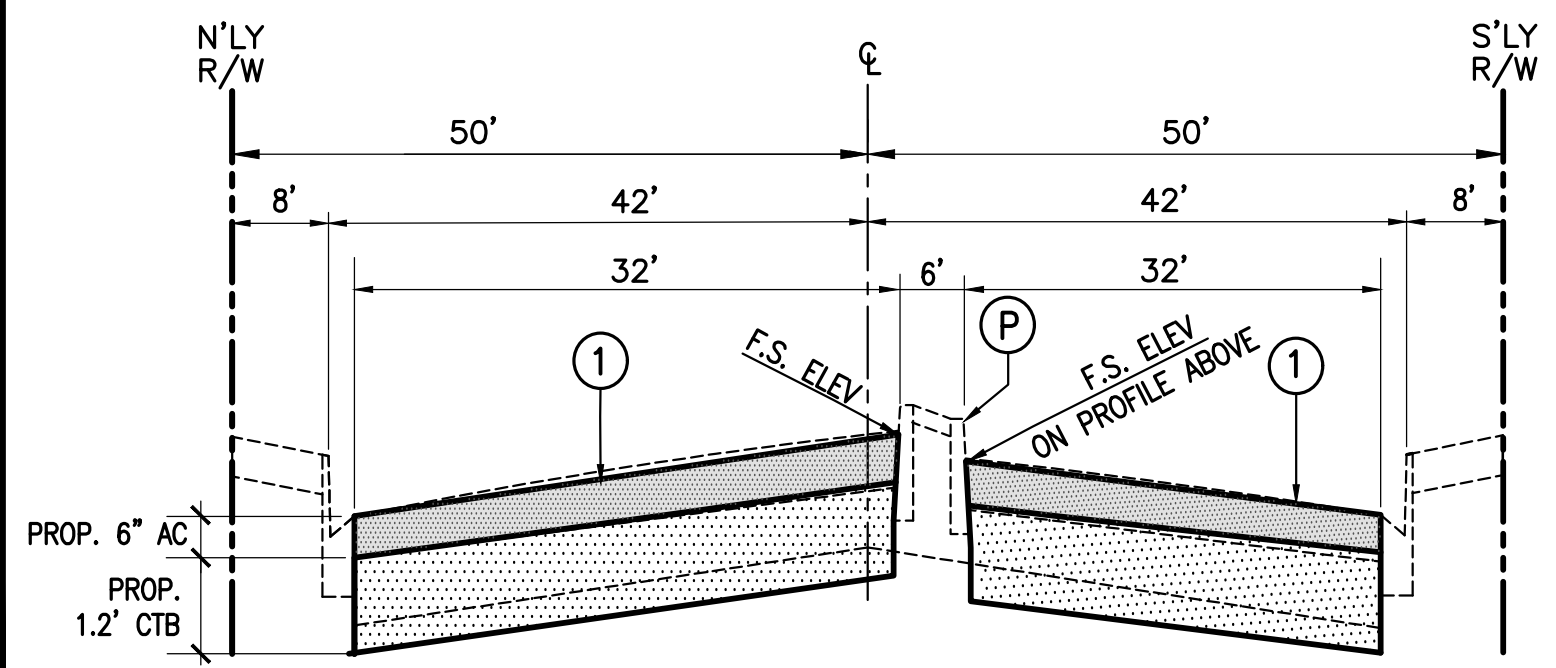
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- (2) COLD MILL EXISTING AC PAVEMENT 0.17" UNIFORM DEPTH AND CONSTRUCT 0.17" ARHM SURFACE COURSE.
- (3) REMOVE AND DISPOSE OF EXISTING AC/AB PAVEMENT TO A TOTAL DEPTH OF 1.5' AND CONSTRUCT 0.17" ARHM SURFACE COURSE OVER 0.42' AC BASE COURSE OVER 0.9' AGGREGATE BASE, CLASS 2.
- (4) SAW CUT & REMOVE EXISTING DAMAGED SIDEWALK AND CONSTRUCT 0.33" THICK PCC SIDEWALK PER CITY STD. PLAN NO. B-106, TO MATCH EXISTING.
- (5) SAW CUT & REMOVE EXISTING DAMAGED CURB & GUTTER. CONSTRUCT NEW CONCRETE CURB AND GUTTER PER DETAIL 1/SHEET 2 AND PER CITY STD. PLAN NO. B-113, TYPE C-8. JOIN TO EXISTING ELEVATIONS TO ALLOW CONTINUOUS FLOW LINE.
- (6) SAW CUT, REMOVE EXISTING AND CONSTRUCT PCC CURB RAMP PER CALTRANS STD. PLAN AB8A. CASE TO BE DETERMINED BY THE CONTRACTOR AND SHALL FIT EXISTING CONDITION.
- (7) SAW CUT, REMOVE EXISTING AND CONSTRUCT PCC CROSS GUTTER PER CITY STD. PLAN NO. B-119, MATCH EXISTING.
- (8) ADJUST SEWER MANHOLE FRAME AND COVER TO NEW FINISHED GRADE PER CITY STD PLANS S-100 & S-103.
- (9) ADJUST STORM DRAIN MANHOLE FRAME & COVER TO NEW FINISHED GRADE PER CITY STD. PLAN B-206.
- (10) ADJUST WATER VALVE, FRAME AND COVER TO NEW FINISHED GRADE PER CITY STD PLANS B-752 & B-753.
- (11) RE-ESTABLISH SURVEY MONUMENT PER PROJECT SPECIFICATIONS.
- (12) REMOVE EXISTING TREE, TREE STUMP, AND/OR TREE ROOTS AND CONSTRUCT 0.33" THICK PCC SIDEWALK PER CITY STD. PLAN NO. B-106, TO MATCH EXISTING.
- (13) REMOVE EXISTING TREE, TREE STUMP AND/OR TREE ROOTS. KEEP TREE WELL IN PLACE.
- (14) SAWCUT, REMOVE EXISTING MATERIAL AS NEEDED, AND EXTEND EXISTING TREE WELL 1 FT. ON BOTH SIDES.
- (15) ADJUST UTILITY BOX, VALVE, HANDHOLE, TO GRADE. CONTRACTOR TO COORDINATE WITH UTILITY OWNERS.
- (16) EXISTING CURB OPENING CATCH BASIN TO REMAIN. INSTALL BIO CLEAN CURB INLET FILTER INSERT WITH BYPASS FLOW (MODEL BC-CURB). CONTRACTOR SHALL MEASURE REQUIRED WIDTH IN THE FIELD.
- (17) REMOVE & REPLACE EXISTING MANHOLE COVER & FRAME/RING. THE CITY WILL SUPPLY THE NEW MATERIAL, TO BE PICKED-UP BY THE CONTRACTOR AT THE CITY YARD.



MATCHLINE - STA. 18+90 - SEE SHEET 4

**CHAPMAN AVENUE**

SCALE: 1"=40'



**B**  
SECTION B  
3

**PAVEMENT KEY**

- A.C. AT F.D.R. AREA
- A.C. AT MILL & OVERLAY AREA
- A.C. AT REMOVE & REPLACE AREA
- CONCRETE PAVEMENT
- LANDSCAPE AREA

**SPOT ELEVATION AND SLOPE SYMBOL:**

- (100) - DENOTES EXISTING ELEVATION, VERIFY-IN-FIELD
- 100 - DENOTES PROPOSED ELEVATION
- (S%) - DENOTES EXISTING SLOPE & FLOW DIRECTION, VERIFY-IN-FIELD
- ←S% - DENOTES PROPOSED SLOPE & FLOW DIRECTION

**AS-BUILT**



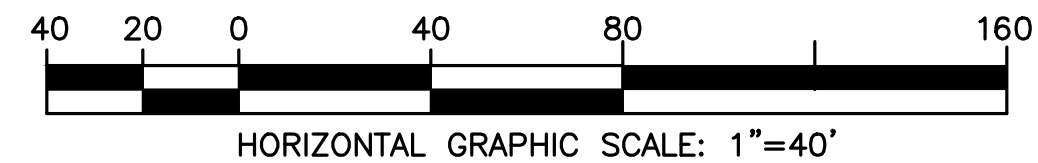
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REV.	DATE	DESCRIPTION	ISSUED BY	APP'D
1	AUG-2018	DESIGN CHANGE, ADDED, OR DELETED ITEM	MS	MU

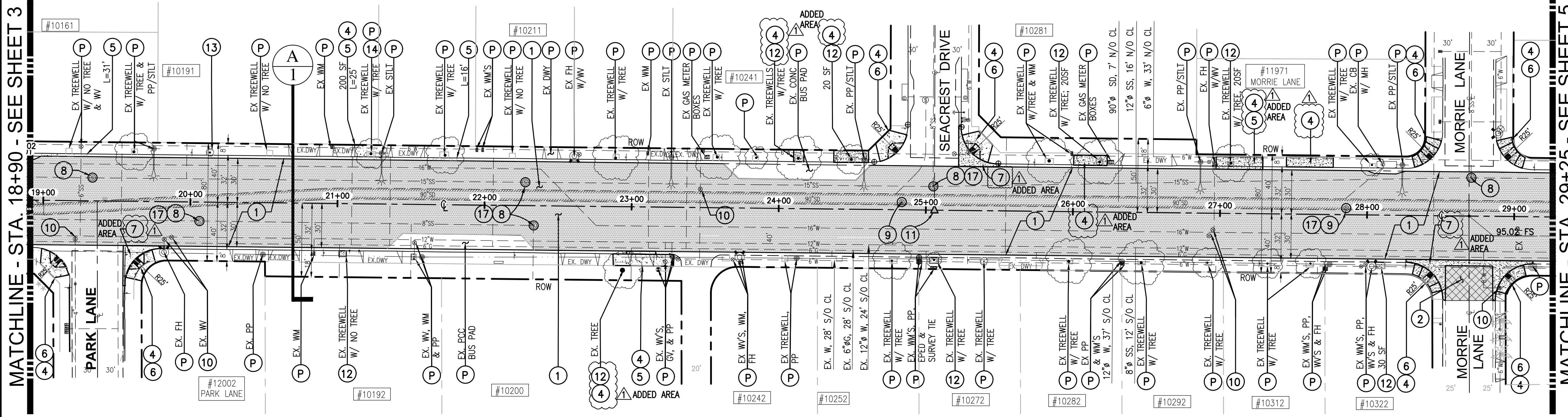
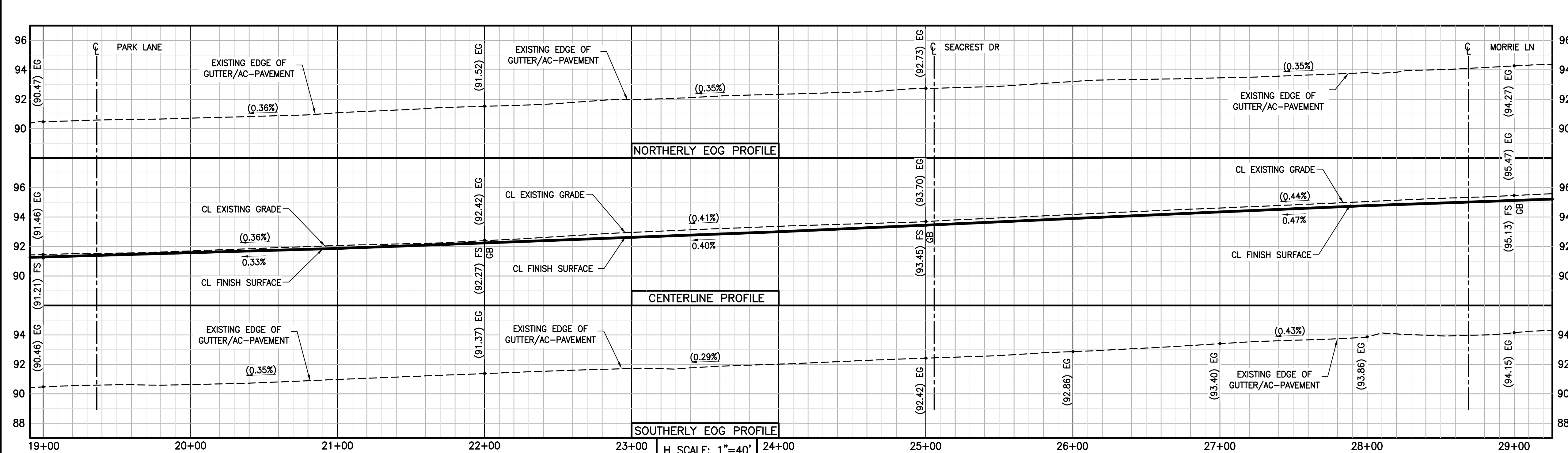


City of Garden Grove  
Department Of Public Works

STREET REHABILITATION  
**CHAPMAN AVENUE**  
FROM BROOKHURST ST. TO NELSON ST.

DRAWING NUMBER  
**A-1873**  
SHEET 3 OF 10





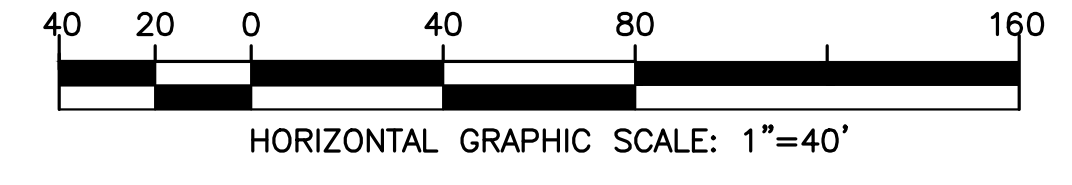
**CHAPMAN AVENUE**  
SCALE: 1"=40'

**CONSTRUCTION NOTES:**

- (P) PROTECT EXISTING IMPROVEMENT IN PLACE.
- (1) PULVERIZE AND MIX EXISTING AC/AB PER CROSS SECTIONS FOUND ON SHEETS 7 & 8. REMOVE AND DISPOSE OF EXCESS PULVERIZED MATERIAL. CONSTRUCT 0.17' ARHM SURFACE COURSE OVER 0.42' AC BASE COURSE OVER 0.90' CEMENT TREATED BASE (CEMENT CONTENT 4.3% TO 3.5%).
- (2) COLD MILL EXISTING AC PAVEMENT 0.17' UNIFORM DEPTH AND CONSTRUCT 0.17' ARHM SURFACE COURSE.
- (3) REMOVE AND DISPOSE OF EXISTING AC/AB PAVEMENT TO A TOTAL DEPTH OF 1.5' AND CONSTRUCT 0.17' ARHM SURFACE COURSE OVER 0.42' AC BASE COURSE OVER 0.9' AGGREGATE BASE, CLASS 2.
- (4) SAW CUT & REMOVE EXISTING DAMAGED SIDEWALK AND CONSTRUCT 0.33' THICK PCC SIDEWALK PER CITY STD. PLAN NO. B-106, TO MATCH EXISTING.
- (5) SAW CUT & REMOVE EXISTING DAMAGED CURB & GUTTER. CONSTRUCT NEW CONCRETE CURB AND GUTTER PER DETAIL 1/SHEET 2 AND PER CITY STD. PLAN NO. B-113, TYPE C-8. JOIN TO EXISTING ELEVATIONS TO ALLOW CONTINUOUS FLOW LINE.
- (6) SAW CUT, REMOVE EXISTING AND CONSTRUCT PCC CURB RAMP PER CALTRANS STD. PLAN AB8A. CASE TO BE DETERMINED BY THE CONTRACTOR AND SHALL FIT EXISTING CONDITION.
- (7) SAW CUT, REMOVE EXISTING AND CONSTRUCT PCC CROSS GUTTER PER CITY STD. PLAN NO. B-119, MATCH EXISTING.
- (8) ADJUST SEWER MANHOLE FRAME AND COVER TO NEW FINISHED GRADE PER CITY STD. PLANS S-100 & S-103.
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MATCHLINE - STA. 18+90 - SEE SHEET 3

MATCHLINE - STA. 29+25 - SEE SHEET 5



**NOTE TO CONTRACTOR:**  
APPROXIMATELY FROM STA 23+00 TO STA 35+00: TO ACHIEVE THE REQUIRED EXISTING A.C. TO BE RECYCLED/RECLAIMED FOR STRUCTURAL SECTION PER FULL DEPTH RECLAMATION (FDR) SPECIFICATION, THE CONTRACTOR SHALL PRESERVE, AND TEMPORARILY STORE A.C. MATERIAL TO DIFFERENT LOCATION; HAUL OUT EXCESS SUBGRADE/DIRT MATERIAL UNDERNEATH; THEN BRING BACK PRESERVED EXISTING A.C. TO THE SITE FOR THE RECLAMATION & C.T.B. PROCESS. VERIFY-IN-FIELD UPON COLDMILLING/EXCAVATION/PULVERIZATION. HAUL-OUT EXCESS RESTORED A.C. OR REUSE IT ON OTHER AREAS AS NEEDED, BEYOND THE SPECIFIED STATION ABOVE.

**PAVEMENT KEY**

	A.C. AT F.D.R. AREA
	A.C. AT MILL & OVERLAY AREA
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	CONCRETE PAVEMENT
	LANDSCAPE AREA

**SPOT ELEVATION AND SLOPE SYMBOL:**

(100)	- DENOTES EXISTING ELEVATION, VERIFY-IN-FIELD
100	- DENOTES PROPOSED ELEVATION
(SX)	- DENOTES EXISTING SLOPE & FLOW DIRECTION, VERIFY-IN-FIELD
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**AS-BUILT**

REVISIONS				
REV.	DATE	DESCRIPTION	ISSUED BY	APP'D
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City Of Garden Grove  
Department Of Public Works

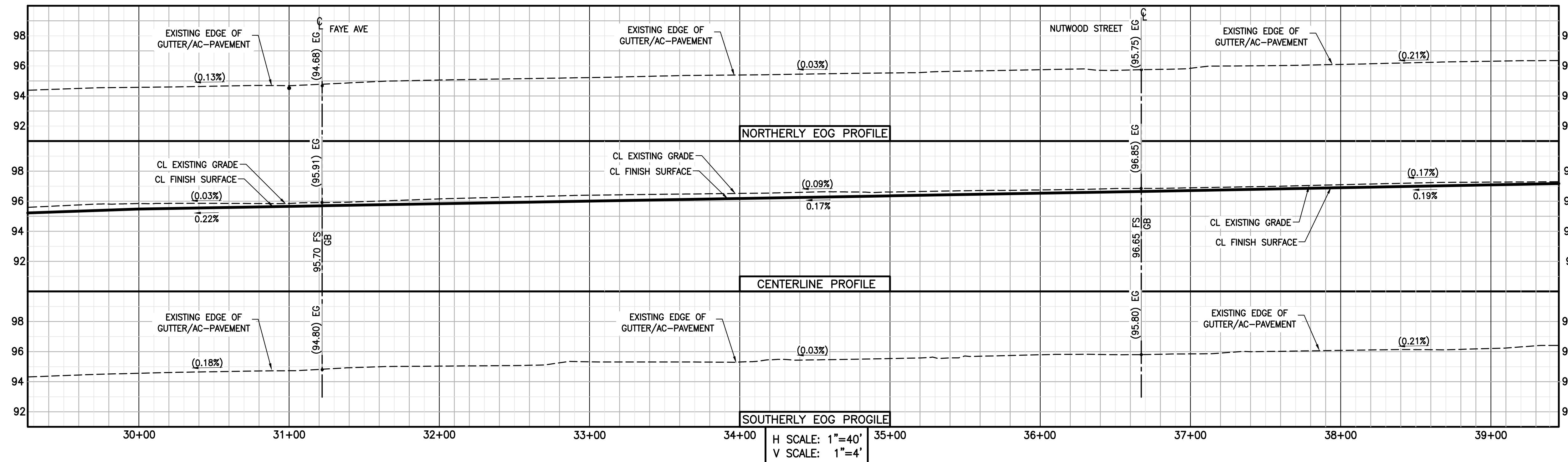
STREET REHABILITATION  
**CHAPMAN AVENUE**  
FROM BROOKHURST ST. TO NELSON ST.

DRAWING NUMBER  
**A-1873**  
SHEET 4 OF 10

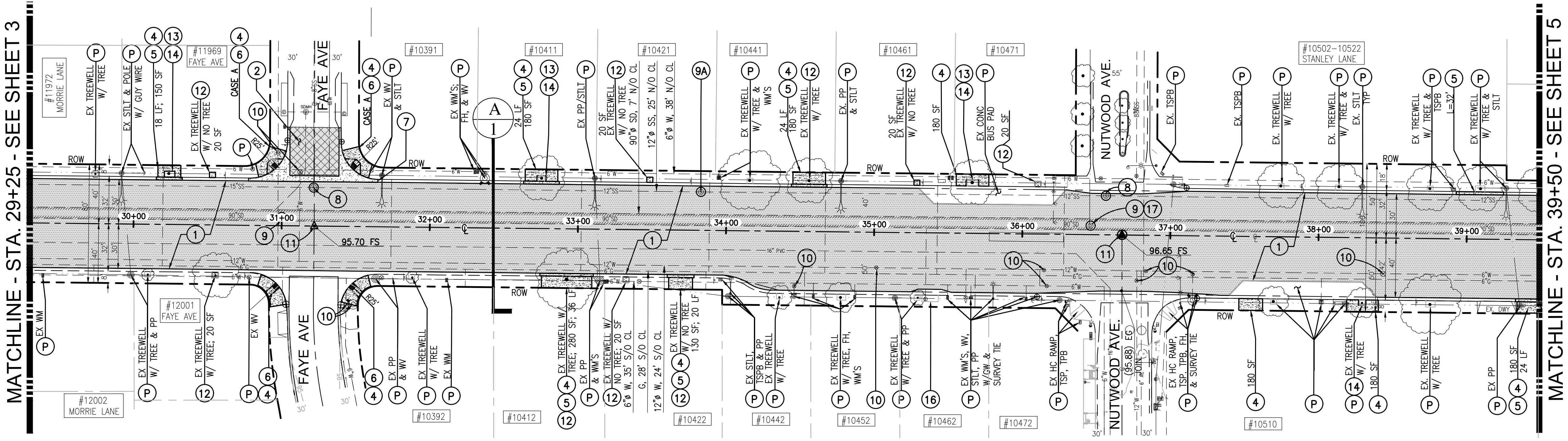


**CONSTRUCTION NOTES:**

- (P) PROTECT EXISTING IMPROVEMENT IN PLACE.
- (1) PULVERIZE AND MIX EXISTING AC/AB PER CROSS SECTIONS FOUND ON SHEETS 7 & 8. REMOVE AND DISPOSE OF EXCESS PULVERIZED MATERIAL. CONSTRUCT 0.17' ARHM SURFACE COURSE OVER 0.42' AC BASE COURSE OVER 0.90' CEMENT TREATED BASE (CEMENT CONTENT 4.3%, 3% TO 3.5%).
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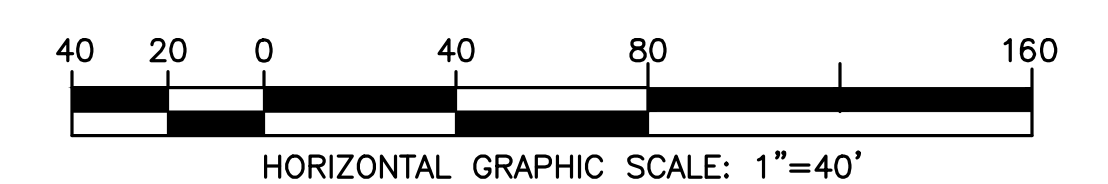


H SCALE: 1"=40'  
V SCALE: 1"=4'



**CHAPMAN AVENUE**

SCALE: 1"=40'



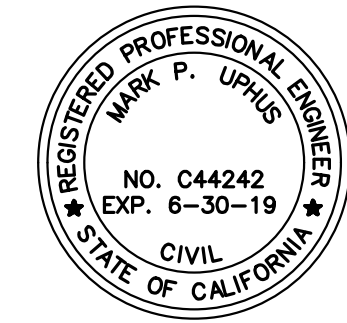
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**AS-BUILT**



REVISIONS				
REV.	DATE	DESCRIPTION	ISSUED BY	APP'D
1	AUG-2018	DESIGN CHANGE, ADDED, OR DELETED ITEM	MS	MU



City Of Garden Grove  
Department Of Public Works

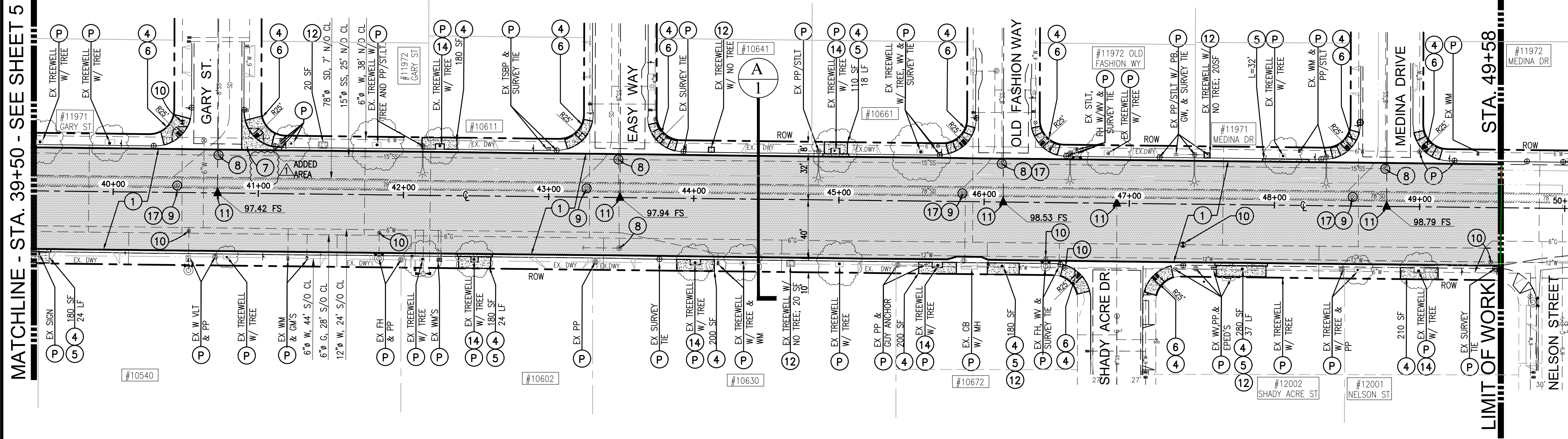
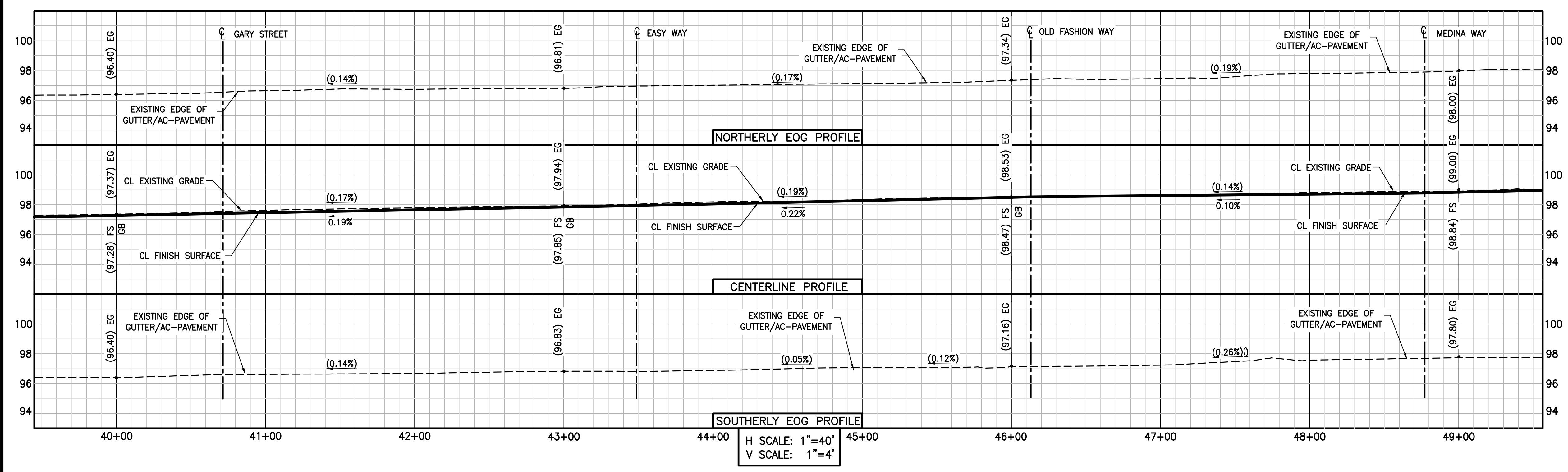
STREET REHABILITATION  
**CHAPMAN AVENUE**  
FROM BROOKHURST ST. TO NELSON ST.

DRAWING NUMBER  
**A-1873**  
SHEET 5 OF 10



MATCHLINE - STA. 39+50 - SEE SHEET 5

LIMIT OF WORK STA. 49+58



**CHAPMAN AVENUE**  
SCALE: 1"=40'

**CONSTRUCTION NOTES:**

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**SPOT ELEVATION AND SLOPE SYMBOL:**

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100	- DENOTES PROPOSED ELEVATION
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**AS-BUILT**

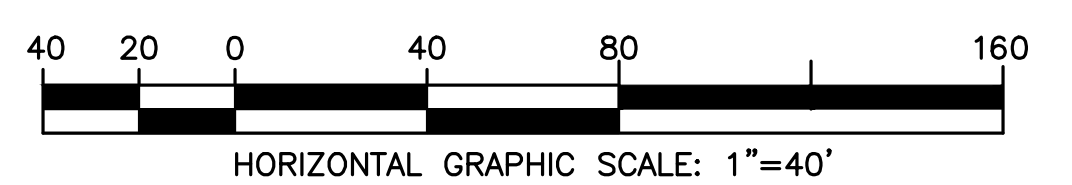
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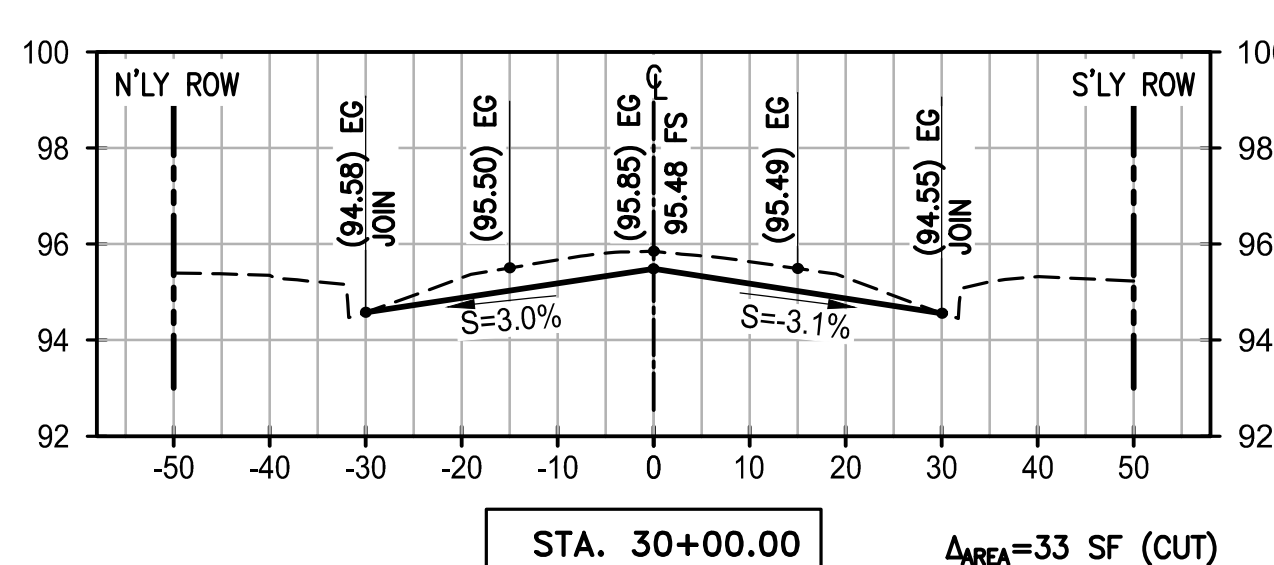
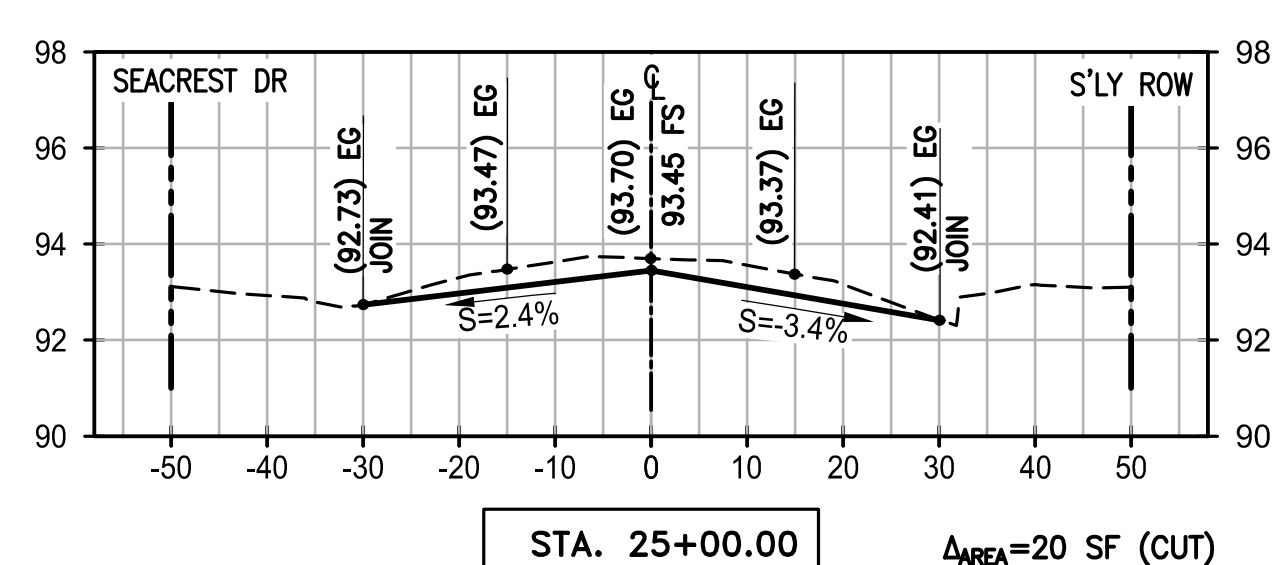
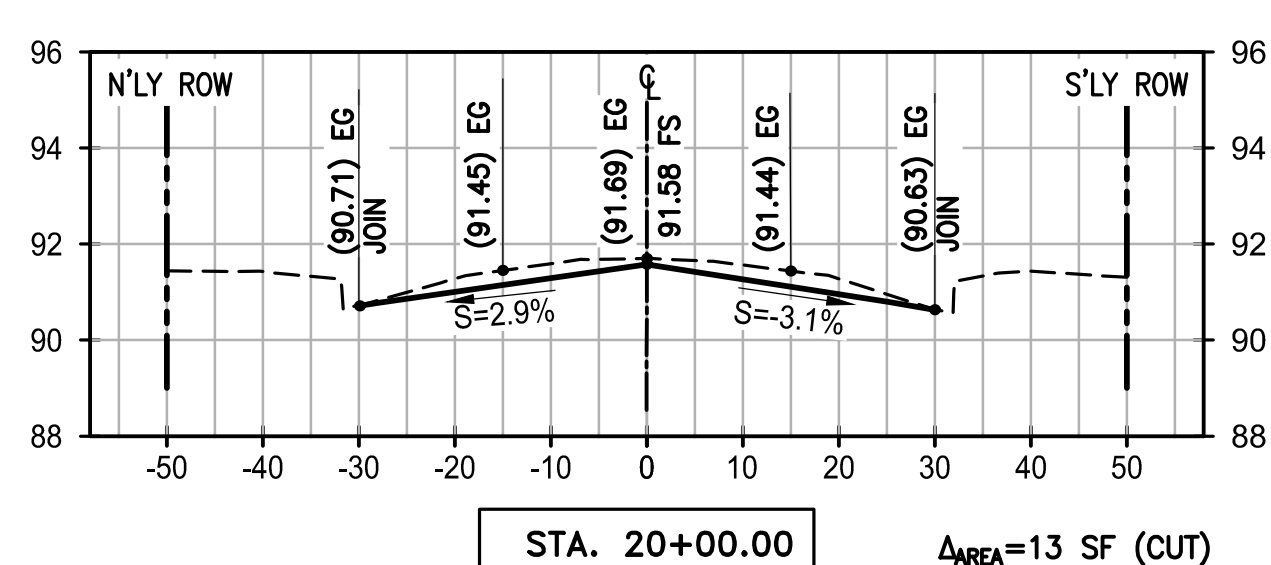
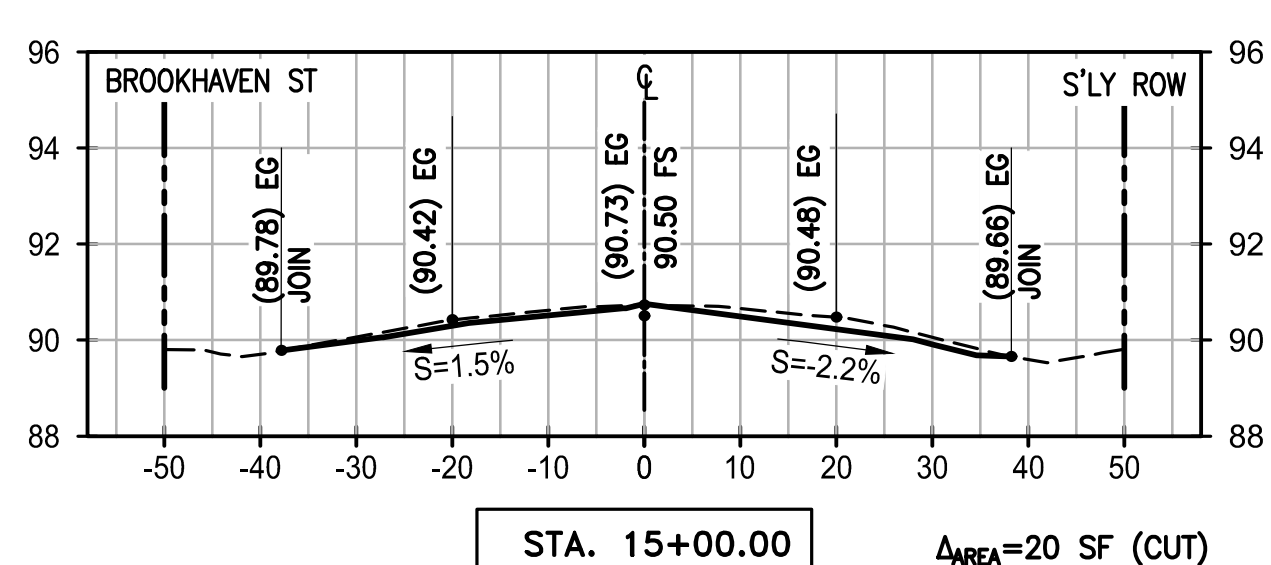
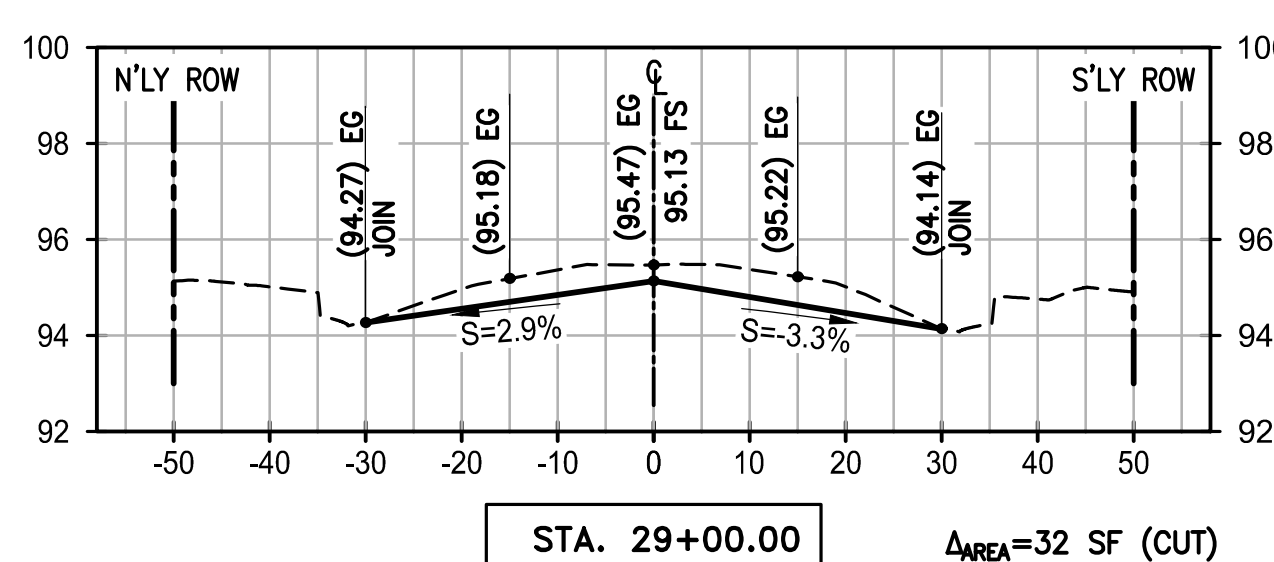
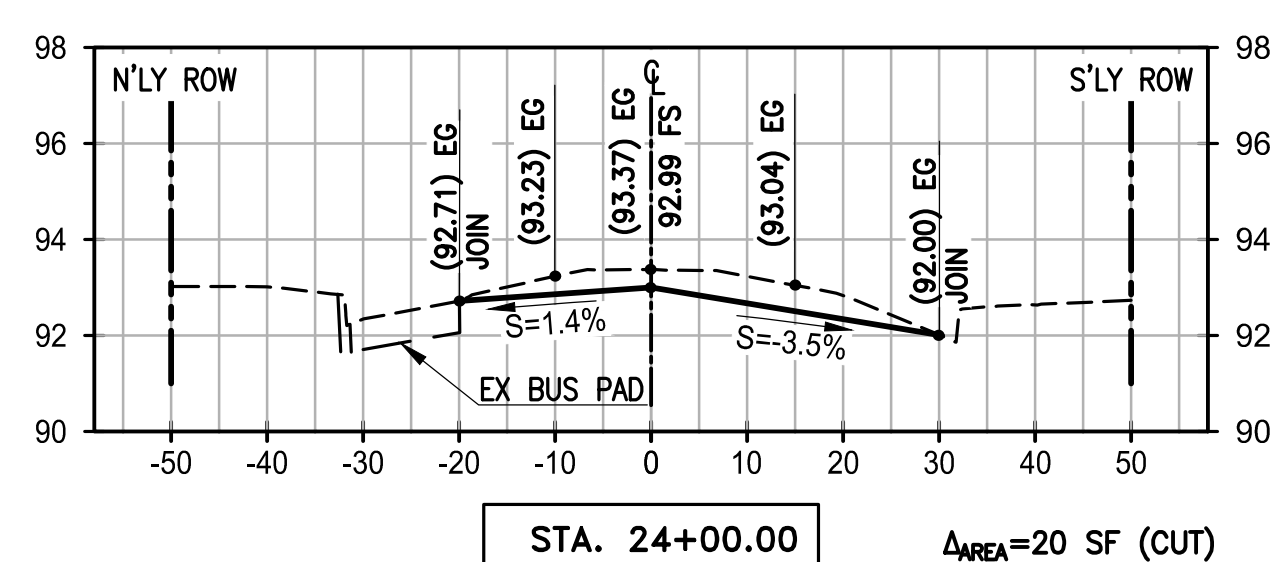
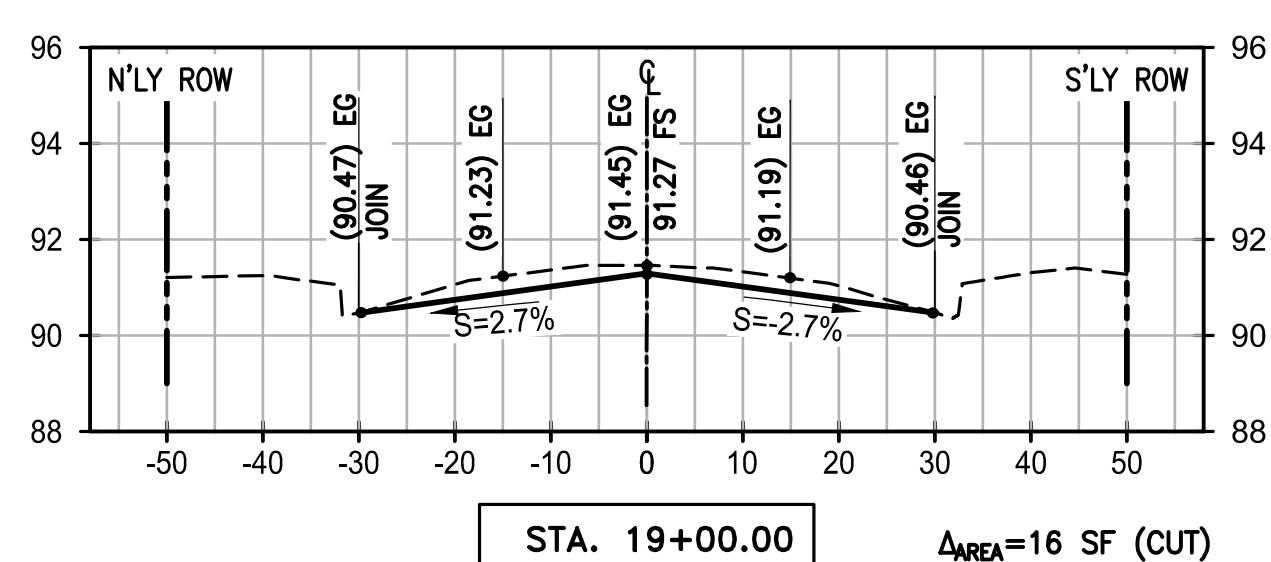
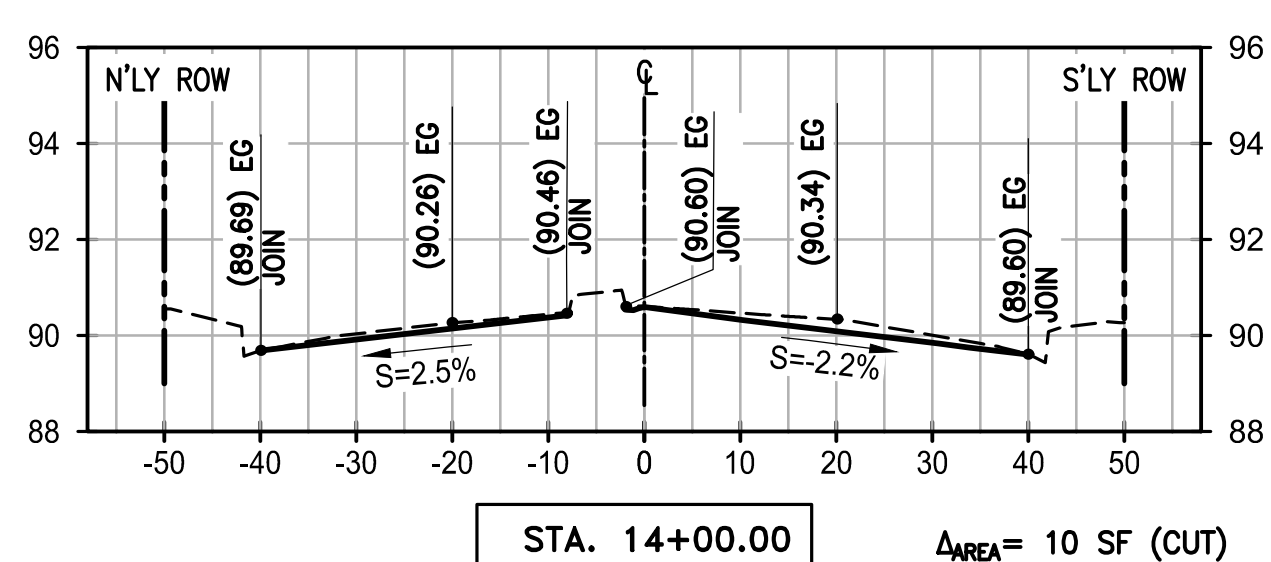
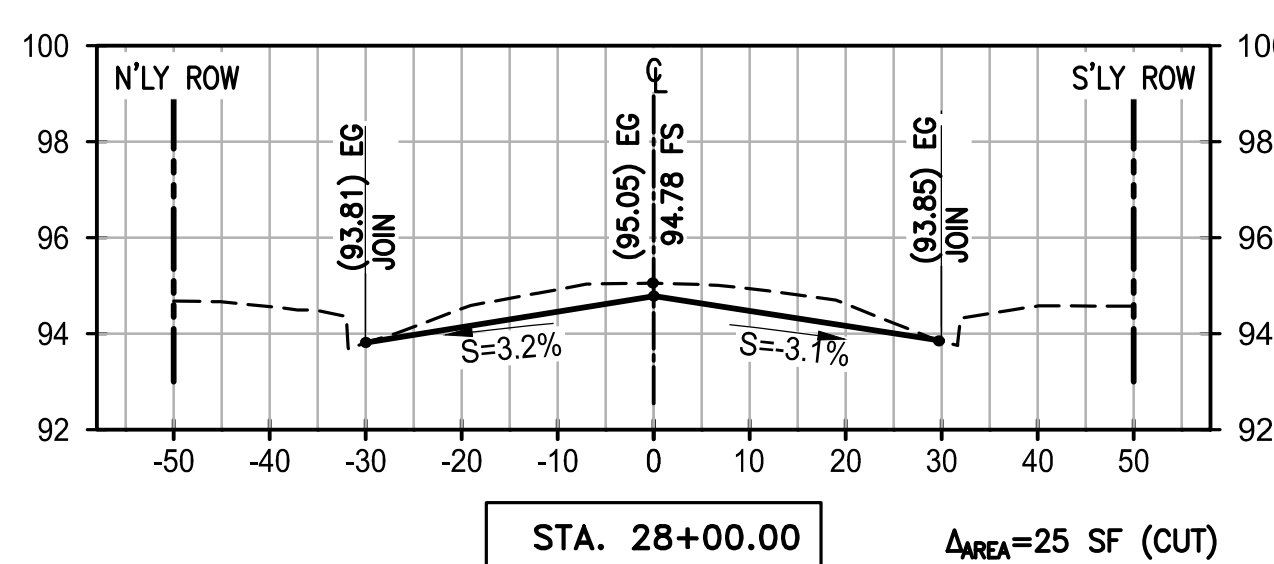
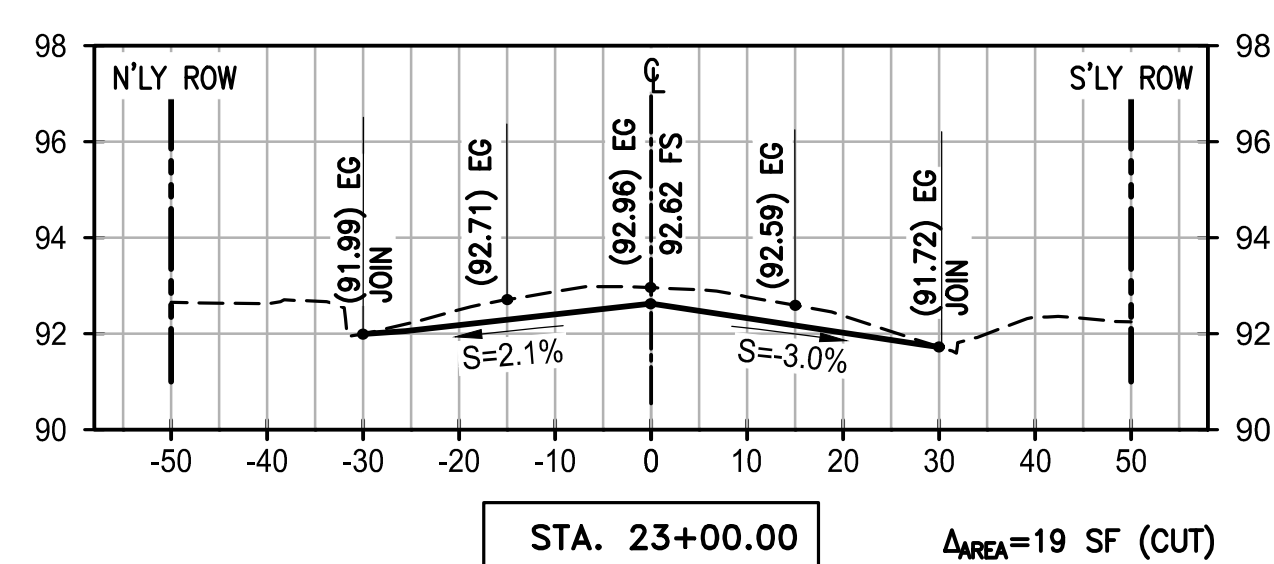
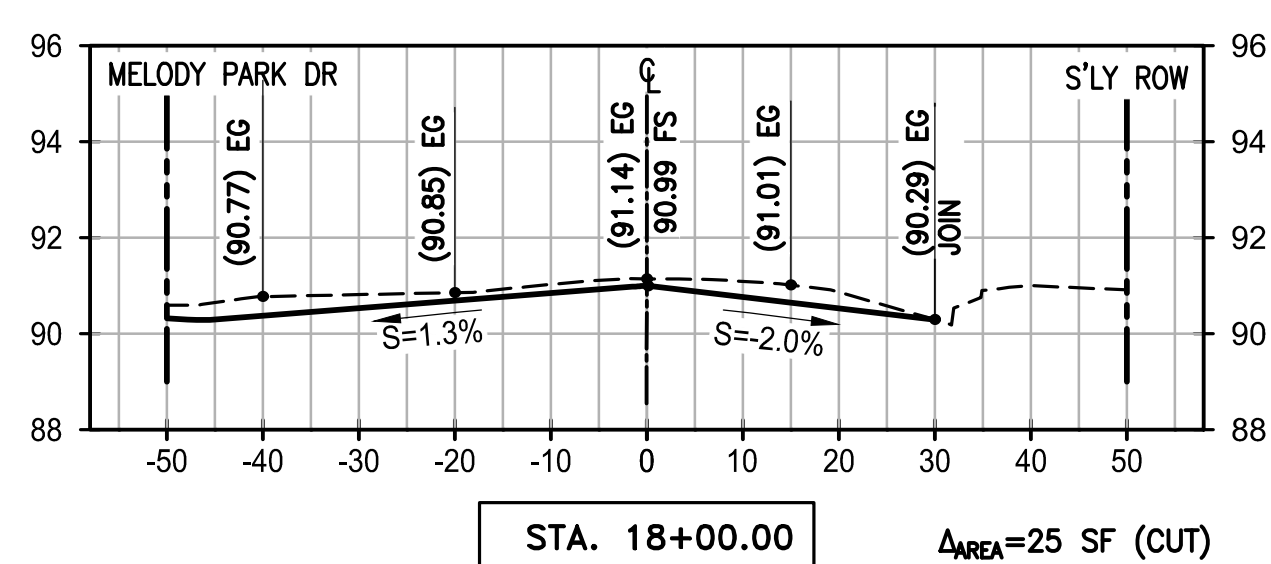
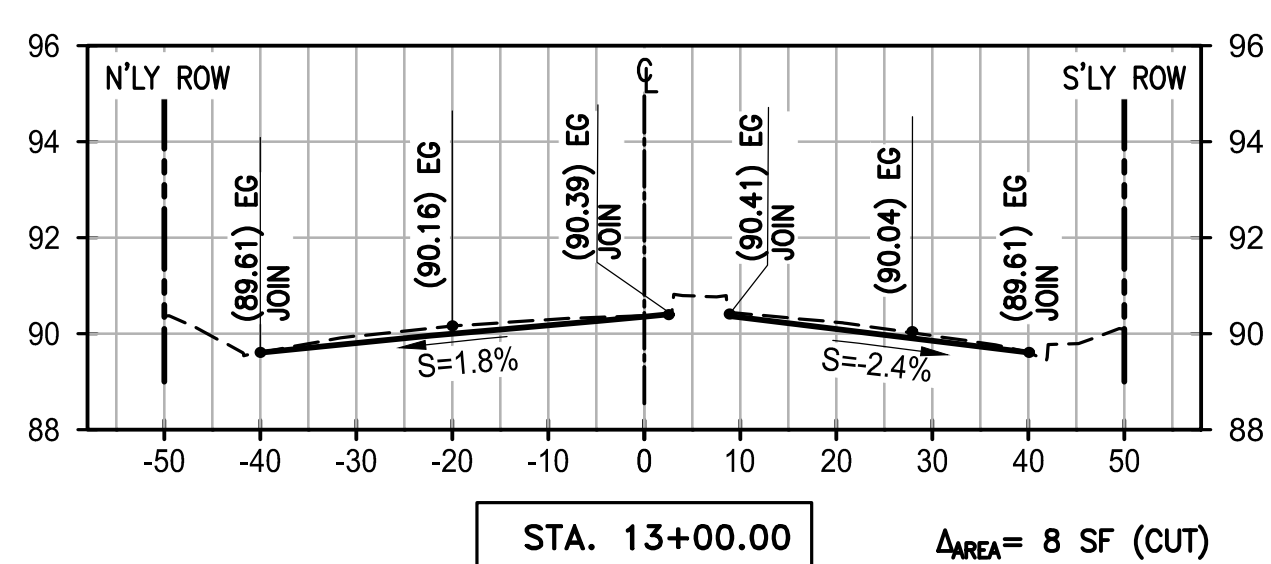
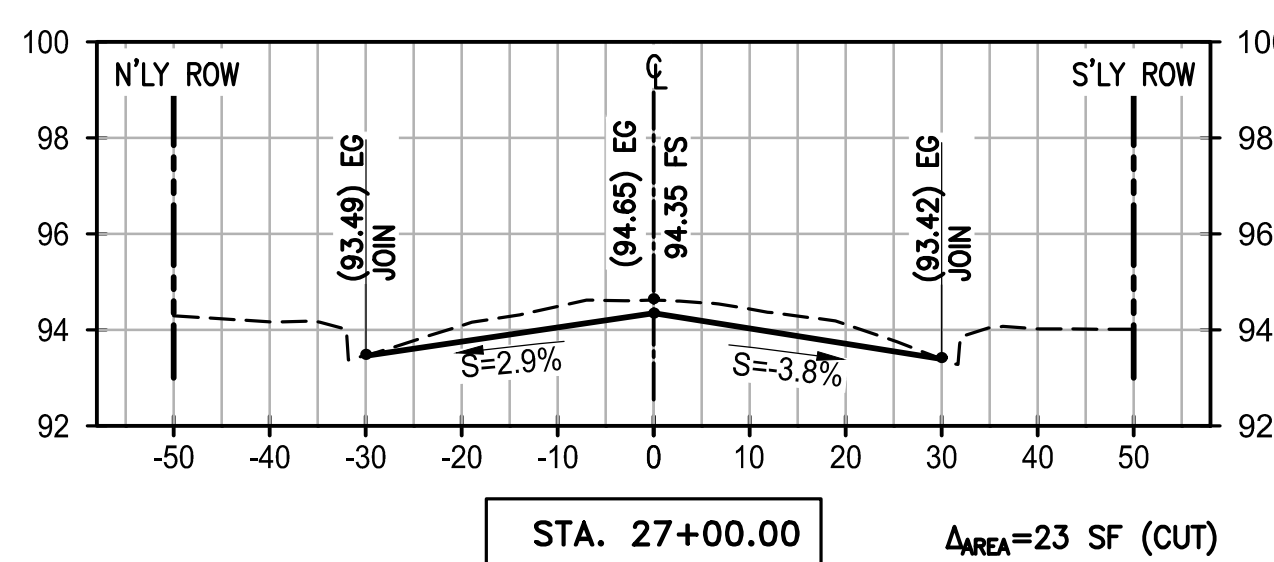
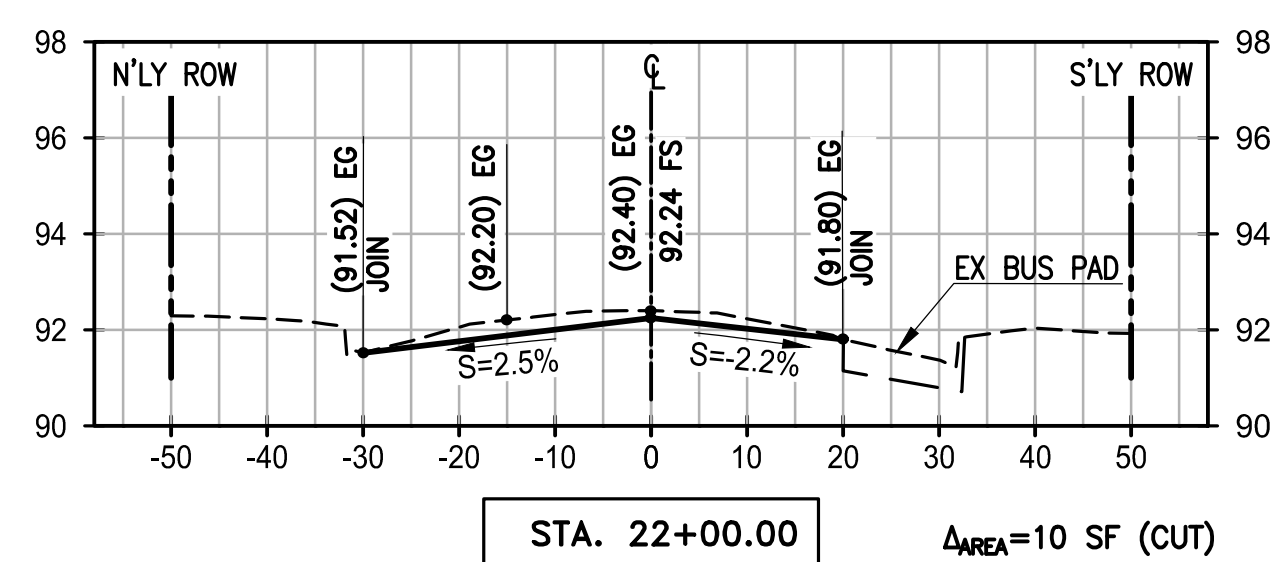
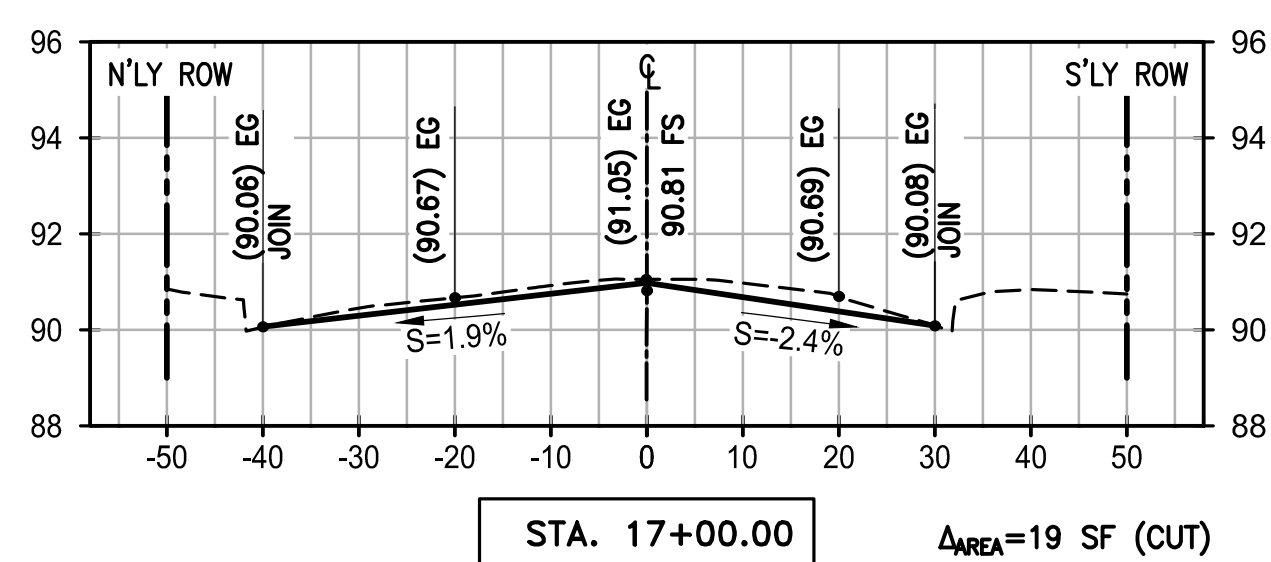
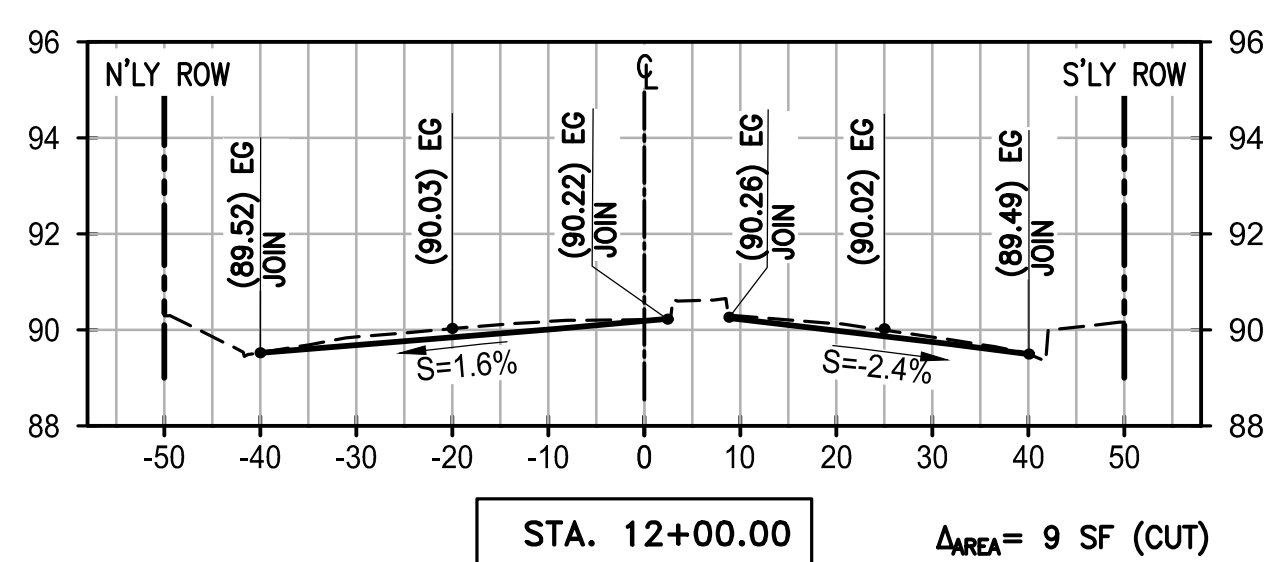
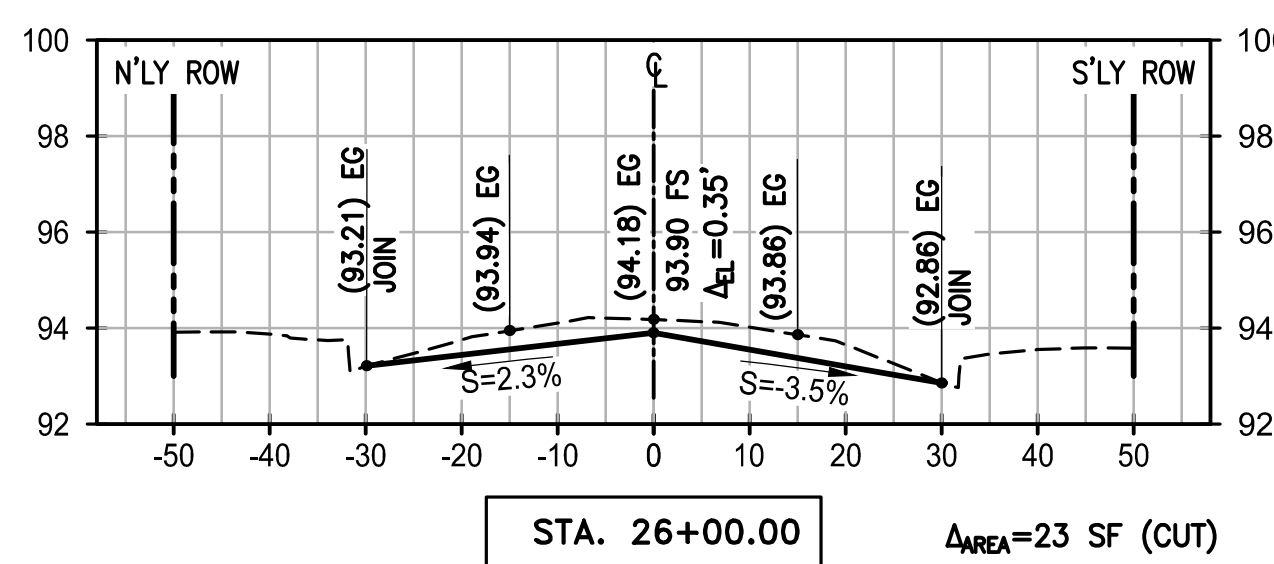
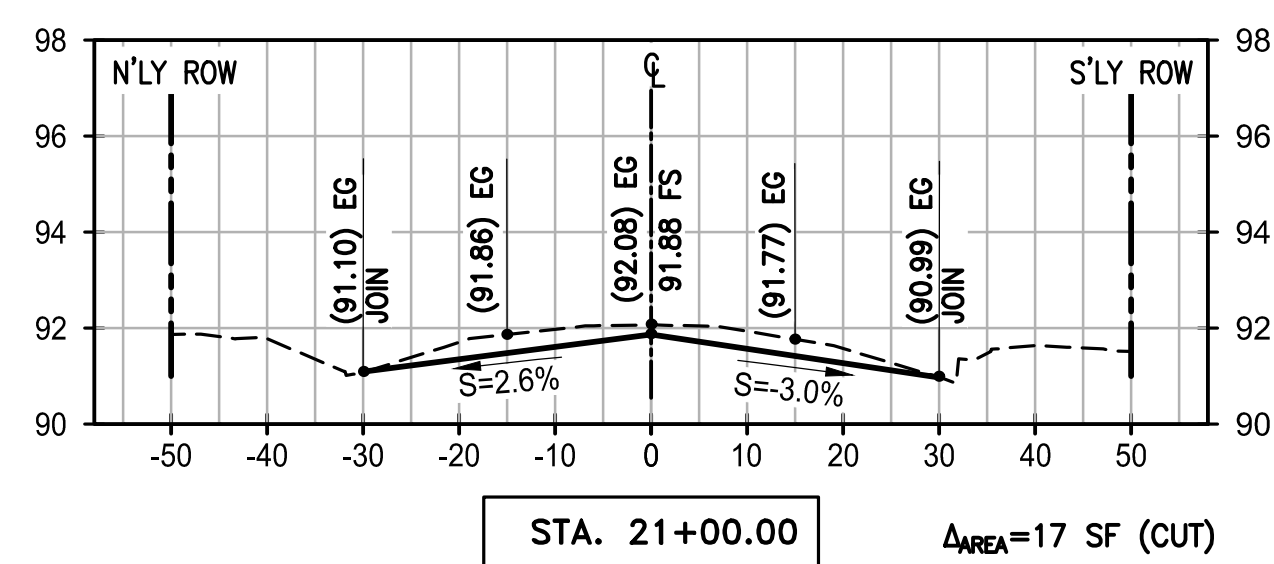
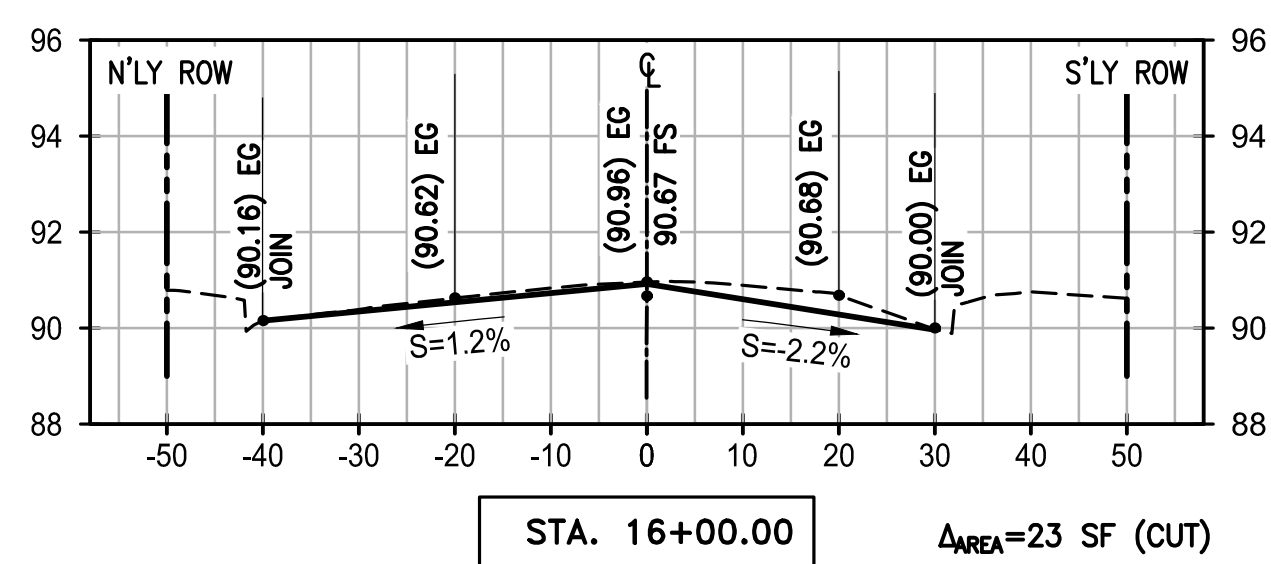
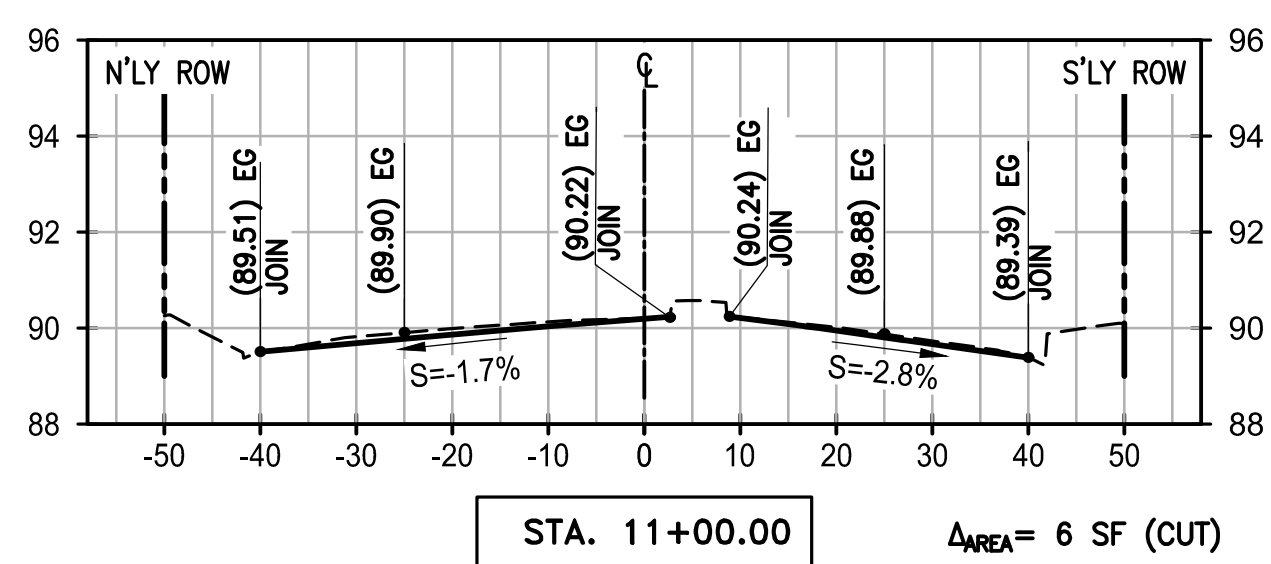
**G** Garden Grove  
 City Of Garden Grove  
 Department Of Public Works

STREET REHABILITATION  
**CHAPMAN AVENUE**  
 FROM BROOKHURST ST. TO NELSON ST.

DRAWING NUMBER  
**A-1873**  
 SHEET 6 OF 10







NOTES TO CONTRACTOR:

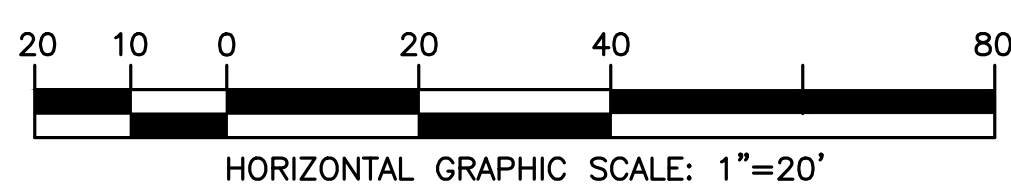
1. THE DIFFERENCE IN AREA FOR EXISTING VS. PROPOSED GRADE SHOWN HEREON IS FOR REFERENCE ONLY, AND SHALL NOT BE THE BASIS OF CONTRACTOR'S BID ESTIMATE. THE CONTRACTOR IS RESPONSIBLE TO COMPUTE FOR HIS OWN EARTHWORK QUANTITIES.

2. APPROXIMATELY FROM STA 23+00 TO STA 35+00: TO ACHIEVE THE REQUIRED EXISTING A.C. TO BE RECYCLED/RECLAIMED FOR STRUCTURAL SECTION PER FULL DEPTH RECLAMATION (FDR) SPECIFICATION, THE CONTRACTOR SHALL PRESERVE, AND TEMPORARILY STORE A.C. MATERIAL TO DIFFERENT LOCATION, HAUL OUT EXCESS SUBGRADE/DIRT MATERIAL UNDERNEATH; THEN BRING BACK PRESERVED EXISTING A.C. TO THE SITE FOR THE RECLAMATION & C.T.B. PROCESS. VERIFY-IN-FIELD UPON COLDMILLING/EXCAVATION/PULVERIZATION. HAUL-OUT EXCESS RESTORED A.C. OR REUSE IT ON OTHER AREAS AS NEEDED, BEYOND THE SPECIFIED STATION ABOVE.

LEGEND:

FINISH GRADE	—————
EXISTING GRADE	- - - - -
PROPOSED ELEV.	90.00
EXISTING ELEV.	(90.00)

DESIGN CROSS SECTIONS  
ALONG CHAPMAN AVENUE  
SCALE: 1"=20' HOR., 1"=4' VERT.



AS-BUILT

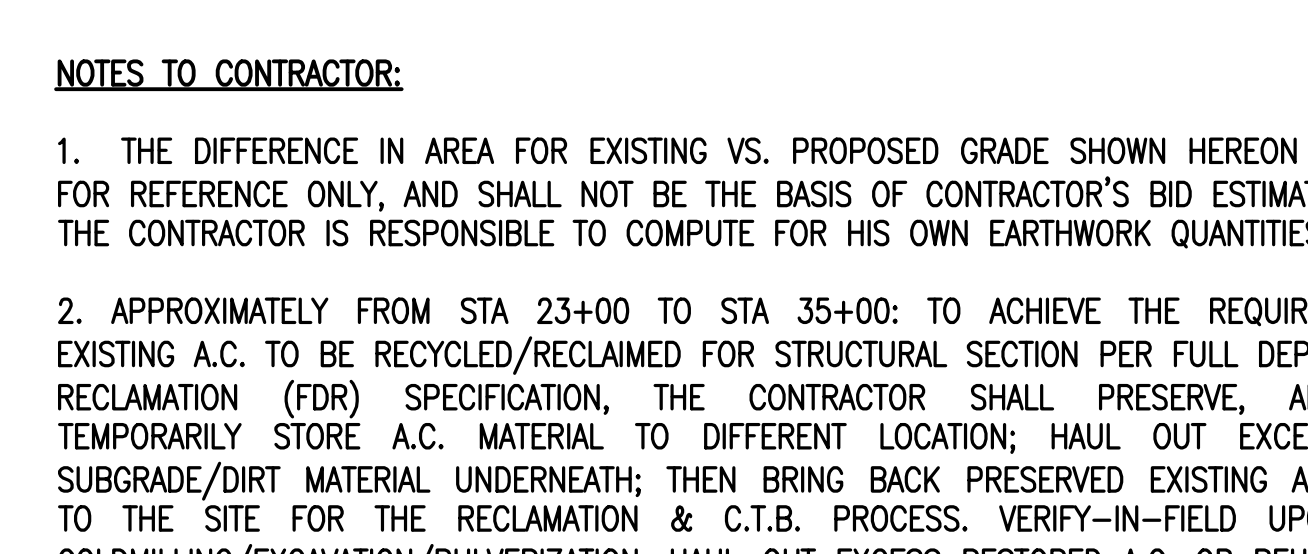
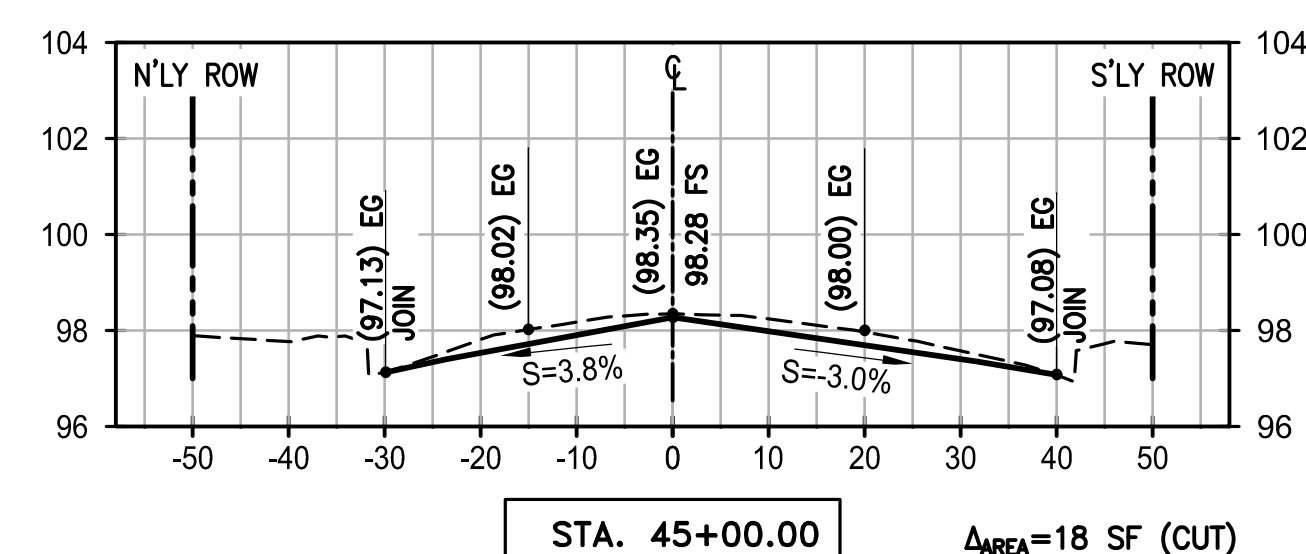
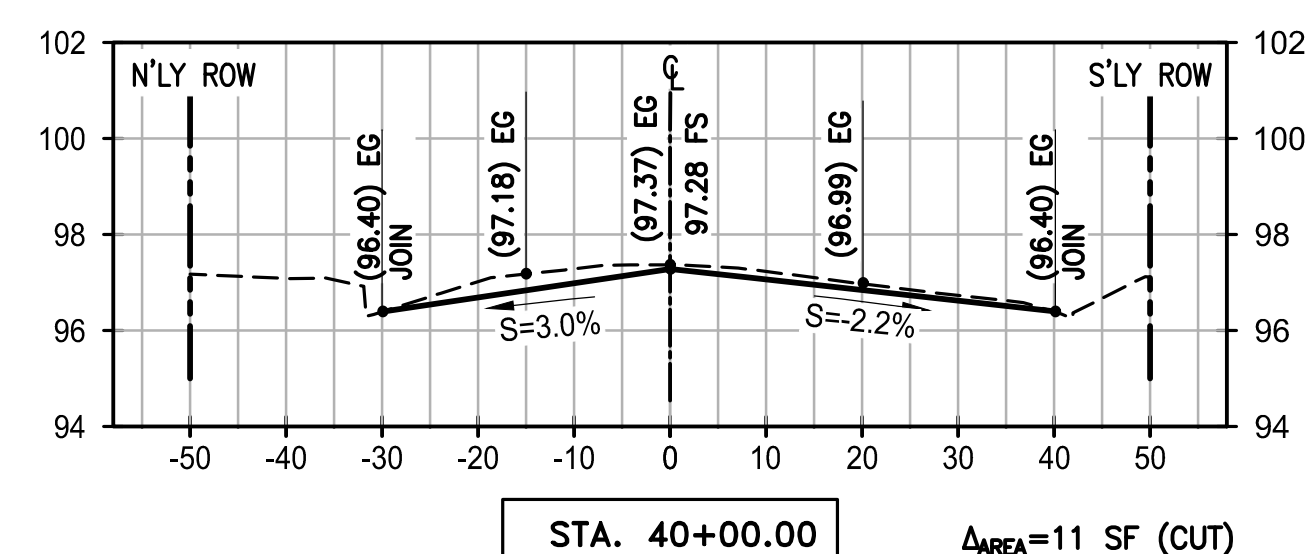
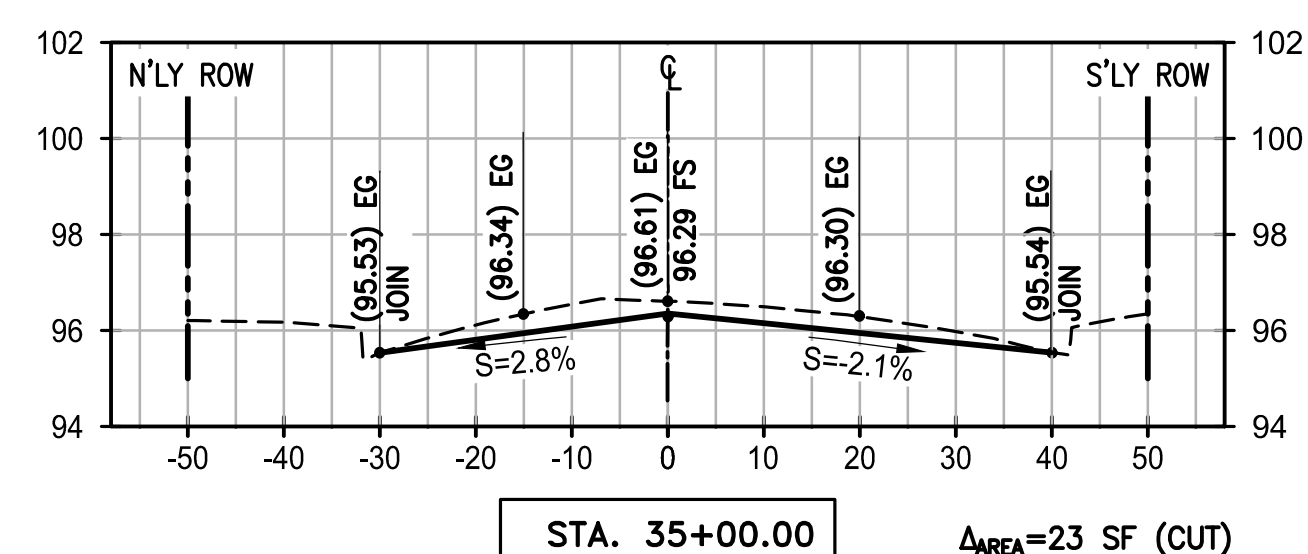
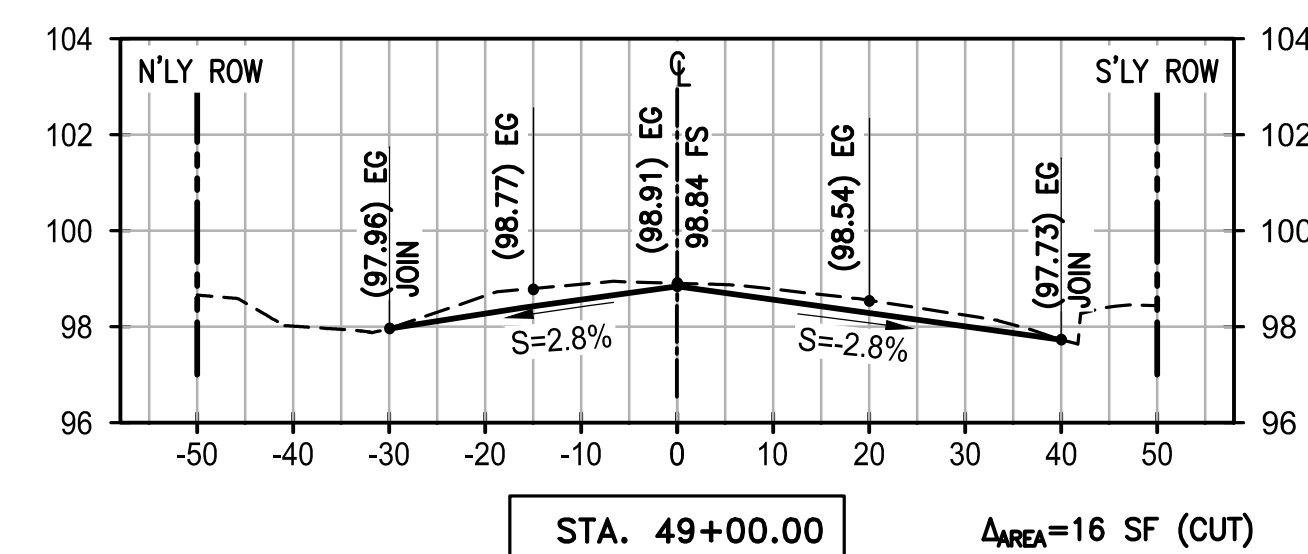
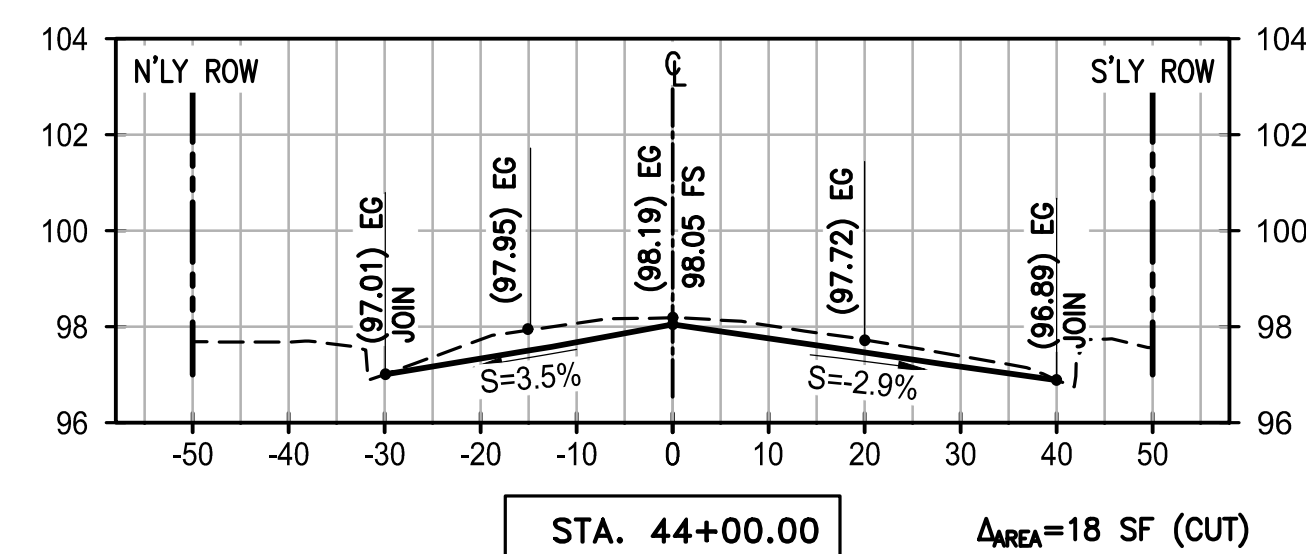
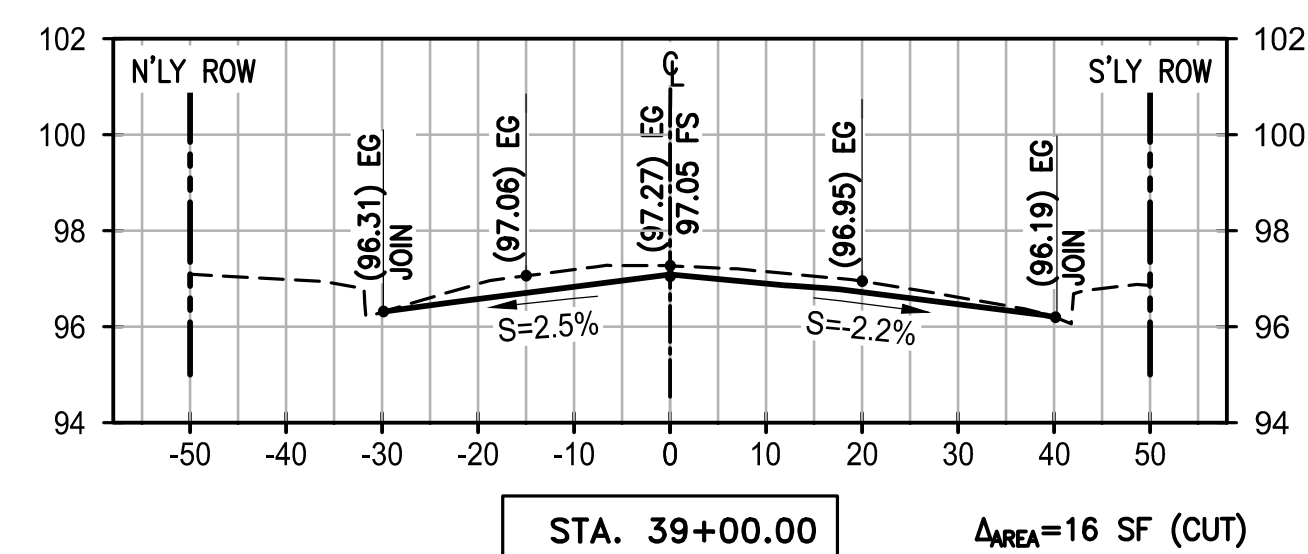
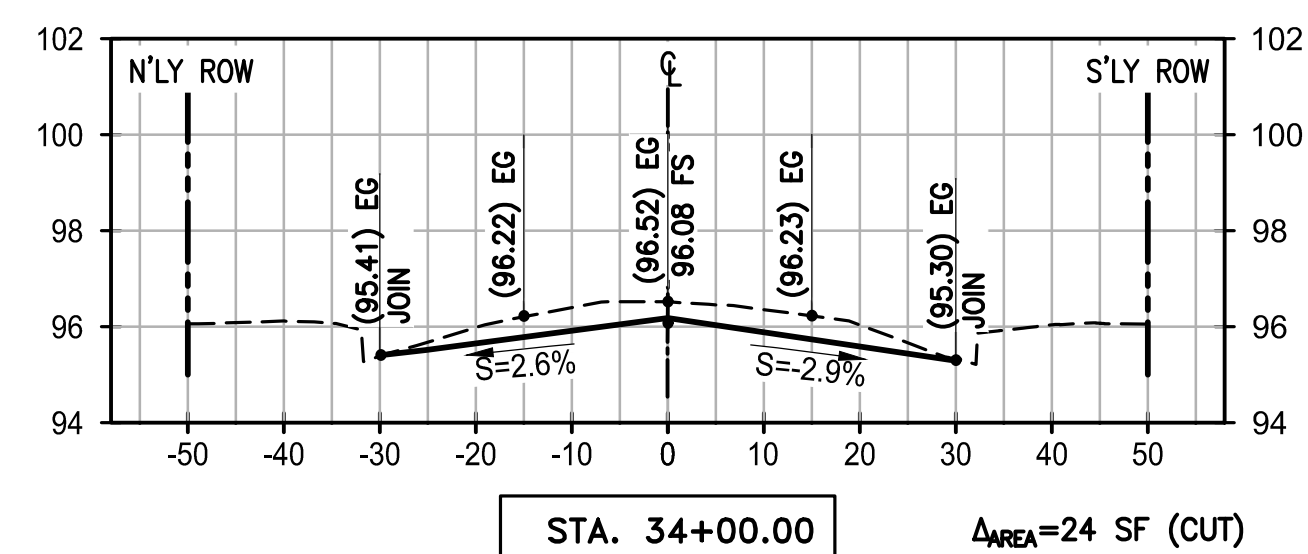
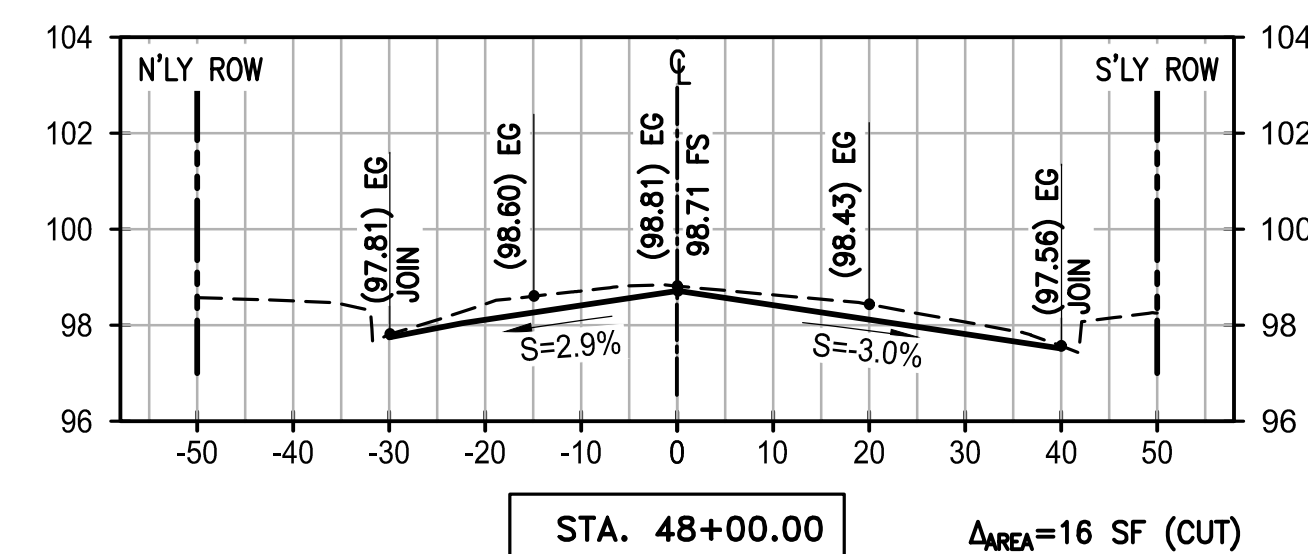
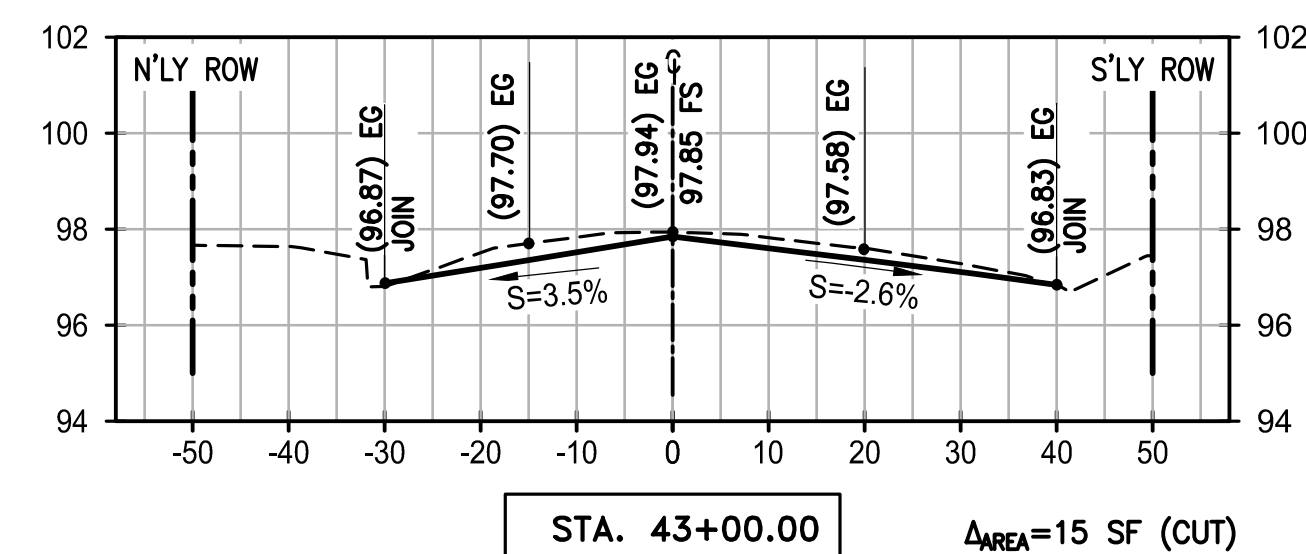
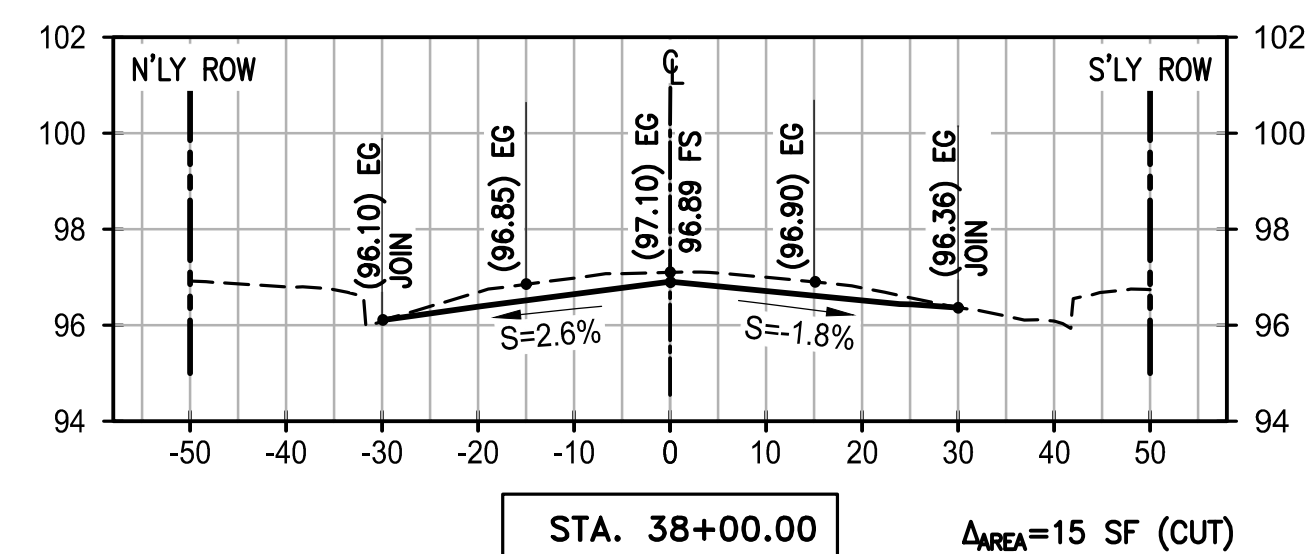
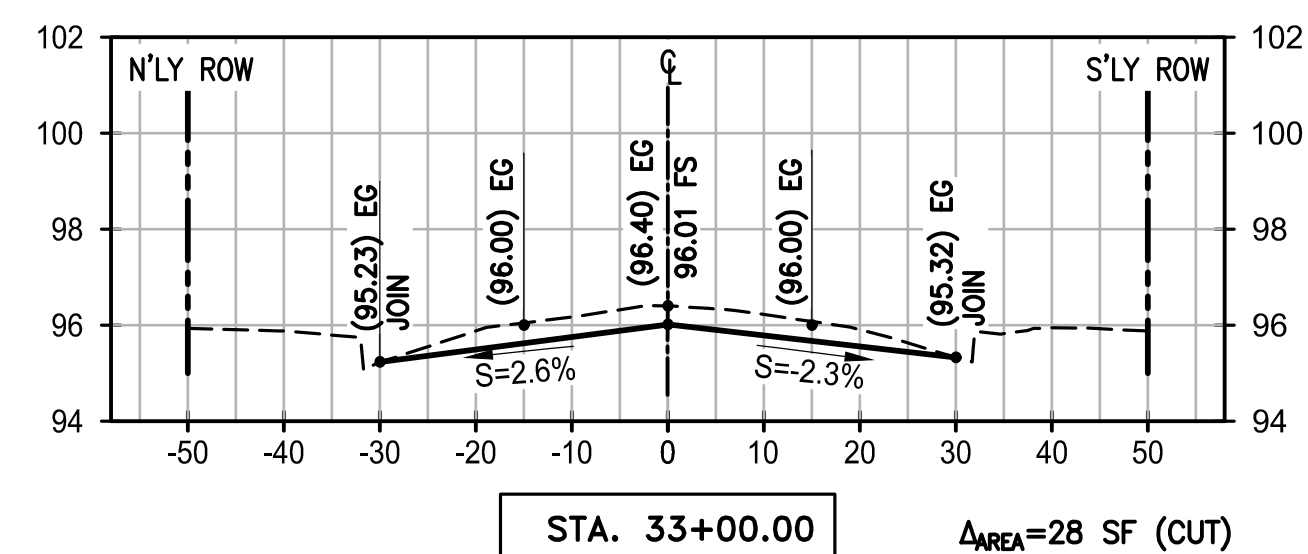
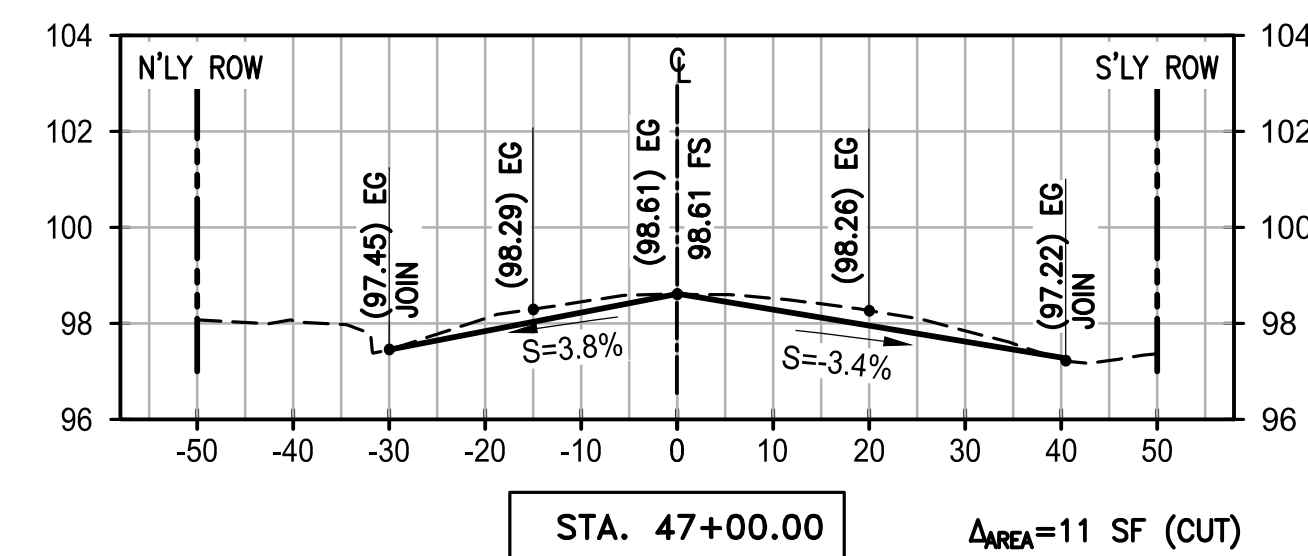
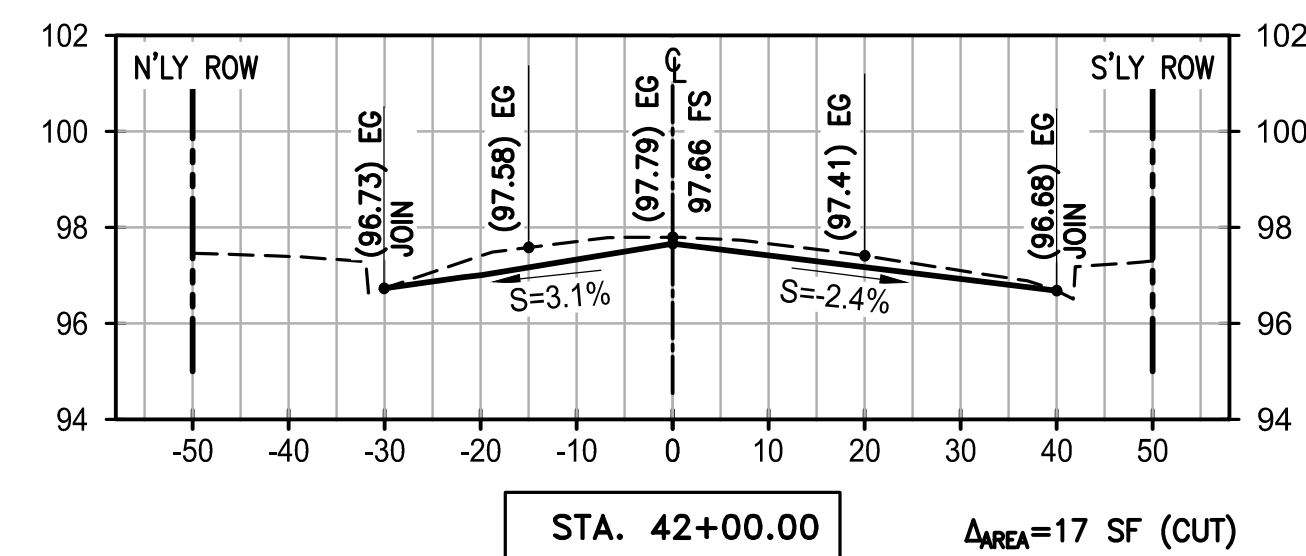
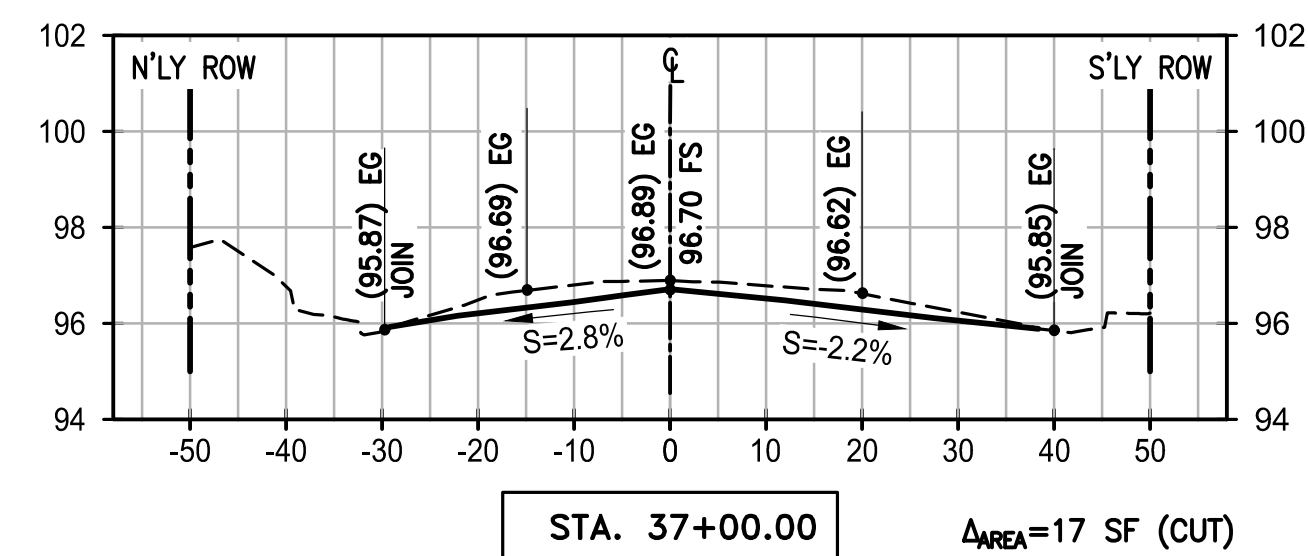
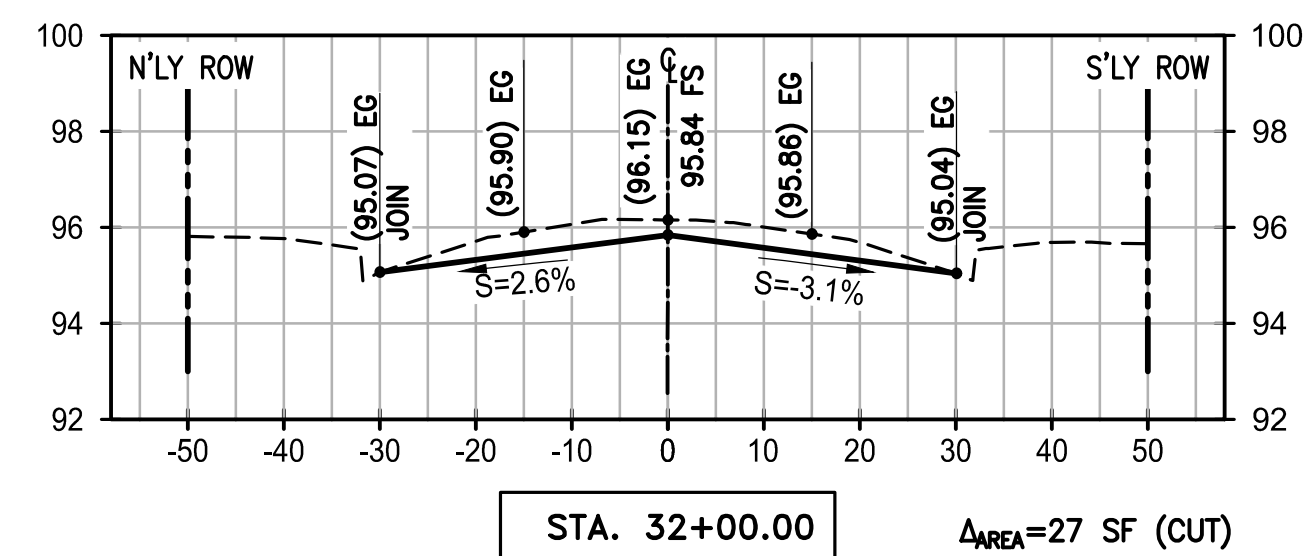
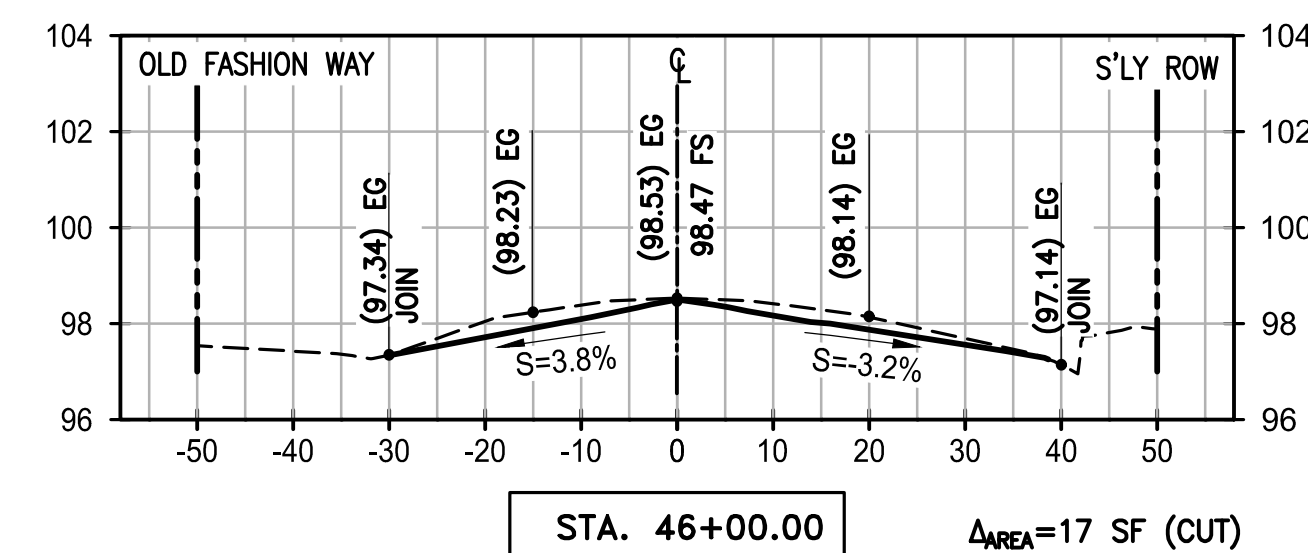
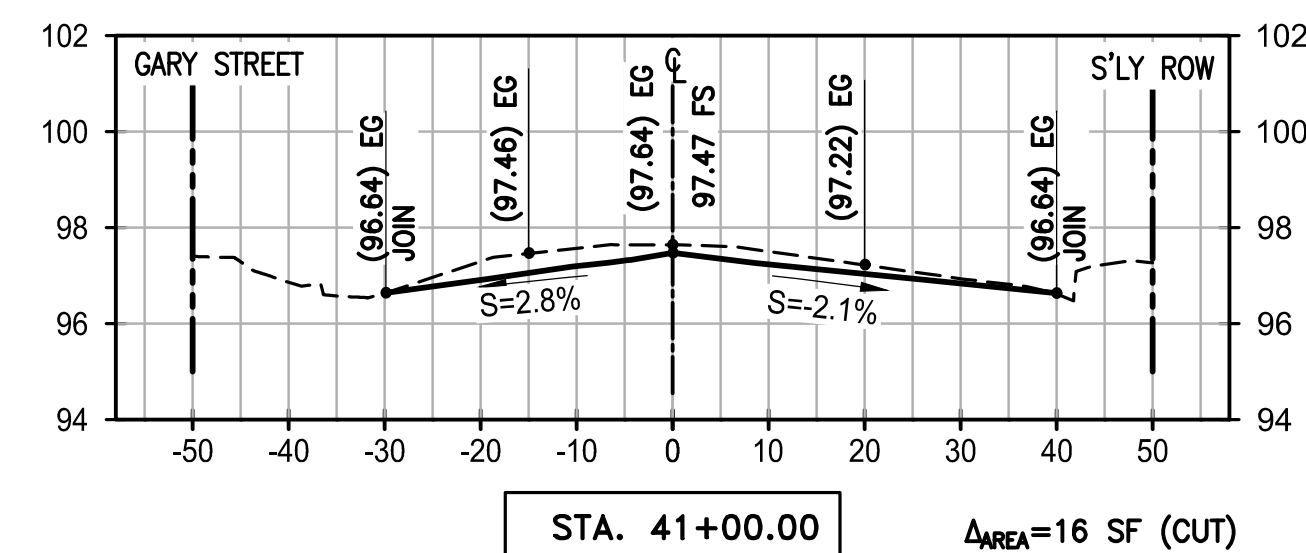
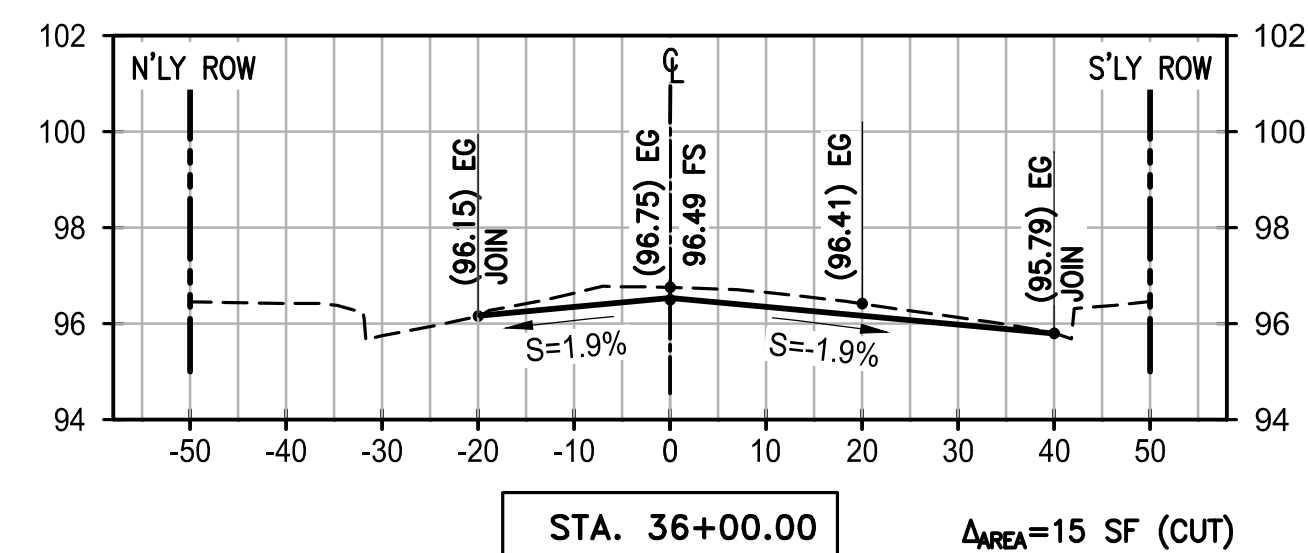
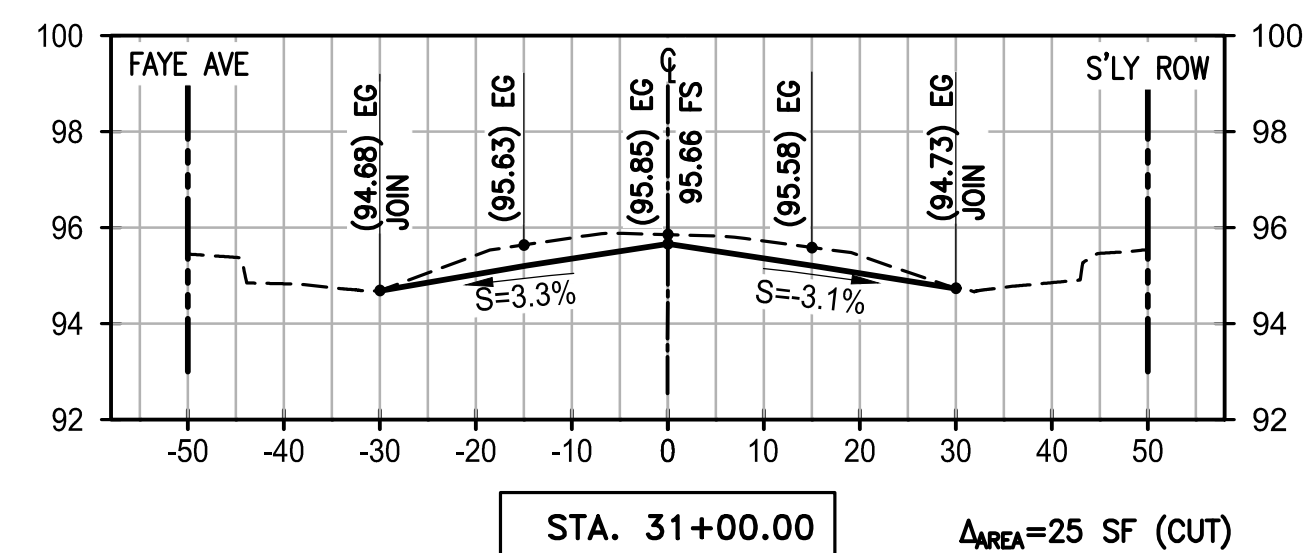
REVISIONS				
REV.	DATE	DESCRIPTION	ISSUED BY	APP'D
1	AUG-2018	DESIGN CHANGE, ADDED, OR DELETED ITEM	MS	MU



City Of Garden Grove  
Department Of Public Works

STREET REHABILITATION  
CHAPMAN AVENUE  
FROM BROOKHURST ST. TO NELSON ST.

DRAWING NUMBER  
**A-1873**  
SHEET 7 OF 10

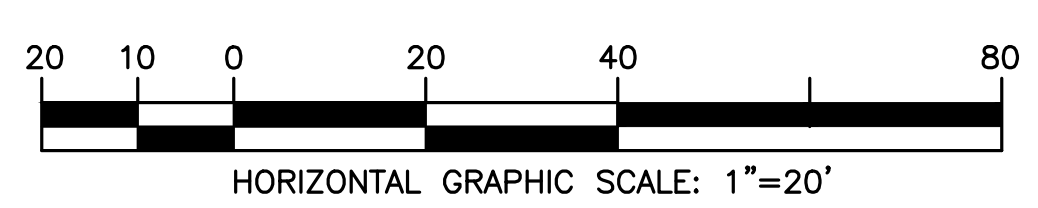


- NOTES TO CONTRACTOR:**
1. THE DIFFERENCE IN AREA FOR EXISTING VS. PROPOSED GRADE SHOWN HEREON IS FOR REFERENCE ONLY, AND SHALL NOT BE THE BASIS OF CONTRACTOR'S BID ESTIMATE. THE CONTRACTOR IS RESPONSIBLE TO COMPUTE FOR HIS OWN EARTHWORK QUANTITIES.
  2. APPROXIMATELY FROM STA 23+00 TO STA 35+00: TO ACHIEVE THE REQUIRED EXISTING A.C. TO BE RECYCLED/RECLAIMED FOR STRUCTURAL SECTION PER FULL DEPTH RECLAMATION (FDR) SPECIFICATION, THE CONTRACTOR SHALL PRESERVE, AND TEMPORARILY STORE A.C. MATERIAL TO DIFFERENT LOCATION; HAUL OUT EXCESS SUBGRADE/DIRT MATERIAL UNDERNEATH; THEN BRING BACK PRESERVED EXISTING A.C. TO THE SITE FOR THE RECLAMATION & C.T.B. PROCESS. VERIFY-IN-FIELD UPON COLDMILLING/EXCAVATION/PULVERIZATION. HAUL-OUT EXCESS RESTORED A.C. OR REUSE IT ON OTHER AREAS AS NEEDED, BEYOND THE SPECIFIED STATION ABOVE.

**LEGEND:**

FINISH GRADE	—————
EXISTING GRADE	- - - - -
PROPOSED ELEV.	90.00
EXISTING ELEV.	(90.00)

**DESIGN CROSS SECTIONS  
ALONG CHAPMAN AVENUE**  
SCALE: 1"=20' HOR., 1"=4' VERT.



**AS-BUILT**

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STREET REHABILITATION  
**CHAPMAN AVENUE**  
FROM BROOKHURST ST. TO NELSON ST.

DRAWING NUMBER  
**A-1873**  
SHEET 8 OF 10



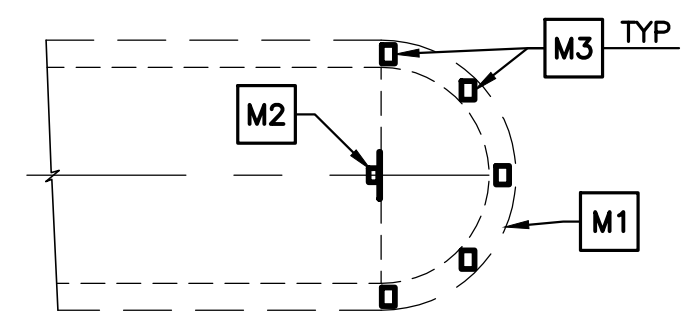
**STRIPING NOTES:**

ALL STRIPING AND SIGNAGE SHALL CONFORM TO THE CA MUTCD, LATEST EDITION AND ALL STRIPING SHALL BE THERMOPLASTIC WITH 2 LAYERS OF GLASS BEADS PER THE SPECIFICATIONS.

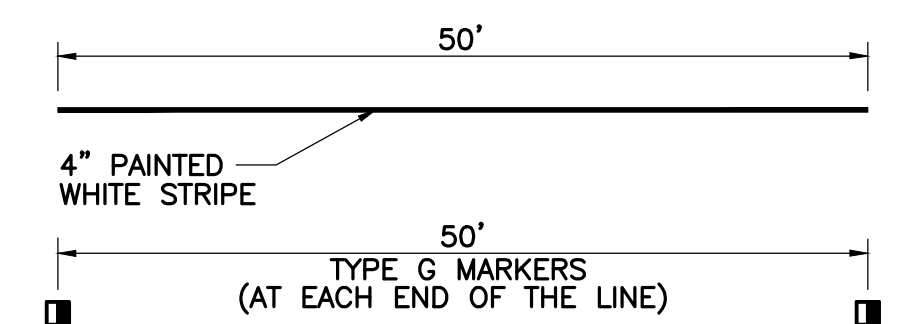
- P EXISTING, PROTECT IN PLACE.
- 1 INSTALL THERMOPLASTIC PAVEMENT LEGEND OR ARROW AS SHOWN PER CALTRAN'S STD. PLAN No. A24A & A24D.
- 2 INSTALL THERMOPLASTIC 12" WHITE LINE PER CALTRAN'S STD PLAN no. A24E.
- 3 INSTALL 4" DASHED WHITE LINE WITH TYPE D RPM'S PER CALTRAN'S STD PLAN No. A20A, DETAIL 9.
- 4 INSTALL 4" SOLID WHITE LINE AND INSTALL TYPE D RPM AT EACH END.
- 5 INSTALL 4" SOLID DOUBLE YELLOW LINE AND TYPE D RPM'S PER CALTRAN'S STD PLAN No. A20A, DETAIL 22.
- 6 INSTALL 6-INCH WIDE WHITE LINE PER CALTRAN'S STD PLAN No. A20D, DETAIL 39.
- 7 INSTALL YELLOW PAVEMENT MARKERS ONLY PER CALTRAN'S STD PLAN No. A20B, DETAIL 26.
- 8 PAINT TWO-WAY LEFT TURN LANE PER CALTRANS STANDARD PLAN No. A20B, DETAIL 32.
- 9 INSTALL 8" WHITE LINE PER CALTRAN'S PLAN No. A20D, DETAIL 38.
- 10 NOT USED.
- 11 INSTALL MEDIAN NOSE MARKING PER DETAIL HEREON.
- 12 INSTALL 6" WHITE BIKE LANE INTERSECTION LINE PER CALTRAN'S STD PLAN No. A20D, DETAIL 39A.
- R INSTALL LOOPS AND CONDUIT STUBOUT FOR REDFLEX DETECTION. EACH LOOP MUST HAVE A SEPARATE HOME RUN AND LOOP LEAD IN CABLE; MAXIMUM 2 LOOPS PER SAWCUT. REDFLEX LOOPS TO BE LABELED AT REDFLEX CABINET. SEE LOOP DIAGRAM SHOWN ON THE LEFT AND DETAILS SHOWN IN APPENDIX F OF THE SPECIFICATIONS. CONTRACTOR SHALL COORDINATE WITH REDFLEX PRIOR TO INSTALLATION TO DETERMINE EXACT LOCATION OF INSTALLATION.

**MEDIAN NOTES :**

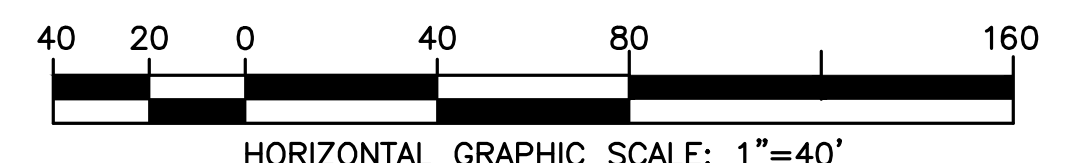
- M1 PAINT MEDIAN NOSE, CURB FACE AND TOP, WITH HIGHLY REFLECTIVE PREMIXED WHITE TRAFFIC PAINT WITH GLASS BEADS.
- M2 INSTALL HORIZONTAL TYPE K MARKER ON FLEXIBLE POST.
- M3 INSTALL YELLOW REFLECTIVE PAVEMENT MARKERS ON TOP SURFACE OF MEDIAN CURB NOSE AT 2' C.C. SPACING (MINIMUM 5 MARKERS). PLACE REFLECTIVE SURFACE OF MARKERS PARALLEL TO CENTER LINE OF ROADWAY.



DETAIL 1  
N.T.S.



DETAIL 2  
N.T.S.

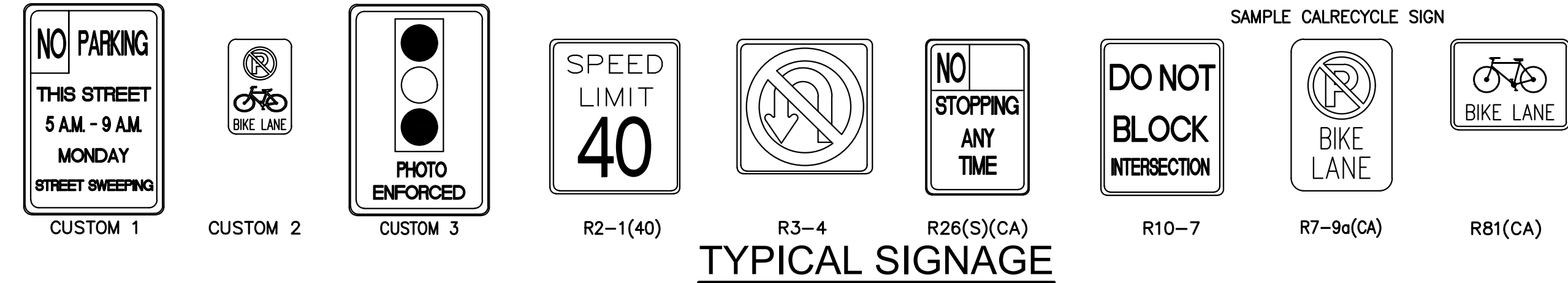


**CHAPMAN AVENUE**

**CHAPMAN AVENUE**

**SIGNAGE NOTES:**

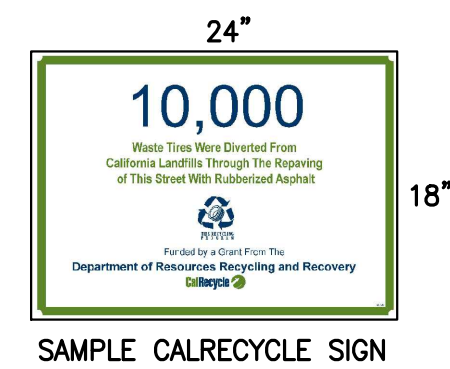
- S1 REMOVE EXISTING AND INSTALL NEW SIGN AND POST EXCEPT AS NOTED ON THE PLANS.
- S2 REMOVE EXISTING POST. FILL HOLE WITH CONCRETE GROUT (1,500 PSI).
- S3 REMOVE EXISTING STREET SIGN AND INSTALL NEW STREET SIGN PER GARDEN GROVE STANDARD PLAN B-301. REUSE EXISTING POST.
- S4 REPLACE EXISTING SIGN ONLY AND PROTECT EXISTING POST IN PLACE.



TYPICAL SIGNAGE

**MISC. NOTES:**

1. MATCH EXISTING SIGN SIZE AND SHAPE.
2. NEW STREET NAME SIGN POSTS SHALL BE CIRCULAR. ALL OTHER NEW POSTS SHALL BE "UNISTRUT" 2" SQUARE STEEL POST PER THE SPECIAL PROVISIONS.
3. THE CONTRACTOR SHALL RE-PAINT ALL EXISTING RED CURB (NOT SHOWN ON PLANS) PER THE SPECIAL PROVISION.
4. REFER TO CITY'S SPECIFICATIONS PLAN No. B-301 FOR STREET NAME SIGNS.



SAMPLE CALRECYCLE SIGN



**AS-BUILT**

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Department Of Public Works

STREET REHABILITATION  
**CHAPMAN AVENUE**  
FROM BROOKHURST ST. TO NELSON ST.

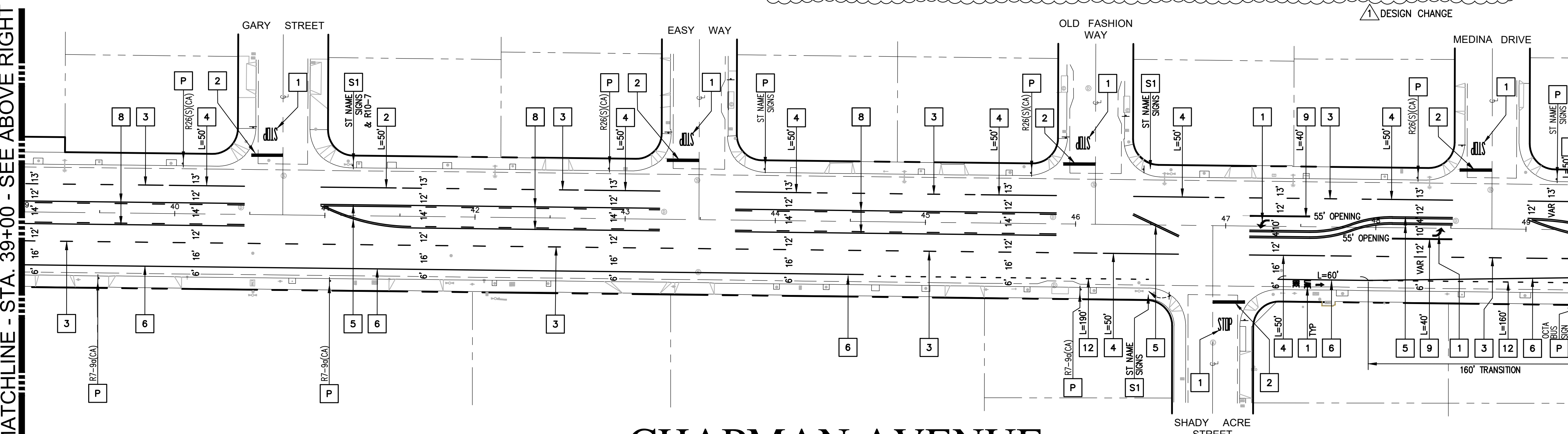
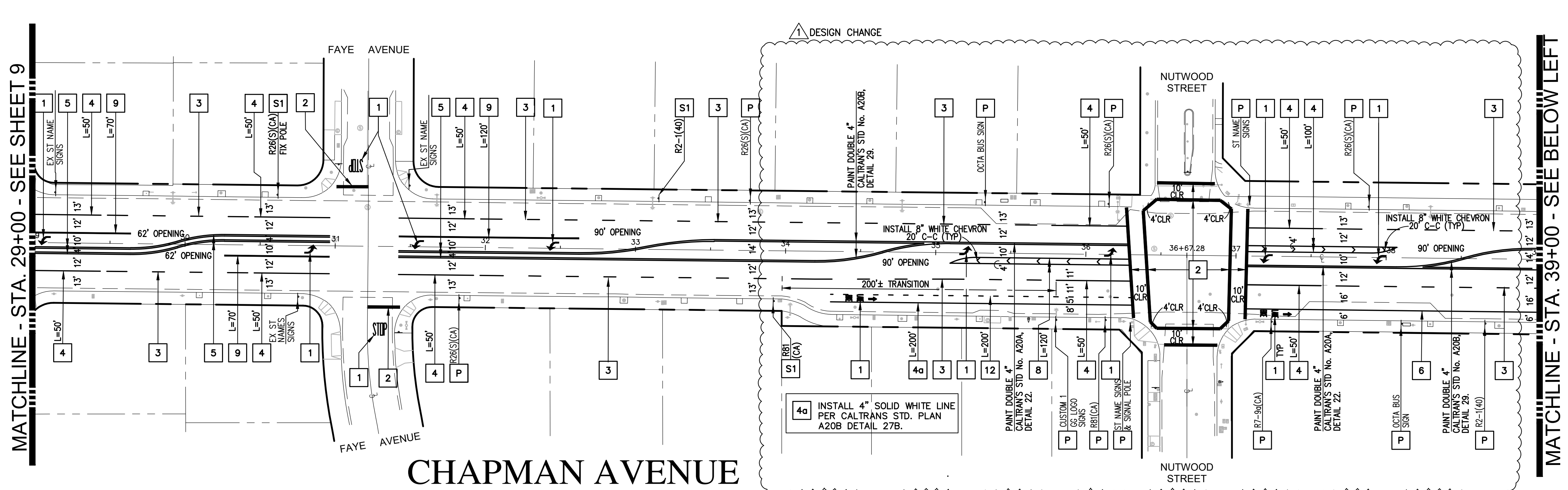
DRAWING NUMBER  
**S-235**  
**A-1873**  
SHEET 9 of 10



**STRIPING NOTES:**

ALL STRIPING AND SIGNAGE SHALL CONFORM TO THE CA MUTCD, LATEST EDITION AND ALL STRIPING SHALL BE THERMOPLASTIC WITH 2 LAYERS OF GLASS BEADS PER THE SPECIFICATIONS.

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- R** INSTALL LOOPS AND CONDUIT STUBOUT FOR REDFLEX DETECTION. EACH LOOP MUST HAVE A SEPARATE HOME RUN AND LOOP LEAD IN CABLE; MAXIMUM 2 LOOPS PER SAWCUT. REDFLEX LOOPS TO BE LABELED AT REDFLEX CABINET. SEE LOOP DIAGRAM SHOWN ON THE LEFT AND DETAILS SHOWN IN APPENDIX F OF THE SPECIFICATIONS. CONTRACTOR SHALL COORDINATE WITH REDFLEX PRIOR TO INSTALLATION TO DETERMINE EXACT LOCATION OF INSTALLATION.



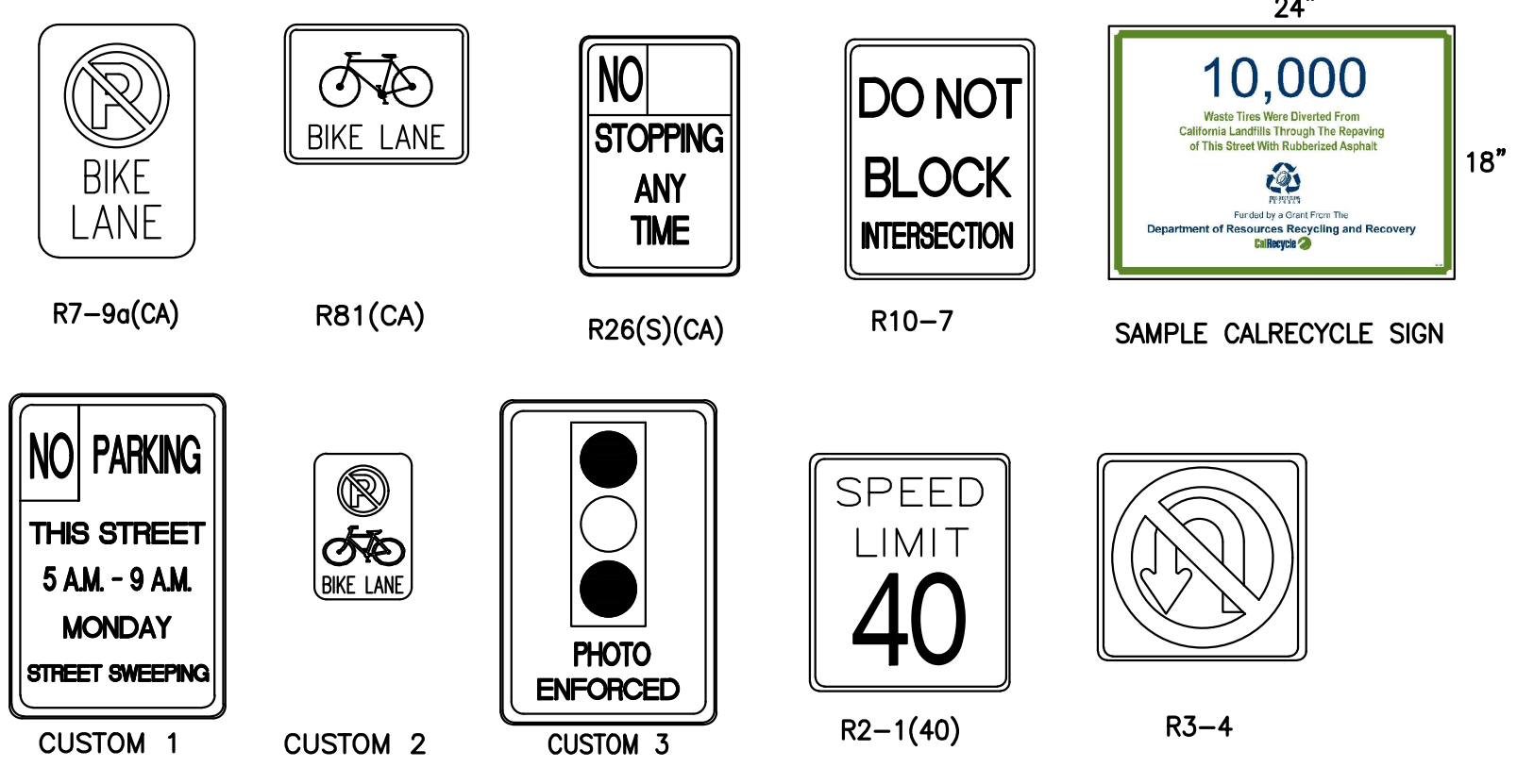
MATCHLINE - STA. 39+00 - SEE ABOVE RIGHT

MATCHLINE - STA. 29+00 - SEE BELOW LEFT

PROJECT LIMIT - JOIN TO EX. STRIPING

**CHAPMAN AVENUE**

**CHAPMAN AVENUE**



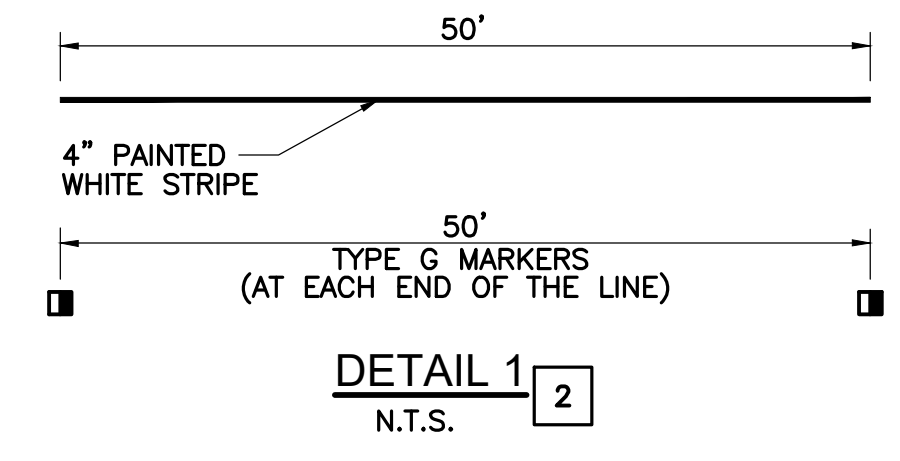
**TYPICAL SIGNAGE**

**SIGNAGE NOTES:**

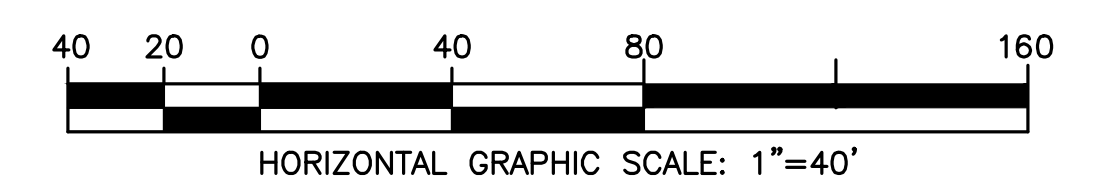
- S1** REMOVE EXISTING AND INSTALL NEW SIGN AND POST EXCEPT AS NOTED ON THE PLANS.
- S2** REMOVE EXISTING POST. FILL HOLE WITH CONCRETE GROUT (1,500 PSI).
- S3** REMOVE EXISTING STREET SIGN AND INSTALL NEW STREET SIGN PER GARDEN GROVE STANDARD PLAN B-301. REUSE EXISTING POST.

**MISC. NOTES:**

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- 2. NEW STREET NAME SIGN POSTS SHALL BE CIRCULAR. ALL OTHER NEW POSTS SHALL BE "UNISTRUT" 2" SQUARE STEEL POST PER THE SPECIAL PROVISIONS.
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**DETAIL 1**  
N.T.S.



**AS-BUILT**



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SHEET 10 of 10