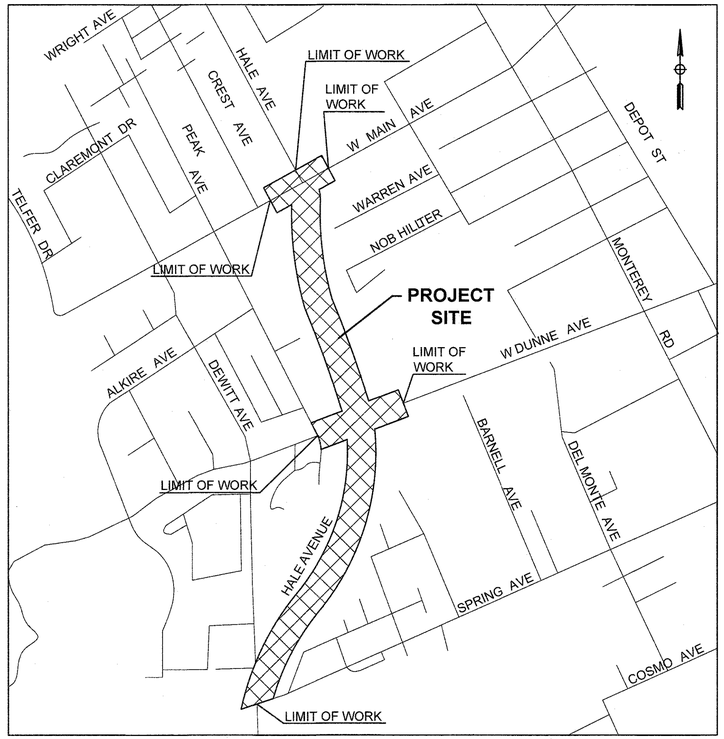
CITY OF MORGAN HILL
IMPROVEMENT PLANS FOR
HALE AVENUE EXTENSION PROJECT

FOR USE IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND THE STANDARD DETAILS OF THE CITY OF MORGAN HILL AND THE STANDARD PLANS AND SPECIFICATIONS OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION AND ALL OTHER APPLICABLE LOCAL, STATE AND FEDERAL STANDARDS.



PROJECT LOCATION



VICINITY MAP

SHEET INDEX

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BASIS OF BEARING*

THE BEARING: NORTH 65°31'00" EAST ON THE MONUMENT LINE OF SPRING AVENUE BETWEEN WILD OAK WAY AND WILLOW CREEK DRIVE FROM TRACT 9252, 730-M-41 (BETWEEN PT.11 & PT.12).

BENCHMARK*

ELEV DATUM: SANTA CLARA VALLEY WATER DISTRICT BM002, ELEVATION= 340.12 FEET (29). DESCRIBED BY SCWD AS "FOUND BRASS DISK ON TOP OF CONCRETE CURB AT BACK OF SIDEWALK OF NW CORNER OF INTERSECTION OF MONTEREY ST. AND W. DUNNE AVE. ADDITIONAL REFERENCES: 13.4 FT. N'LY OF TRAFFIC SIGNAL #2343, 10.3 FT. RADIALLY FROM FLOWLINE OF GUTTER, 0.55' ABOVE BACK OF SIDEWALK ELEVATION".

* INFORMATION FROM HMH SURVEY CONTROL DRAWING DATED 07-01-2008 FOR WEST DUNNE AVENUE IMPROVEMENTS.

MARK THOMAS TEMPORARY BENCHMARK 500 (NO HORIZONTAL POSITION): CUT SQUARE SET ON WEST SIDE OF DRAINAGE INLET ON NORTH SIDE OF W. DUNNE AVE. AT DRIVEWAY FOR ADDRESS #275. ELEVATION= 370.022. SET BY MARK THOMAS 10-11-11.

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: DESIGN: SCALE HOR. N.T.S.
CHECKED: MC DATE: 09/25/2020 SCALE VERT.
APPROVED: DATE: 9/25/2020 JOB NO. SJ-17101
SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
REGISTERED PROFESSIONAL ENGINEER MICHAEL K. COOPER No. 29072 3/31/2021 CIVIL STATE OF CALIFORNIA
Michael Cooper 09/25/2020
SIGNATURE DATE

MARK THOMAS

TITLE SHEET

IMPROVEMENT PLANS FOR HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: T-1
1 OF 120

CAD USER: jbethe
PLOT DATE: Sep 23, 2020-04:23pm
FILE NAME: HAE_T
PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CADD\Sheets\

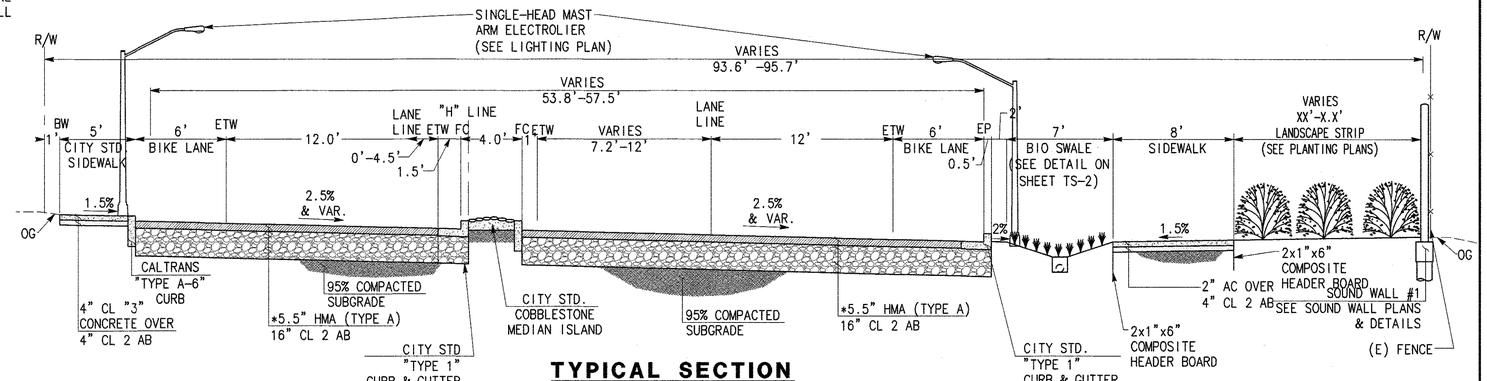
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GENERAL NOTES:

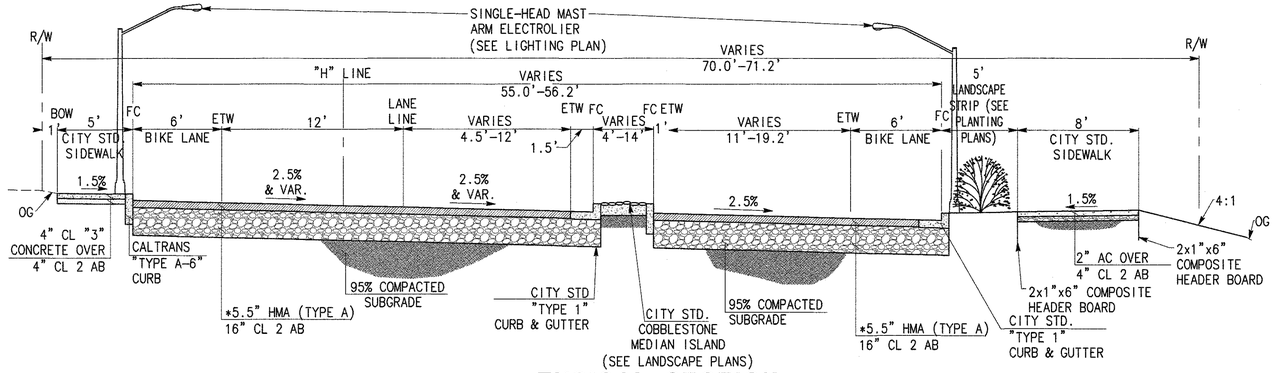
1. TEMPORARY BENCHMARK – BASED ON A CITY APPROVED BENCHMARK AS SHOWN ON THESE PLANS.
2. ALL EXISTING ELEVATIONS SHALL BE FIELD VERIFIED BY CONTRACTOR UNLESS OTHERWISE NOTED.
3. ALL SURVEY MONUMENTS SHALL BE INSTALLED AT LOCATIONS SHOWN.
4. CONTRACTOR SHALL NOT DESTROY EXISTING PERMANENT SURVEY MONUMENTS UNLESS SHOWN OTHERWISE ON THE PLANS.
5. ALL WORK SHALL CONFORM TO THE LATEST EDITION OF THE CITY OF MORGAN HILL STANDARD DETAILS FOR CONSTRUCTION WHICH ARE HEREBY MADE A PART OF THESE PLANS. DEVIATIONS FROM THE STANDARD DETAILS MUST BE APPROVED BY THE CITY ENGINEER.
6. CONTRACTOR SHALL ARRANGE FOR A PRE-CONSTRUCTION MEETING WITH THE CITY ENGINEER (MUNICIPAL CODE 17.32.250B) PRIOR TO COMMENCING ANY CONSTRUCTION. AN ENCROACHMENT PERMIT SHALL BE OBTAINED FROM THE PUBLIC WORKS DEPARTMENT UPON COMPLETION OF SAID MEETING AND PRIOR TO CONSTRUCTION OF ANY IMPROVEMENTS WITHIN AN EXISTING OR OFFERED FOR DEDICATION RIGHT-OF-WAY, PUBLIC UTILITY EASEMENT OR PUBLIC SERVICE EASEMENT.
7. ONLY UPON CITY APPROVAL OF THE IMPROVEMENT PLANS AND COMPLETION OF A PRE-CONSTRUCTION MEETING, SHALL CONTRACTOR COMMENCE OFF-SITE GRADING.
8. CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DEPARTMENT 48 HOURS PRIOR TO COMMENCEMENT OF ANY WORK PHASE. AT THAT TIME, AN "INSPECTION REQUEST FORM" SHALL BE COMPLETED TO ENSURE PROPER SCHEDULING OF AN INSPECTION WITH THE CITY ENGINEER'S REPRESENTATIVE.
9. CONTRACTOR SHALL PRESERVE ALL SURROUNDING PROPERTY BY CONFINING OPERATIONS TO WITHIN THE "LIMITS OF WORK". CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ACCESS FOR ALL ADJOINING RESIDENTS, PLACES OF BUSINESS, AND PROPERTIES AT ALL TIMES AND IN A SAFE MANNER. CONTRACTOR SHALL PROVIDE WRITTEN NOTICE AT LEAST 24 HOURS IN ADVANCE OF ANY INTERRUPTION IN ACCESS OR SERVICE TO THE ABOVE PROPERTY OWNERS AS WELL AS TO THE CITY ENGINEER'S REPRESENTATIVE.
10. CONTRACTOR SHALL ONLY USE EQUIPMENT PROVIDED WITH A SPARK ARRESTOR DEVICE TO REDUCE A POTENTIAL FIRE HAZARD.
11. RIGHT OF MODIFICATION:
    APPROVAL OF THIS PLAN DOES NOT RELEASE CONTRACTOR OF THE RESPONSIBILITY FOR CORRECTION OF MISTAKES, ERRORS, OR OMISSIONS, CONTAINED THEREIN. IF DURING THE COURSE OF CONSTRUCTION, PUBLIC INTEREST REQUIRES A MODIFICATION OF OR A DEPARTURE FROM THESE IMPROVEMENT PLANS OR THE CITY STANDARD DETAILS FOR CONSTRUCTION, THE CITY ENGINEER SHALL HAVE THE AUTHORITY TO REQUIRE SUCH MODIFICATIONS AND DEPARTURES AND TO SPECIFY THE MANNER IN WHICH THE SAME IS TO BE MADE.
12. OFF-SITE WATER & DUST CONTROL:
    CONTRACTOR SHALL PROVIDE A WATER TRUCK ONSITE AT ALL TIMES. CONTRACTOR WILL BE ALLOWED TO DRAW WATER FROM THE CITY OF MORGAN HILL WATER DISTRIBUTION SYSTEM ONLY AFTER OBTAINING A HYDRANT METER FROM THE PUBLIC WORKS DEPARTMENT AND AN INSPECTION OF THE WATER TRUCK FOR A PROPER BACKFLOW DEVICE OR "AIR-GAP" FILLING PIPE. CONTRACTOR SHALL KEEP DOWN DUST FROM CONSTRUCTION ACTIVITY TO THE MAXIMUM EXTENT POSSIBLE. CONTRACTOR SHALL CLEAN ALL EXISTING STREETS, CURBS, GUTTERS, AND SIDEWALKS AFFECTED BY THE PROJECT AT THE END OF EACH WORKING DAY.
13. MATERIAL STORAGE:
    NO MATERIAL SHALL BE STORED NEAR THE EDGE OF PAVEMENT, TRAVELED WAY, SIDEWALK, DRIVEWAY, OR SHOULDER LINE WHICH MAY CREATE A HAZARD FOR VEHICULAR AND PEDESTRIAN TRAFFIC UNLESS PRIOR APPROVAL BY CITY HAS BEEN GRANTED.
14. TRAFFIC CONTROL:
    CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN FOR APPROVAL TO THE PUBLIC WORKS DEPARTMENT A MINIMUM OF 5 DAYS PRIOR TO ANY WORK WITHIN AN EXISTING PUBLIC STREET. THE PLAN SHALL BE SIGNED BY A LICENSED TRAFFIC ENGINEER WHEN IT INVOLVES AN ARTERIAL STREET. CONTRACTOR SHALL PROVIDE ALL NECESSARY TRAFFIC CONTROL IN ACCORDANCE WITH THE LATEST EDITION OF A CALTRANS "MANUAL OF WARNING SIGNS, LIGHTS, AND DEVICES FOR USE IN PERFORMANCE OF WORK UPON HIGHWAYS", WHILE WORKING WITHIN THE PUBLIC RIGHT-OF-WAY. TWO TRAFFIC LANES (10' MIN.) SHALL BE OPEN TO VEHICULAR TRAFFIC DURING ALL HOURS, WEEKENDS, AND HOLIDAYS. ONE LANE ONE WAY TRAFFIC, MAY BE PERMITTED UNDER THE CONTROL OF NOT LESS THAN 2 (TWO) COMPETENT FLAGMEN DURING CONSTRUCTION OPERATIONS. STREET CLOSURES AND DETOURS SHALL ONLY TAKE PLACE UPON CITY ENGINEER APPROVAL AND POLICE DEPARTMENT COORDINATION.
15. THERE IS A 5 YEAR WARRANTY WHEN THE PROJECT IS COMPLETED (REFERENCE TO COUNTY ORDINANCE NS-7039, SECTION B17-36.4). COUNTY'S ROADS OPERATIONS ENGINEERING WILL BE THE ONE TO DETERMINE WHAT CONSTITUTES FAILURE BASED ON ACCEPTABLE INDUSTRY STANDARDS INCLUDING CRACKS AND SEPARATION IN THE MICRO-SURFACING, SETTLEMENT WHERE THE TRENCH REPAIRS TOOK PLACE, DAMAGED PAVEMENT EDGES ALONG THE TRENCHES ARE CONSIDERED FAILURES.
16. WHEN TRENCHING IS TO OCCUR ON COUNTY MAINTAIN ROADS, TRENCH PLATES ARE TO BE H-20 LOAD RATED, SKID RESISTANT, AND RECESSED FLUSH TO THE EXISTING PAVED SURFACE. CUT-BACK AND/OR COLD MIX WILL NOT BE ALLOWED AS TEMPORARY ROADWAY SURFACE BACKFILL IN TRAVELED WAYS UNLESS PRIOR APPROVAL IS GIVEN.
17. WHEN ANY PAVEMENT RESTORATION AT THIS SITE MUST BE CURB TO CURB/LANE LINE AND MICRO-SURFAACED USING A TYPE II SLURRY MIX PER COUNTY STANDARDS, "111-12-.09 MICRO-SURFACING, TYPE II", THE MICRO-SURFACING MIXTURE SHALL BE OF THE PROPER CONSISTENCY AT ALL TIMES, SO AS TO PROVIDE THE APPLICATION RATE REQUIRED BY THE SURFACE CONDITION. THE AVERAGE SINGLE APPLICATION RATE, AS MEASURED BY THE COUNTY, SHALL BE 15 LB/SY(±1 LB/SY).
18. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING PAVEMENT TO LIKE OR BETTER CONDITION. ANY STRIPING IN COUNTY RIGHT-OF-WAY SHALL BE THERMOPLASTIC AND REPLACED PER EXISTING STRIPING. ALL VERTICAL ASPHALT CUTS MUST BE TACK COATED PRIOR TO ASPHALT PLACEMENT.
19. EROSION AND SEDIMENT CONTROL NOTES
    THE CONTRACTOR SHALL SUBMIT A SWPPP RISK LEVEL 2 FOR CITY APPROVAL PRIOR TO COMMENCING WITH ANY WORK. THE UTILITY COMPANY, THEIR EMPLOYEES, SUBCONTRACTORS, AND/OR ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES SHALL INSTALL AND MAINTAIN CONSTRUCTION BEST MANAGEMENT PRACTICES (BMPS) ON THE PROJECT SITE AND WITHIN THE SANTA CLARA COUNTY ROAD RIGHT OF WAY THROUGHOUT THE DURATION OF CONSTRUCTION AND UNTIL THE ESTABLISHMENT OF PERMANENT STABILIZATION AND SEDIMENT CONTROL TO PREVENT THE DISCHARGE OF POLLUTANTS INCLUDING SEDIMENT, CONSTRUCTION MATERIALS, EXCAVATED MATERIALS, WASTE MATERIALS INTO THE SANTA CLARA COUNTY RIGHT OF WAY, STORM SEWER WATERWAYS, AND ROADWAY INFRASTRUCTURE. BMPS SHALL INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING
    a. PREVENTION OF POLLUTANTS IN STORM WATER DISCHARGES FROM THE CONSTRUCTION SITE AND THE CONTRACTOR'S MATERIAL AND EQUIPMENT LAYDOWN/STAGING AREAS,
    b. PREVENTION OF TRACKING OF MUD, DIRT AND CONSTRUCTION MATERIALS ONTO PUBLIC ROAD RIGHT OF WAY, AND
    c. PREVENTION OF DISCHARGE OF WATER RUNOFF DURING DRY AND WET WEATHER CONDITIONS ONTO PUBLIC ROAD RIGHT OF WAY.
20. THE UTILITY COMPANY, THEIR EMPLOYEES, SUBCONTRACTORS, AND/OR ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES SHALL ENSURE THAT ALL TEMPORARY CONSTRUCTION FACILITIES, INCLUDING BUT NOT LIMITED TO CONSTRUCTION MATERIALS, DELIVERIES, HAZARDOUS AND NON-HAZARDOUS MATERIAL STORAGE, EQUIPMENT, TOOLS, PORTABLE TOILETS, CONCRETE WASHOUT, GARBAGE CONTAINERS, LAY DOWN YARDS, SECONDARY CONTAINMENT AREAS, ETC. ARE LOCATED OUTSIDE THE SANTA CLARA COUNTY ROAD RIGHT OF WAY.
21. PERMANENT MONUMENTS/MONUMENT PRESERVATION:
    THE LANDOWNER, CONTRACTOR AND/OR ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES THAT WILL OR MAY DISTURB AN EXISTING MONUMENT, CORNER STAKE, OR ANY OTHER PERMANENT SURVEYED MONUMENT SHALL CAUSE TO HAVE A LICENSED LAND SURVEYOR OR CIVIL ENGINEER, AUTHORIZED TO PRACTICE SURVEYING, ENSURE THAT A CORNER RECORD AND/OR RECORD OF SURVEY ARE FILED WITH THE COUNTY SURVEYOR'S OFFICE PRIOR TO DISTURBING SAID MONUMENTS AND RESET PERMANENT MONUMENT(S) IN THE SURFACE OF THE NEW CONSTRUCTION OR SET A WITNESS MONUMENT(S) TO PERPETUATE THE LOCATION IF ANY PERMANENT MONUMENT COULD BE DESTROYED, DAMAGED, COVERED, DISTURBED, OR OTHERWISE OBLITERATED. THE LICENSED LAND SURVEYOR OR CIVIL ENGINEER SHALL FILE A CORNER RECORD OR RECORD OF SURVEY WITH COUNTY SURVEYOR PRIOR TO FINAL CLOSE-OUT OF THE ENCROACHMENT PERMIT BY THE ROADS & AIRPORT INSPECTOR.
22. IMPROVEMENT PLAN CONSTRUCTION NOTES:
    ALL WORK IN THE COUNTY ROAD RIGHT OF WAY REQUIRES AN ENCROACHMENT PERMIT FROM THE ROADS AND AIRPORTS DEPARTMENT. EACH INDIVIDUAL ACTIVITY REQUIRES A SEPARATE PERMIT – I.E. RETAINING WALLS, DRIVEWAY APPROACHES, TEMPORARY CONSTRUCTION ENTRANCES, FENCES, LANDSCAPING, TREE REMOVAL, STORM DRAINAGE IMPROVEMENTS, ALL UTILITY OPERATIONS (RELOCATIONS, REPLACEMENTS, ABANDONMENTS, TEMPORARY FACILITIES, AND/OR NEW FACILITIES FOR CABLE, ELECTRIC, GAS, SEWER, WATER), ETC.

LEGEND

PROPOSED		EXISTING		PROPOSED		EXISTING		PROPOSED		EXISTING
	CONTROL LINE				CURB & GUTTER (STD. DWG. A-3)				FIRE HYDRANT (W-14)	
	PROPERTY LINE				EDGE OF PVMT / VERTICAL CURB				WATER METER	
	EASEMENT				ELECTRICAL OVERHEAD LINE	E-OH			WATER VALVE, VALVE BOX AND COVER	
E	ELECTRICAL LINE	E			ELECTRICAL UNDERGROUND LINE	E-UG			STREET LIGHT	
G	GAS LINE	G			MONUMENT (A-31)				RETAINING WALL CAST-IN-PLACE	
	STORM DRAIN LINE	SD			STORM DRAIN MANHOLE (SD-1)				SOUND WALL	
SS	SANITARY SEWER LINE	SS			DROP INLET (SD-4)			C	LIMIT OF CUT	
SS	SANITARY SEWER LATERAL	SS						F	LIMIT OF FILL	
W	WATER LINE	W							CUT-IN TEE	
T	TELEPHONE LINE	TEL T								
JT	JOINT TRENCH									



TYPICAL SECTION
STA:8+66.90 TO STA:10+18.88



TYPICAL SECTION
STA:6+86.11 TO STA:8+66.90

NOTE:

* FINAL PAVEMENT SECTIONS TO BE DETERMINED AFTER SUBGRADE IS ROUGH GRADED

ABBREVIATIONS

AB	AGGREGATE BASE
AS	AGGREGATE SUBBASE
AC	ASPHALT CONCRETE
BOW	BACK OF WALK
ETW	EDGE OF TRAVELED WAY
FC	FACE OF CURB
FG	FINISH GRADE
FOW	FACE OF WALK
OG	ORIGINAL GROUND
PG	PROFILE GRADE
R/W	RIGHT OF WAY
STD	STANDARD
TC	TOP OF CURB
VAR	VARIES

NOTE:
CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

CAUTION!!! ENERGIZED FACILITIES!!

CONTRACTOR TO EXERCISE EXTREME CAUTION TO AVOID DAMAGING EXISTING UNDERGROUND UTILITIES. OBSTRUCTIONS INDICATED ARE FOR INFORMATION ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION AND DEPTH WITH THE APPROPRIATE AGENCIES. NEITHER THE OWNER NOR THE DESIGNER ASSUME ANY RESPONSIBILITY THAT THE OBSTRUCTIONS INDICATED WILL ACTUALLY BE THE OBSTRUCTIONS ENCOUNTERED. POTHOLING IS REQUIRED. HAND EXCAVATE ONLY IN PRESENCE OF AN INSPECTOR.

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. N.T.S.	
CHECKED: KY	DATE: 09/25/2020	SCALE VERT. N.T.S.	
APPROVED:	DATE: 9/25/2020	JOB NO. SJ-17101	

SCOTT C. CREER, RCE 58879, DEPUTY DIRECTOR FOR ENGINEERING, EXP. DATE 6-30-21

SUPERVISED BY: MICHAEL K. COOPER, REGISTERED CIVIL ENGINEER, RCE 29072, EXP. DATE 3-31-21
SIGNATURE DATE

MARK THOMAS

GENERAL NOTES & TYPICAL SECTIONS

IMPROVEMENT PLANS FOR
MORGAN HILL **HALE AVE EXTENSION** CALIFORNIA

CITY FILE NO.	504E02
PLAN SET:	09/25/2020
DRAWING:	TS-1
	2 OF 120

CAD USER: jkohe
PLOT DATE: Sep 23, 2020-02:51pm
FILE NAME: HAE_TS1-3
PATH: J:\Morgan Hill\SJ-17101-Hale Avenue Extension\CAD\Sheets\

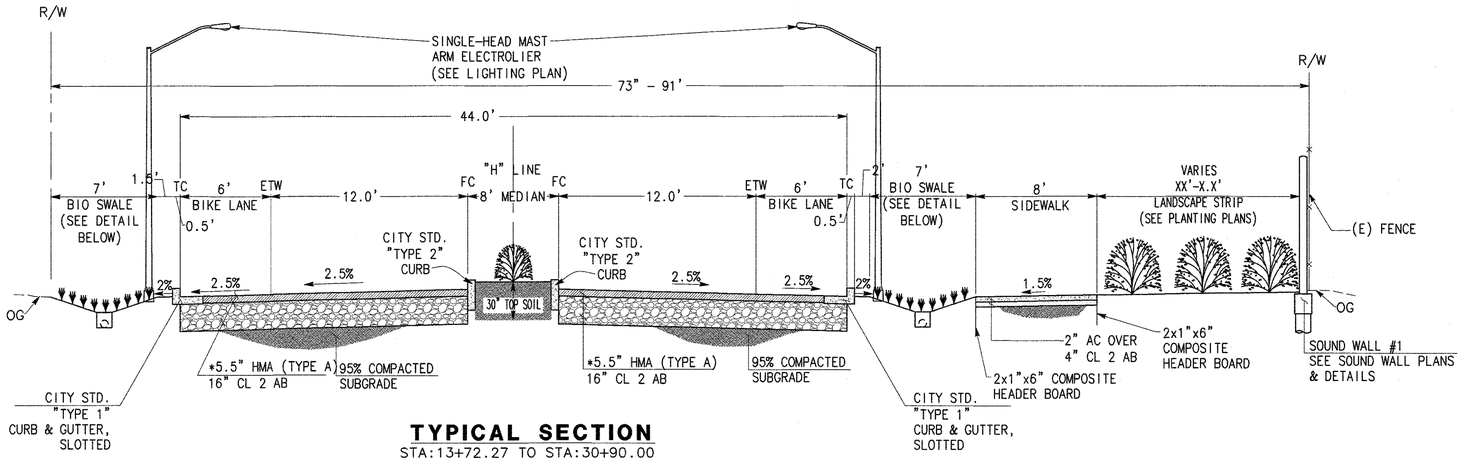
GENERAL NOTES: (CONT')

15. TRENCH EXCAVATION:
CONTRACTOR SHALL EXERCISE DILIGENCE IN REVIEWING THE APPROVED GEOTECHNICAL REPORT AND OTHER AVAILABLE RESOURCES TO FAMILIARIZE HIMSELF/HERSELF WITH THE SOIL CONDITIONS TO BE ENCOUNTERED IN THE COURSE OF WORK IDENTIFIED IN THESE PLANS. CONTRACTOR SHALL NOT CAUSE DAMAGE TO ADJACENT TREES OR EXISTING STRUCTURES ABOVE OR BELOW GRADE DURING TRENCH EXCAVATION. ALL ROCKS, BOULDERS, AND LARGE STONES ENCOUNTERED SHALL BE REMOVED TO PROVIDE A CLEARANCE OF 6 INCHES AROUND THE PIPE. THE TRENCH BOTTOM SHALL BE REFILLED TO GRADE WITH SAND, PEA GRAVEL, OR OTHER APPROVED GRANULAR MATERIAL. CLEAN 1/4" OR 1/2" PEA GRAVEL SHALL BE USED IN AREAS OF MOIST CONDITION, OR WHERE THE SOIL HAS A HISTORY OF SUB-SURFACE WATER. IF THE BOTTOM OF THE TRENCH IS FOUND TO CONSIST OF WET OR UNSTABLE MATERIAL INCAPABLE OF PROPERLY SUPPORTING THE PIPE, THE MATERIAL SHALL BE REMOVED TO A MINIMUM DEPTH OF 12 INCHES BELOW THE UNSTABLE LAYER FOR THE FULL WIDTH OF THE TRENCH AND REPLACED WITH APPROVED GRANULAR MATERIAL. TRENCH EXCAVATION MATERIAL DEPOSITED ADJACENT TO THE TRENCH SHALL BE PLACED AND LOCATED TO PREVENT SPILLAGE INTO THE OPEN TRENCH.
16. TRENCH SAFETY:
IT SHALL BE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL NECESSARY TRENCH SAFETY MEASURES FOR EXCAVATIONS. ALL TRENCH SAFETY MEASURES SHALL BE IN ACCORDANCE WITH THE LATEST CAL-OSHA GUIDELINES. CONTRACTOR SHALL PROVIDE EVIDENCE OF A CAL-OSHA TRENCHING PERMIT AT THE PRE-CONSTRUCTION MEETING.
17. EXCAVATIONS WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE BACKFILLED, COMPACTED, AND TEMPORARILY PAVED WITH COLD MIX "CUT BACK" TYPE A.C. TO ALLOW FOR VEHICULAR AND PEDESTRIAN TRAFFIC FOR PERIODS OF LESS THAN 24 HOURS. THE USE OF TRENCH PLATES IS ALLOWED, PROVIDED THEY ARE RECESSED IN TRAFFIC LANES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN ON A DAILY BASIS, INCLUDING WEEKENDS, THE AMOUNT OF MATERIAL NECESSARY TO MAINTAIN THE TRENCH SURFACE FLUSH WITH THE EXISTING STREET OR SIDEWALK. IN ADDITION, THE CONTRACTOR SHALL RESPOND TO AND CORRECT SHIFTING TRENCH PLATES REGARDLESS OF THE TIME OF DAY. IF CONTRACTOR FAILS TO CORRECT SINKING BACKFILL MATERIAL OR SHIFTING TRENCH PLATES IN A TIMELY MANNER, CITY SHALL RESERVE THE RIGHT TO CORRECT THE PROBLEM AND BACK CHARGE THE CONTRACTOR.
18. JOINING EXISTING PAVEMENT:
EXISTING PAVEMENT WHICH IS TO BE JOINED BY NEW PAVEMENT SHALL BE SAW CUT VERTICAL TO PROVIDE STRAIGHT, TRUE, AND NEAT JOINTS. OVERLAPPING OF EXISTING PAVEMENT WITHOUT SAW CUTTING OR GRINDING SHALL NOT BE PERMITTED. THE VERTICAL EDGES SHALL BE TACKED PRIOR TO PAVING. TERMINALS OF ALL SURFACING INDICATED ON THE PLANS SHALL JOIN ANY EXISTING SURFACE IN A SMOOTH BUTT JOINT. CONFORM PAVING BY METHOD OF ABRASIVE GRINDING WILL BE ALLOWED UPON APPROVAL OF THE CITY ENGINEER.

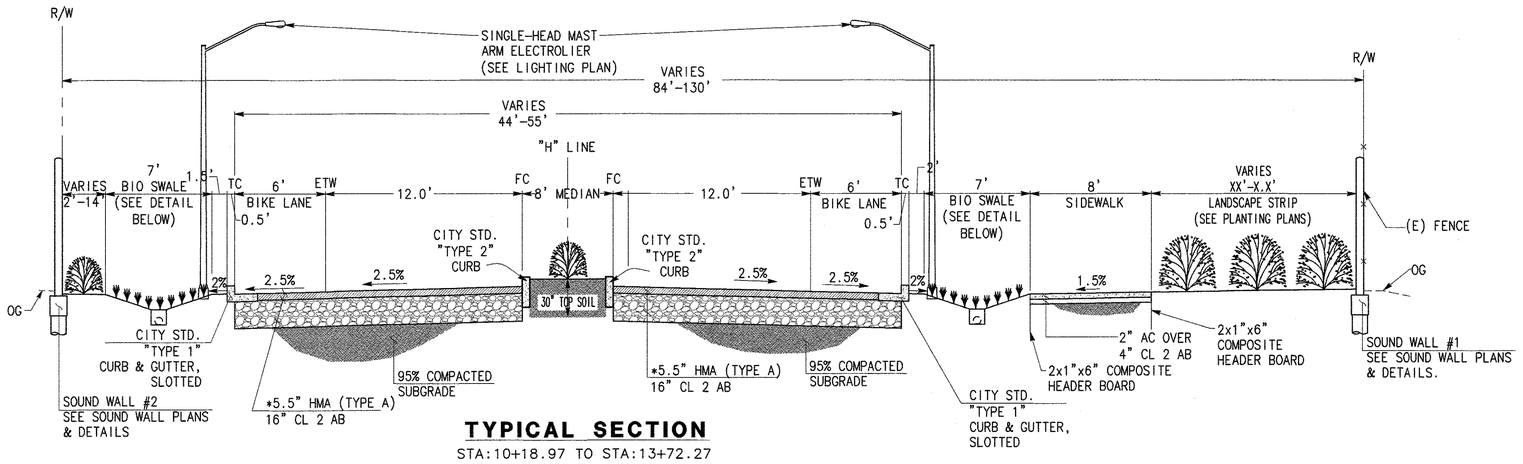
WATER LINES:

19. CONTRACTOR SHALL NOT TURN OFF OR ON ANY VALVES BELONGING TO THE CITY'S WATER SYSTEM. ONLY DEPARTMENT OF PUBLIC WORKS PERSONNEL SHALL OPEN THE NECESSARY VALVES TO CONNECT NEW LINES. FAILURE TO FOLLOW THIS REQUIREMENT SHALL BE CONSIDERED AN "UNLAWFUL CONNECTION" AND MAY RESULT IN ISSUING OF A CITATION AND FINES AS SPECIFIED IN SECTION 13.04 OF THE MORGAN HILL MUNICIPAL CODE.
20. CONNECTIONS REQUIRING SHUT DOWN OF THE SYSTEM SHALL BE DONE BETWEEN THE HOURS OF 12:00 MIDNIGHT AND 6:00 A.M., AND ONLY UPON COORDINATION WITH THE DEPARTMENT OF PUBLIC WORKS.
21. ALL WATER LINES SHALL BE TESTED AFTER COMPLETION OF THE TRENCH BACKFILL AND COMPACTION OF THE FINAL BASE MATERIAL, BUT PRIOR TO THE PLACEMENT OF THE FINAL ROADWAY SURFACE.
22. THE CONCRETE CONTRACTOR SHALL STAMP A LETTER "W" ON THE FACE OF CURB DIRECTLY ABOVE THE WATER SERVICE.
23. FIRE HYDRANT WET BARREL TYPE, CAST IRON BODY, TWO 2 1/2" OUTLETS AND ONE 4 1/2" OUTLET, CLOW MODEL F-960 WITH CLOW #40 BREAKOFF CHECK VALVE ASSEMBLY OR EQUAL.
24. BACKFILL & COMPACTION:
BACKFILL MATERIAL SHALL BE HAND PLACED AND COMPACTED UP TO AT LEAST 6" ABOVE THE PIPE. WHEN USING NATIVE SOILS AS TRENCH BACKFILL, THE MINIMUM SAND COVER SHALL BE 12".
25. JETTING AND/OR FLOODING OF TRENCH BACKFILL MATERIAL WILL BE PERMITTED ONLY IF APPROVED BY THE SOILS ENGINEER AND CITY ENGINEER.
26. ANY EXCESS EXCAVATION MATERIAL MAY BE DEPOSITED ONSITE IN AREAS AND AT DEPTHS DESIGNATED BY THE OWNER, AND WITH APPROVAL OF THE CITY ENGINEER.
27. THE MINIMUM RELATIVE COMPACTION FOR TRENCH BACKFILL, SUBGRADE AND BASE MATERIAL SHALL BE 95% AS DETERMINED IN ACCORDANCE WITH ASTM D 1557 THROUGHOUT THE PROJECT UNLESS RECOMMENDED OTHERWISE IN THE SOILS REPORT AND APPROVED BY THE CITY ENGINEER.
28. THE CITY WILL CONDUCT COMPACTION TESTS ON ALL TRENCH BACKFILL.
29. ANY AGGREGATE BASE THAT BECOMES CONTAMINATED DURING CONSTRUCTION SHALL BE REMOVED AND REPLACED WITH UNCONTAMINATED BASE.
30. EROSION CONTROL:
AN EROSION CONTROL PLAN SHALL BE REQUIRED PRIOR TO ANY PHYSICAL DEVELOPMENT OF A PROPERTY PLANNED BETWEEN OCTOBER 15TH AND MAY 1ST. SAID PLANS SHALL MEET THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE CALIFORNIA STORMWATER QUALITY ASSOCIATION (CASQA) FOR STORMWATER BEST MANAGEMENT PRACTICES (BMPs). CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING THE REQUIRED EROSION CONTROL MEASURES DURING THE ABOVE TIME PERIOD.
31. ELECTROLIERS:
ALL LED ELECTROLIERS SHALL BE INSTALLED BY THE CONTRACTOR AT THE LOCATIONS SHOWN ON THESE PLANS. SEE SHEET DT08 AND THE STREET LIGHTING PLANS FOR ADDITIONAL INFORMATION.

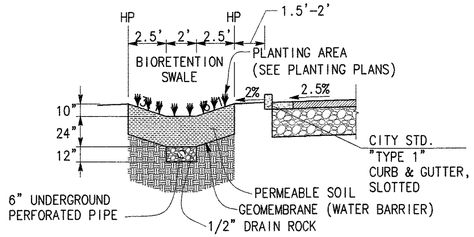
THE STANDARD SPECIFICATIONS AND DETAILS, LATEST EDITION, OF THE CITY OF MORGAN HILL SHALL GOVERN UNLESS OTHERWISE SPECIFIED HEREIN.



TYPICAL SECTION
STA:13+72.27 TO STA:30+90.00



TYPICAL SECTION
STA:10+18.97 TO STA:13+72.27



BIORETENTION SWALE DETAIL

NOTE:

* FINAL PAVEMENT SECTIONS TO BE DETERMINED AFTER SUBGRADE IS ROUGH GRADED

CAUTION!!! ENERGIZED FACILITIES!!

CONTRACTOR TO EXERCISE EXTREME CAUTION TO AVOID DAMAGING EXISTING UNDERGROUND UTILITIES. OBSTRUCTIONS INDICATED ARE FOR INFORMATION ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION AND DEPTH WITH THE APPROPRIATE AGENCIES. NEITHER THE OWNER NOR THE DESIGNER ASSUME ANY RESPONSIBILITY THAT THE OBSTRUCTIONS INDICATED WILL ACTUALLY BE THE OBSTRUCTIONS ENCOUNTERED. POTHOLING IS REQUIRED. HAND EXCAVATE ONLY IN PRESENCE OF AN INSPECTOR.

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: AS-BUILT CORRECTIONS — INSPECTOR: BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. N.T.S.	
CHECKED: KY	DATE: 09/25/2020	SCALE VERT. N.T.S.	
APPROVED:	DATE: 9/25/2020	JOB NO. SJ-17101	

SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

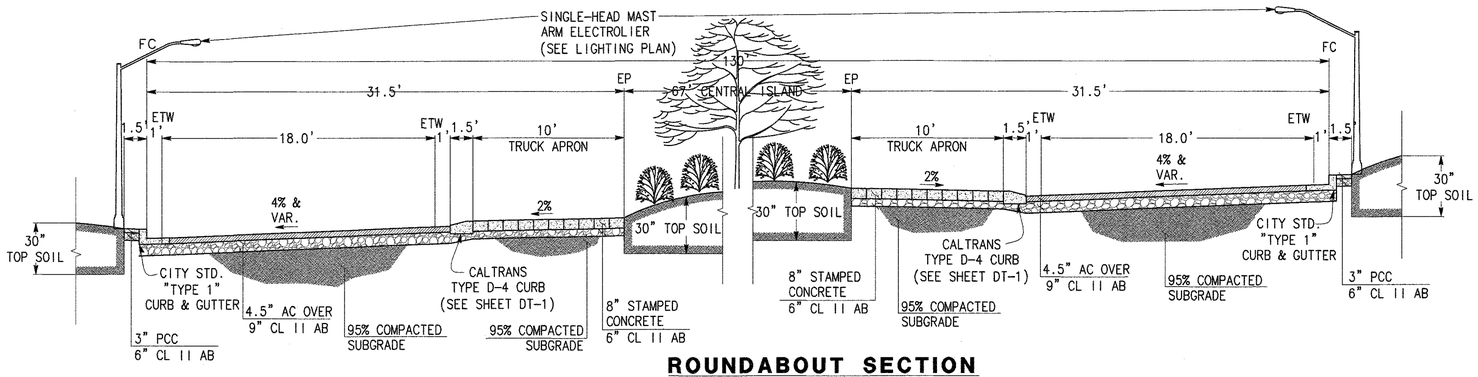
SIGNATURE DATE

MARK THOMAS

GENERAL NOTES & TYPICAL SECTIONS

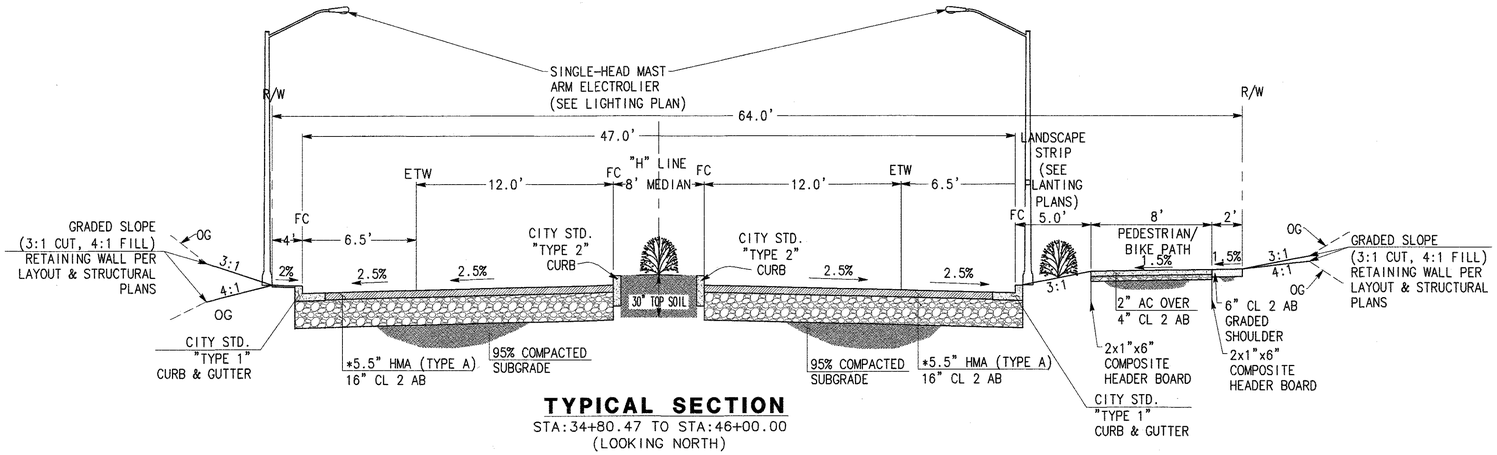
IMPROVEMENT PLANS FOR
MORGAN HILL **HALE AVE EXTENSION** CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **TS-2**
3 OF 120



ROUNDABOUT SECTION

HALE AVENUE ℄



TYPICAL SECTION

STA:34+80.47 TO STA:46+00.00
(LOOKING NORTH)

NOTE:

* FINAL PAVEMENT SECTIONS TO BE DETERMINED AFTER SUBGRADE IS ROUGH GRADED

CAUTION!!! ENERGIZED FACILITIES!!

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BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL
City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. N.T.S.	
CHECKED: KY	DATE: 09/25/2020	SCALE VERT. N.T.S.	
APPROVED:	DATE: 9/25/2020	JOB NO. SJ-17101	

SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

SIGNATURE DATE

MARK THOMAS

GENERAL NOTES & TYPICAL SECTIONS

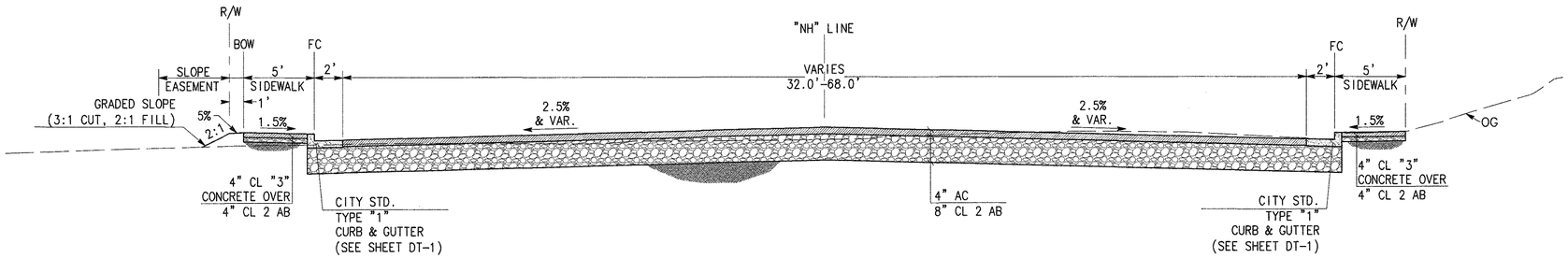
IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: TS-3
4 OF 120

CAD USER: jkothe
PLOT DATE: Sep 23, 2020-02:51:26pm
FILE NAME: HAL_TS1-3
PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CADD\Sheets\

CAD USER: jkohn
PLOT DATE: Sep 23, 2020-8:35:58pm
FILE NAME: HAE_TS1-3
PATH: J:\Morgan Hill-SJ-1781-Hale Avenue Extension\CADD\Sheets\



NOB HILL TERRACE
TYPICAL SECTION

"NH" LINE STA:1+00 TO STA:1+60
(LOOKING EAST)

NOTE:

* FINAL PAVEMENT SECTIONS TO BE DETERMINED AFTER SUBGRADE IS ROUGH GRADED

CALL BEFORE YOU DIG
811
800-227-2600

CAUTION!!! ENERGIZED FACILITIES!!

CONTRACTOR TO EXERCISE EXTREME CAUTION TO AVOID DAMAGING EXISTING UNDERGROUND UTILITIES. OBSTRUCTIONS INDICATED ARE FOR INFORMATION ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION AND DEPTH WITH THE APPROPRIATE AGENCIES. NEITHER THE OWNER NOR THE DESIGNER ASSUME ANY RESPONSIBILITY THAT THE OBSTRUCTIONS INDICATED WILL ACTUALLY BE THE OBSTRUCTIONS ENCOUNTERED. POTHOLING IS REQUIRED. HAND EXCAVATE ONLY IN PRESENCE OF AN INSPECTOR.

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. N.T.S.	
CHECKED: KY	DATE: 09/25/2020	SCALE VERT. N.T.S.	
APPROVED:	DATE: 9/25/2020	JOB NO. SJ-17101	

SCOTT C. CRIER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

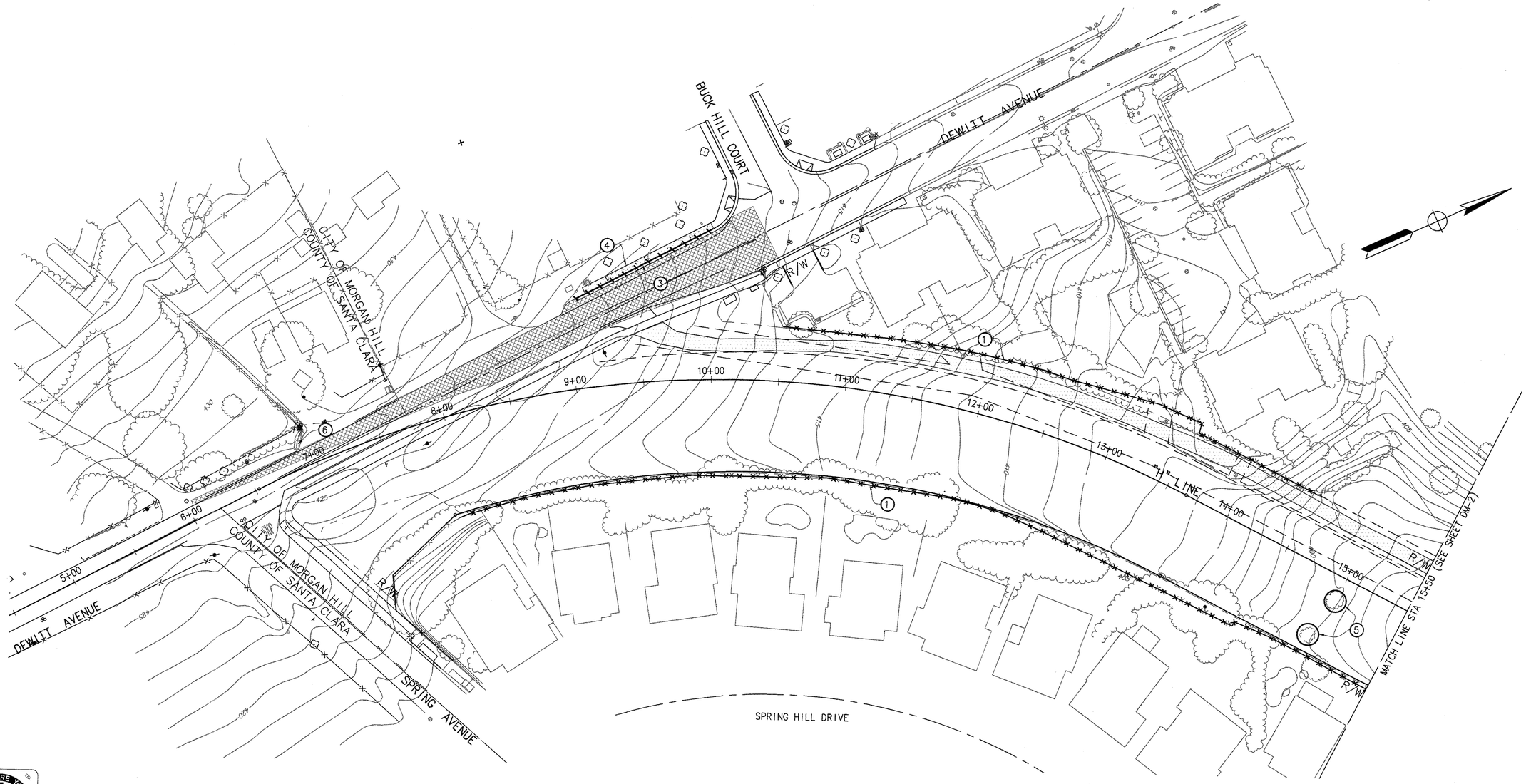
SIGNATURE DATE

MARK THOMAS

GENERAL NOTES & TYPICAL SECTIONS

IMPROVEMENT PLANS FOR
MORGAN HILL **HALE AVE EXTENSION** CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **TS-4**
5 OF 120



CALL BEFORE YOU DIG 800-227-2600

CAUTION!!! ENERGIZED FACILITIES!!

CONTRACTOR TO EXERCISE EXTREME CAUTION WORKING NEAR AND UNDER HIGH VOLTAGE ELECTRICAL LINES.
CONTRACTOR TO EXERCISE EXTREME CAUTION TO AVOID DAMAGING EXISTING UNDERGROUND UTILITIES. OBSTRUCTIONS INDICATED ARE FOR INFORMATION ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION AND DEPTH WITH THE APPROPRIATE AGENCIES. NEITHER THE OWNER NOR THE DESIGNER ASSUME ANY RESPONSIBILITY THAT THE OBSTRUCTIONS INDICATED WILL ACTUALLY BE THE OBSTRUCTIONS ENCOUNTERED. POTHOLING IS REQUIRED. HAND EXCAVATE ONLY IN PRESENCE OF AN INSPECTOR.

LEGEND

- REMOVE (E) AC PVMT & BASE
- REMOVE (E) CONCRETE PVMT & BASE
- REMOVE CONC DITCH
- REMOVE BASE AND SURFACING
- REMOVE SOUNDWALL
- REMOVE Conc CURB/C&G
- REMOVE FENCE
- REMOVE TREE

DEMOLITION NOTES

1. REMOVE (E) WOOD FENCE
2. REMOVE (E) WIRE FENCE
3. REMOVE (E) CURB & GUTTER
4. REMOVE (E) CONCRETE SIDEWALK
5. REMOVE (E) TREE
6. REMOVE (E) COBBLESTONE DITCH

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

City of Morgan Hill
Public Works Department
CITY OF MORGAN HILL
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=40'	
CHECKED: KY	DATE: 09/25/2020	SCALE VERT.	
APPROVED:	DATE: 9/25/2020	JOB NO. SJ-17101	

SCOTT C. CREER, RCE 58879, DEPUTY DIRECTOR FOR ENGINEERING, EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

SIGNATURE DATE

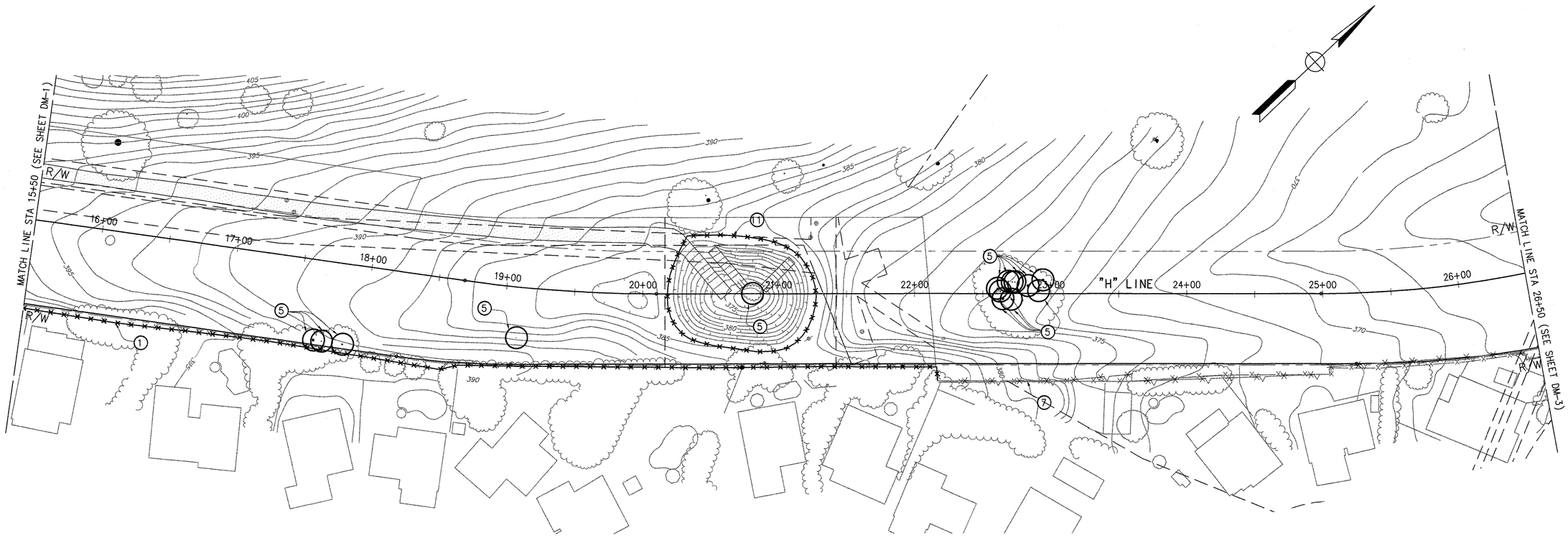
MARK THOMAS

BID SUBMITTAL

SITE TOPOGRAPHY / DEMOLITION PLAN
STA 4+50 TO STA 15+50
IMPROVEMENT PLANS FOR
MORGAN HILL **HALE AVE EXTENSION** CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **DM-1**
6 OF 120

PLOT DATE: Sep 23, 2020- 10:52:37pm CAD USER: jkolne
FILE NAME: HAE_DM1-5
PATH: J:\Morgan Hill\SJ-17101-Hale Avenue Extension\CADD\Sheet\1



CALL BEFORE YOU DIG 811 811 USA 800-227-2600 CALL

CAUTION!!! ENERGIZED FACILITIES!!

CONTRACTOR TO EXERCISE EXTREME CAUTION WORKING NEAR AND UNDER HIGH VOLTAGE ELECTRICAL LINES.
CONTRACTOR TO EXERCISE EXTREME CAUTION TO AVOID DAMAGING EXISTING UNDERGROUND UTILITIES. OBSTRUCTIONS INDICATED ARE FOR INFORMATION ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION AND DEPTH WITH THE APPROPRIATE AGENCIES. NEITHER THE OWNER NOR THE DESIGNER ASSUME ANY RESPONSIBILITY THAT THE OBSTRUCTIONS INDICATED WILL ACTUALLY BE THE OBSTRUCTIONS ENCOUNTERED. POTHOLING IS REQUIRED. HAND EXCAVATE ONLY IN PRESENCE OF AN INSPECTOR.

LEGEND

- REMOVE (E) AC PVMT & BASE
- REMOVE (E) CONCRETE PVMT & BASE
- REMOVE CONC DITCH
- REMOVE BASE AND SURFACING
- REMOVE SOUNDWALL
- REMOVE Conc CURB/C&G
- REMOVE FENCE
- REMOVE TREE

DEMOLITION NOTES

(1) REMOVE (E) WOOD FENCE
(5) REMOVE (E) TREE
(7) REMOVE (E) SOUNDWALL AND INSTALL TEMPORARY WIRE FENCE
(11) REMOVE (E) CHAIN LINK FENCE

CONTRACTOR TO PROVIDE TEMPORARY CHAIN LINK FENCE AT RESIDENTS HOMES AFTER REMOVAL OF FENCE AND WALL UNTIL COMPLETION OF NEW SOUNDWALL

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=40'	
CHECKED: KY	DATE: 09/25/2020	SCALE VERT.	
APPROVED: S.C.C.	DATE: 9/25/2020	JOB NO. SJ-17101	

SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

MICHEL K. COOPER No. 29072 Exp. 3/31/2021 CIVIL STATE OF CALIFORNIA

SIGNATURE DATE

MARK THOMAS

SITE TOPOGRAPHY / DEMOLITION PLAN STA 15+50 TO STA 26+50 IMPROVEMENT PLANS FOR HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **DM-2**
7 OF 120

CAD USER: jkeine
PLOT DATE: Sep 23, 2020-10:55:14pm
FILE NAME: HAE_DM1-5
PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CADD\Sheets\

PLOT DATE: Sep 23, 2020-10:52:18pm CAD USER: jkohe
FILE NAME: HAE_DM1-5



CAUTION!!! ENERGIZED FACILITIES!!

CONTRACTOR TO EXERCISE EXTREME CAUTION WORKING NEAR AND UNDER HIGH VOLTAGE ELECTRICAL LINES.
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LEGEND

- REMOVE (E) AC PVMT & BASE
- REMOVE (E) CONCRETE PVMT & BASE
- REMOVE CONC DITCH
- REMOVE BASE AND SURFACING
- REMOVE SOUNDWALL
- REMOVE Conc CURB/C&G
- REMOVE FENCE
- REMOVE TREE

DEMOLITION NOTES

1. REMOVE (E) WOOD FENCE
2. REMOVE (E) WIRE FENCE
3. REMOVE (E) CURB & GUTTER
4. REMOVE (E) CONCRETE SIDEWALK
5. REMOVE (E) TREE
7. REMOVE (E) SOUNDWALL AND INSTALL TEMPORARY WIRE FENCE
8. HOME OWNER TO RELOCATE SHED
9. REMOVE (E) CONC V-DITCH

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL
City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=40'	
CHECKED: KY	DATE: 09/25/2020	SCALE VERT.	
APPROVED:	DATE: 9/25/2020	JOB NO. SJ-17101	

SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

REGISTERED PROFESSIONAL ENGINEER MICHAEL K. COOPER No. 29072 CIVIL STATE OF CALIFORNIA 3/31/2021

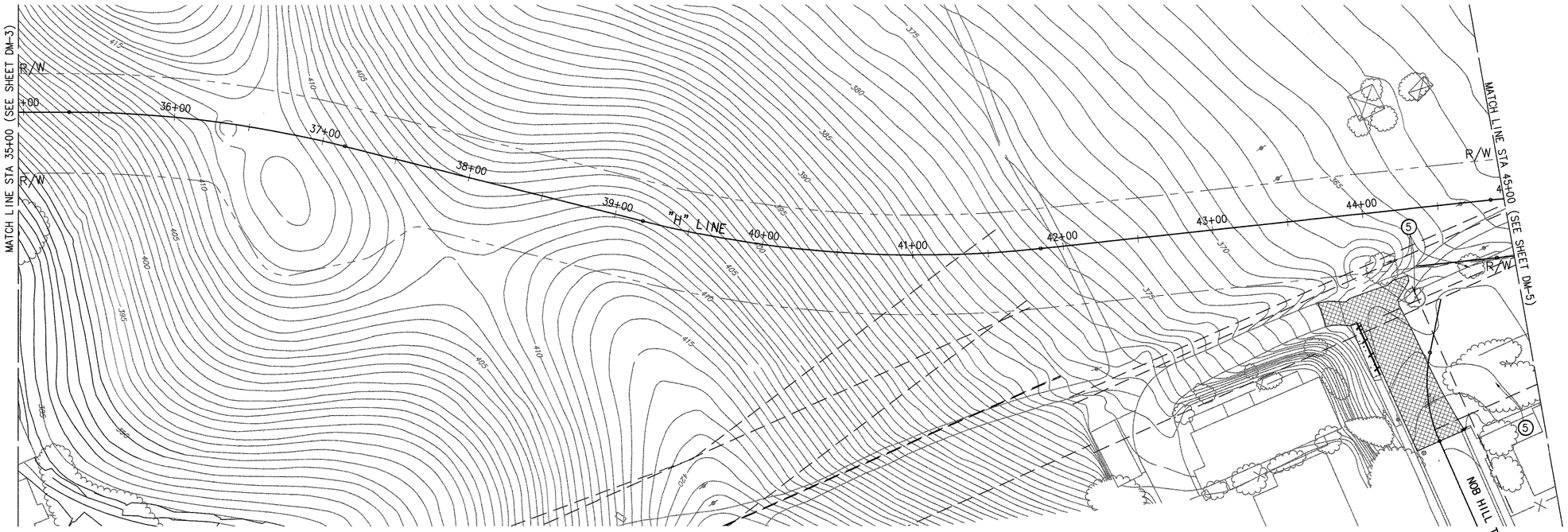
SIGNATURE DATE

MARK THOMAS

SITE TOPOGRAPHY / DEMOLITION PLAN STA 26+50 TO STA 35+00 IMPROVEMENT PLANS FOR HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: DM-3
8 OF 120

PATH: J:\Morgan Hill-SJ-TYH-Hale Avenue Extension\CAD\Sheets\



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800-227-2600

CAUTION!!! ENERGIZED FACILITIES!!

CONTRACTOR TO EXERCISE EXTREME CAUTION WORKING NEAR AND UNDER HIGH VOLTAGE ELECTRICAL LINES.
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LEGEND

- REMOVE (E) AC PVMT & BASE
- REMOVE (E) CONCRETE PVMT & BASE
- REMOVE CONC DITCH
- REMOVE BASE AND SURFACING
- REMOVE SOUNDWALL
- REMOVE Conc CURB/C&G
- REMOVE FENCE
- REMOVE TREE

DEMOLITION NOTES

1. REMOVE (E) WOOD FENCE
2. REMOVE (E) WIRE FENCE
3. REMOVE (E) CURB & GUTTER
4. REMOVE (E) CONCRETE SIDEWALK
5. REMOVE (E) TREE
7. REMOVE (E) SOUNDWALL AND INSTALL TEMPORARY WIRE FENCE
8. DEMOLITE (E) BUILDING
9. REMOVE (E) CONC V-DITCH

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=40'	
CHECKED: KY	DATE: 09/25/2020	SCALE VERT.	
APPROVED: S.C.C.	DATE: 9/25/2020	JOB NO. SJ-17101	

SCOTT C. CREER RCE 58579 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

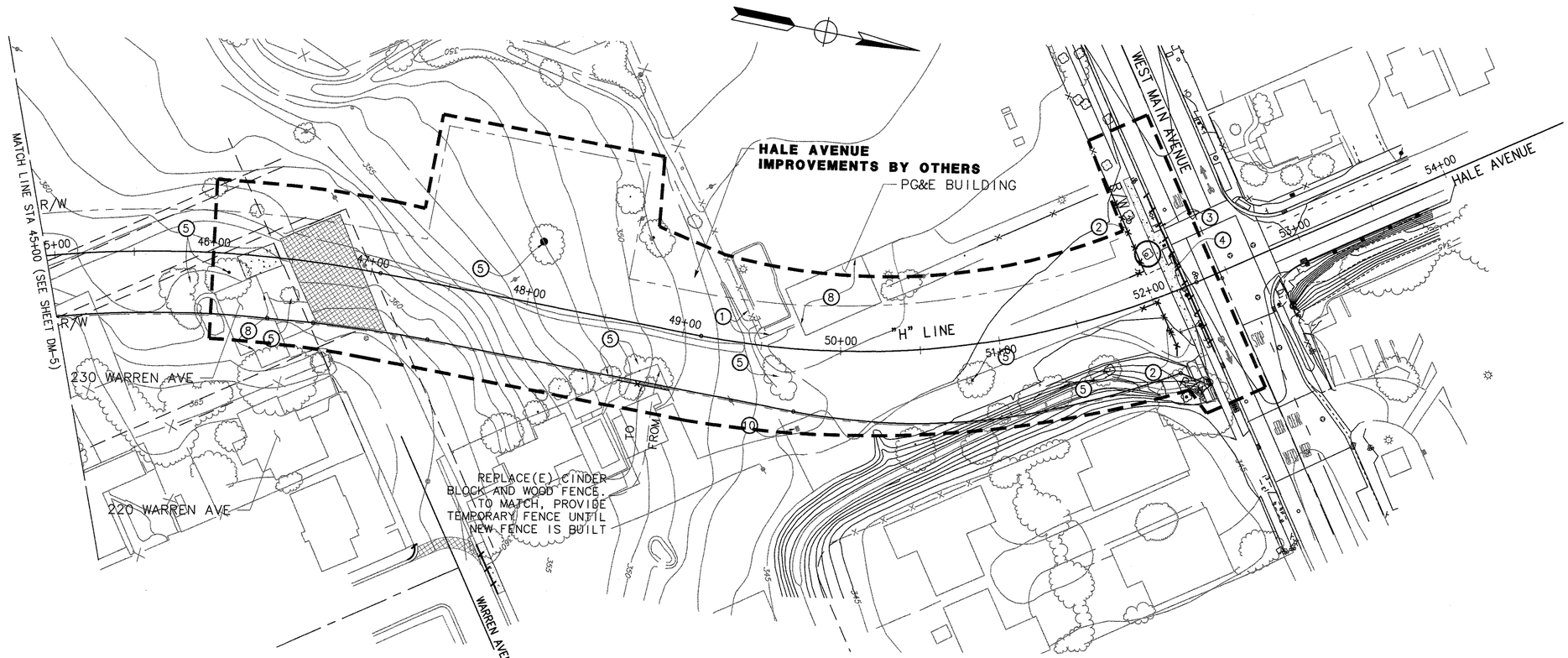
SIGNATURE DATE

MARK THOMAS

SITE TOPOGRAPHY / DEMOLITION PLAN
STA 35+00 TO STA 45+00
IMPROVEMENT PLANS FOR
HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **DM-4**
9 OF 120

PATH: J:\Morgan Hill\-SJ-17101-Hale Avenue Extension\CADD\Sheets\
FILE NAME: HAE_DM1-5
PLOT DATE: Sep 23, 2020-10:52:47pm
CAD USER: jleone



CALL BEFORE YOU DIG
811
USA
800-227-2600

CAUTION!!! ENERGIZED FACILITIES!!

CONTRACTOR TO EXERCISE EXTREME CAUTION WORKING NEAR AND UNDER HIGH VOLTAGE ELECTRICAL LINES.
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LEGEND

- REMOVE (E) AC PVMT & BASE
- REMOVE (E) CONCRETE PVMT & BASE
- REMOVE CONC DITCH
- REMOVE BASE AND SURFACING
- REMOVE SOUNDWALL
- REMOVE Conc CURB/C&G
- REMOVE FENCE
- REMOVE TREE

DEMOLITION NOTES

1. REMOVE (E) WOOD FENCE
2. REMOVE (E) WIRE FENCE
3. REMOVE (E) CURB & GUTTER
4. REMOVE (E) CONCRETE SIDEWALK
5. REMOVE (E) TREE
7. REMOVE (E) SOUNDWALL AND INSTALL TEMPORARY WIRE FENCE
8. DEMOLISH (E) BUILDING
9. REMOVE (E) CONC V-DITCH
10. REPLACE (E) SDDI

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=40'	
CHECKED: KY	DATE: 09/25/2020	SCALE VERT.	
APPROVED: Scott C. Creer	DATE: 9/25/2020	JOB NO. SJ-17101	

SCOTT C. CREER
RCE 58879
DEPUTY DIRECTOR FOR ENGINEERING
EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

MICHAEL K. COOPER No. 29072 3/31/2021 CIVIL STATE OF CALIFORNIA

SIGNATURE DATE

MARK THOMAS

SITE TOPOGRAPHY / DEMOLITION PLAN STA 45+00 TO STA 53+00 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

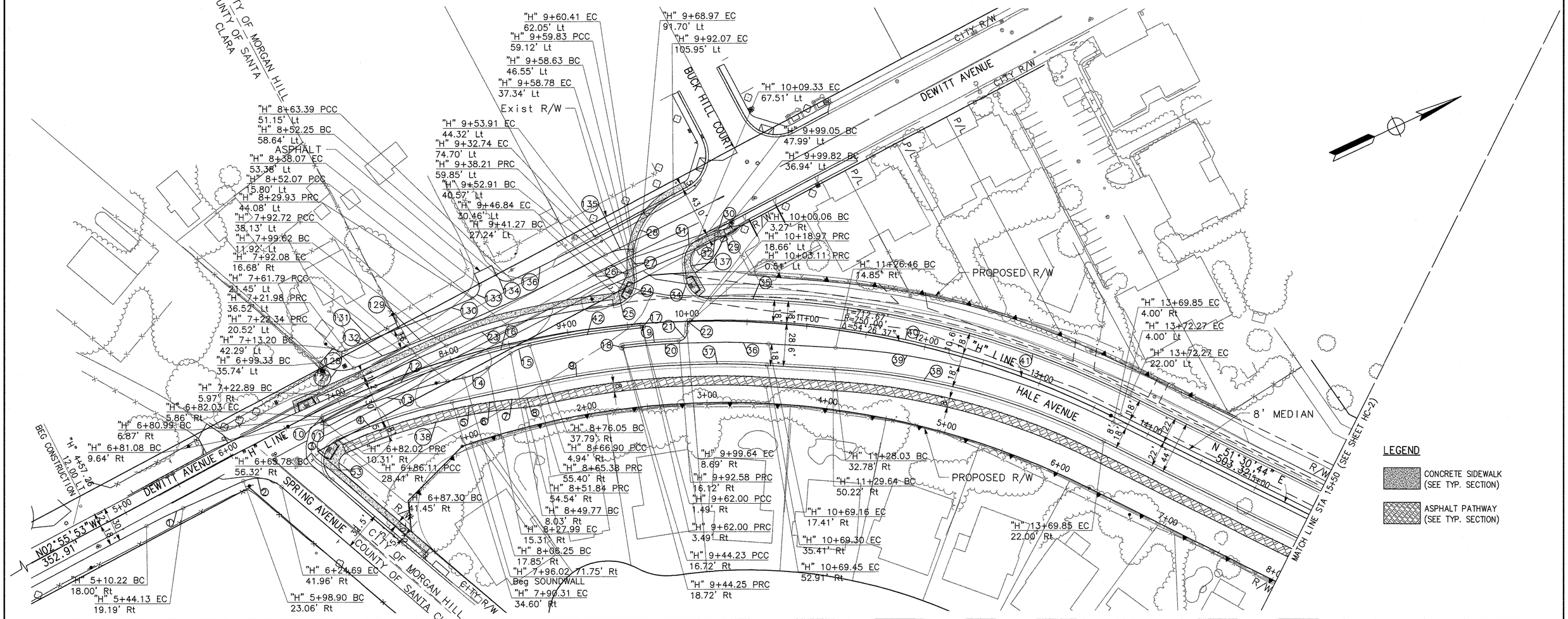
CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: DM-5
10 OF 120

PLOT DATE: Sep 23, 2020-10:52:25pm CAD USER: jkohn

FILE NAME: HAE_DM1-5

PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CADD\Sheets\

CAD USER: jkeine
PLOT DATE: Sep 23, 2020-02:52pm
FILE NAME: HAL_HC1-5



CURVE TABLE

CURVE #	RADIUS	DELTA	TANGENT	LENGTH
1	482.00'	4°02'06"	16.98'	33.94'
2	30.00'	47°21'39"	13.16'	24.80'
3	20.00'	115°40'08"	31.80'	40.38'
4	482.00'	11°54'00"	50.23'	100.11'
5	477.00'	18°51'28"	79.21'	156.99'
6	477.00'	18°51'28"	79.21'	156.99'
7	477.00'	18°51'28"	79.21'	156.99'
8	92.00'	7°12'38"	5.80'	11.58'
9	685.50'	15°22'10"	92.50'	183.88'
10	1.00'	92°45'44"	1.05'	1.62'
11	1.00'	87°35'46"	0.96'	1.53'
12	720.50'	18°55'44"	120.11'	238.03'
13	500.00'	12°25'11"	54.40'	108.38'

CURVE TABLE

CURVE #	RADIUS	DELTA	TANGENT	LENGTH
14	60.00'	20°33'26"	10.88'	21.53'
15	50.00'	19°52'48"	8.76'	17.35'
16	720.50'	18°55'44"	120.11'	238.03'
17	1.00'	179°59'25"	11953.77'	3.14'
18	1.00'	180°00'00"	INFINITY'	3.14'
19	705.50'	3°50'29"	23.66'	47.30'
20	703.50'	9°55'46"	61.11'	121.92'
21	7.00'	84°22'57"	6.35'	10.31'
22	3.00'	85°17'23"	2.76'	4.47'
23	300.00'	10°14'23"	26.88'	53.61'
24	20.00'	88°51'15"	19.60'	31.02'
25	7.00'	56°23'45"	3.75'	6.89'
26	7.00'	32°19'05"	2.03'	3.95'

CURVE TABLE

CURVE #	RADIUS	DELTA	TANGENT	LENGTH
27	73.00'	10°12'27"	6.52'	13.01'
28	63.00'	55°46'16"	33.34'	61.32'
29	12.00'	34°52'22"	3.77'	7.30'
30	30.00'	14°13'23"	3.74'	7.45'
31	20.00'	67°39'42"	13.40'	23.62'
32	25.00'	24°41'54"	5.47'	10.78'
34	20.00'	84°52'28"	18.29'	29.63'
35	769.00'	26°00'38"	177.61'	349.10'
36	703.50'	9°55'46"	61.11'	121.92'
37	685.50'	15°22'10"	92.50'	183.88'
38	581.00'	23°04'06"	118.57'	233.92'
39	599.00'	23°04'06"	122.24'	241.17'
40	751.00'	26°00'38"	173.45'	340.93'

CURVE TABLE

CURVE #	RADIUS	DELTA	TANGENT	LENGTH
41	769.00'	26°00'38"	177.61'	349.10'
42	718.50'	7°32'33"	47.36'	94.58'
53	10.00'	115°50'57"	15.96'	20.22'
127	26.00'	65°58'20"	16.88'	29.94'
128	10.00'	65°58'20"	6.49'	11.51'
129	1500.00'	7°14'21"	94.89'	189.52'
130	1484.00'	2°47'58"	36.26'	72.51'
131	763.00'	3°06'42"	20.72'	41.44'
132	747.00'	3°06'42"	20.29'	40.57'
133	10.00'	91°40'59"	10.30'	16.00'
134	10.00'	89°43'00"	9.95'	15.66'
135	40.00'	35°06'43"	12.65'	24.51'
136	1484.00'	3°02'25"	39.38'	78.75'

CURVE TABLE

CURVE #	RADIUS	DELTA	TANGENT	LENGTH
137	7.00'	25°06'40"	1.56'	3.07'
138	469.00'	18°55'50"	78.19'	154.96'

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL
City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL DESIGN: SL SCALE HOR. 1"=40'
CHECKED: KY DATE: 09/25/2020 SCALE VERT.
APPROVED: DATE: 9/25/2020 JOB NO. SJ-17101
SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

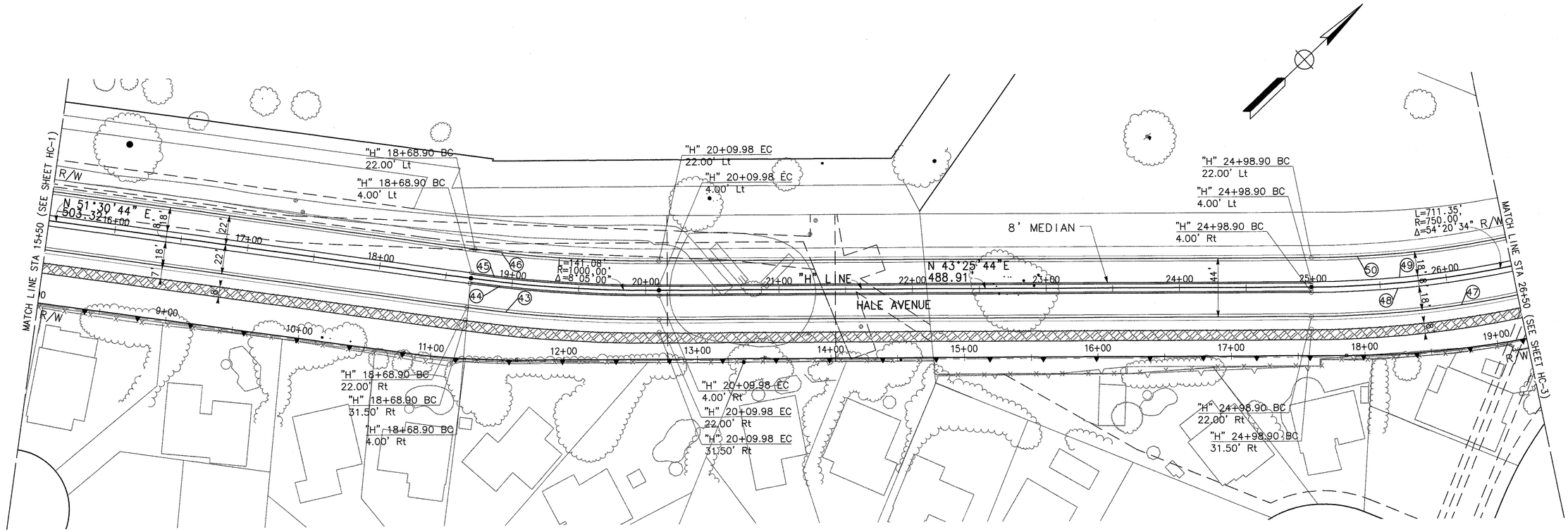
SUPERVISED BY: MICHAEL K. COOPER REGISTERED CIVIL ENGINEER RCE 29072 EXP. DATE 3-31-21
SIGNATURE DATE

MARK THOMAS

HORIZONTAL CONTROL PLAN STA 4+50 TO STA 15+50 IMPROVEMENT PLANS FOR HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: HC-1
11 OF 120

PATH: J:\Morgan Hill\SJ-17101-Hale Avenue Extension\CADD\Sheets\



CURVE TABLE				
CURVE #	RADIUS	DELTA	TANGENT	LENGTH
43	1022.00'	8°05'00"	72.21'	144.18'
44	1003.00'	8°05'00"	70.87'	141.50'
45	997.00'	8°05'00"	70.45'	140.66'
46	978.00'	8°05'00"	69.10'	137.98'
47	772.00'	48°57'19"	351.46'	659.62'
48	754.00'	53°21'53"	378.93'	702.27'
49	746.00'	50°50'18"	354.53'	661.92'
50	728.00'	47°03'55"	317.04'	598.01'

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL | DESIGN: SL | SCALE HOR. 1"=40'
CHECKED: KY | DATE: 09/25/2020 | SCALE VERT.
APPROVED: S.C. | DATE: 9/25/2020 | JOB NO. SJ-17101
SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

REGISTERED PROFESSIONAL ENGINEER — MICHAEL K. COOPER — No. 29072 — Exp. 3/31/2021 — CIVIL — STATE OF CALIFORNIA

SIGNATURE DATE

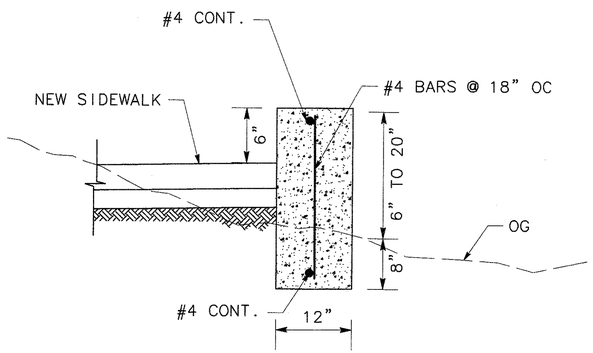
MARK THOMAS

HORIZONTAL CONTROL PLAN STA 15+50 TO STA 26+50 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: HC-2
12 OF 120

CAD USER: jkohn
PLOT DATE: Sep 23, 2020-10:53:29pm
FILE NAME: HAE_HC1-5
PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CAD\Sheets\



RETAINING CURB DETAIL
NO SCALE

CURVE TABLE				
CURVE #	RADIUS	DELTA	TANGENT	LENGTH
51	781.50'	49°43'08"	362.09'	678.15'
52	114.00'	44°03'52"	46.13'	87.67'
55	50.00'	13°00'22"	5.70'	11.35'
56	98.00'	19°59'20"	17.27'	34.19'
57	110.00'	66°50'07"	72.58'	128.31'
58	114.00'	44°03'52"	46.13'	87.67'
59	120.00'	39°54'19"	43.56'	83.58'
60	110.00'	66°50'07"	72.58'	128.31'
61	10.00'	42°07'08"	3.85'	7.35'
62	7.00'	42°01'59"	2.69'	5.14'
63	20.00'	84°03'58"	18.03'	29.34'
64	732.00'	4°06'49"	26.29'	52.55'
65	60.00'	45°35'20"	25.21'	47.74'
66	25.00'	12°15'21"	2.68'	5.35'
67	103.00'	41°59'48"	39.53'	75.50'
68	50.00'	43°20'49"	19.87'	37.83'
69	30.00'	38°10'37"	10.38'	19.99'
70	50.00'	19°53'18"	8.77'	17.36'
71	115.00'	36°39'34"	38.10'	73.58'
72	50.00'	13°51'17"	6.07'	12.09'
73	103.00'	40°16'17"	37.77'	72.40'
74	25.00'	14°43'44"	3.23'	6.43'
75	68.00'	44°59'36"	28.16'	53.40'
76	3.00'	90°43'56"	3.04'	4.75'
77	20.00'	57°45'08"	11.03'	20.16'
78	3.00'	96°05'29"	3.34'	5.03'
79	56.00'	10°12'41"	5.00'	9.98'
194	100.00'	5°10'12"	4.51'	9.02'
195	108.00'	16°11'11"	15.36'	30.51'
196	120.00'	13°33'54"	14.27'	28.41'

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL DESIGN: SL SCALE HOR. 1"=40'
CHECKED: KY DATE: 09/25/2020 SCALE VERT.
APPROVED: DATE: 9/25/2020 JOB NO. SJ-17101
SCOTT C. CREER RCE 56879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

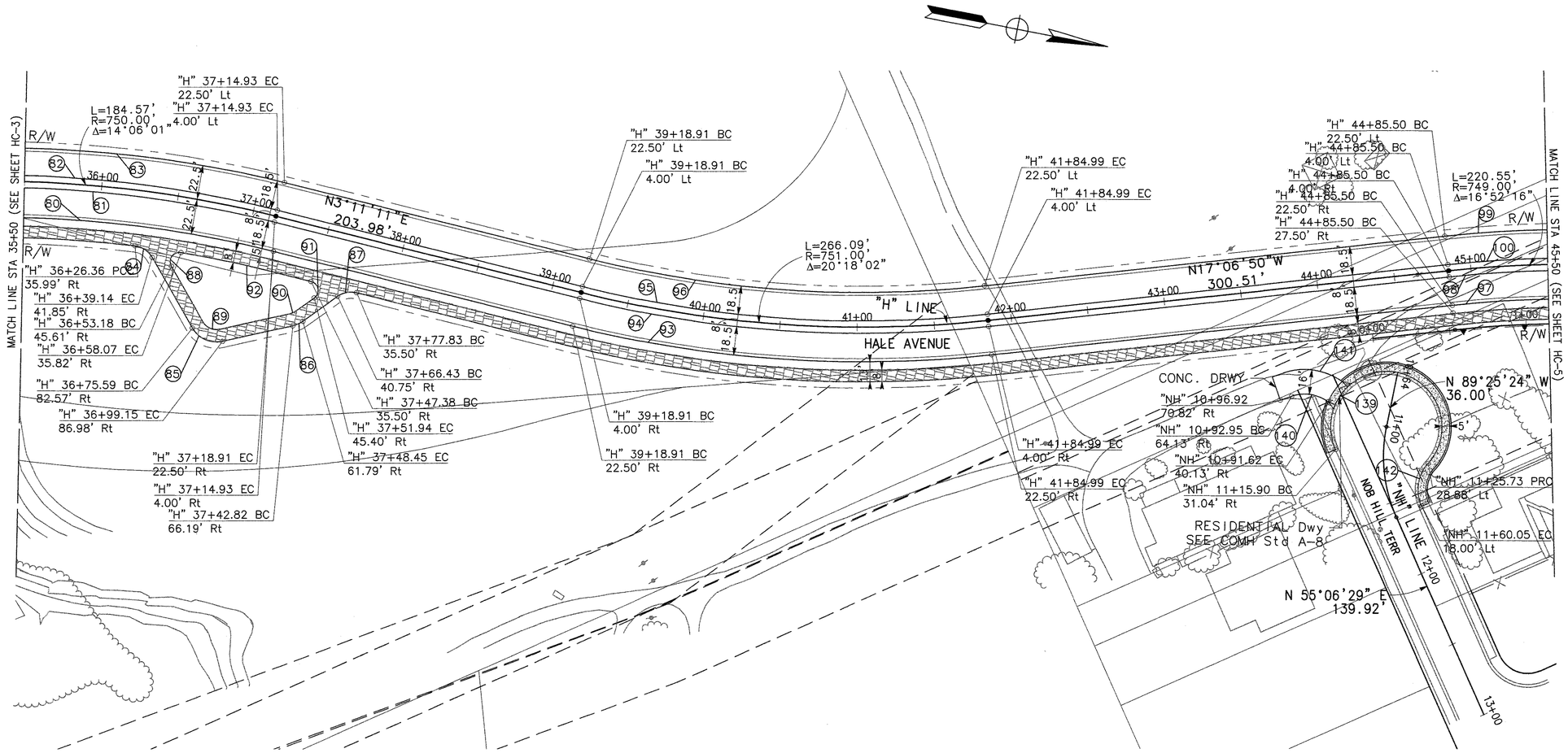
SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21
SIGNATURE DATE

MARK THOMAS

HORIZONTAL CONTROL PLAN
STA 26+50 TO STA 35+50
IMPROVEMENT PLANS FOR
MORGAN HILL **HALE AVE EXTENSION** CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **HC-3**
13 OF 120

PLOT DATE: Sep 23, 2020-09:53:43pm
CAD USER: jkeine
FILE NAME: HAE_HC1-5
PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CADD\Sheets\



CURVE TABLE

CURVE #	RADIUS	DELTA	TANGENT	LENGTH
80	726.50'	14°06'01"	89.85'	178.79'
81	746.00'	14°06'01"	92.26'	183.59'
82	755.00'	14°06'01"	93.37'	185.80'
83	772.00'	14°06'01"	95.48'	189.99'
84	15.00'	53°18'18"	7.53'	13.96'
85	18.00'	72°47'41"	13.27'	22.87'
86	18.00'	22°53'37"	3.64'	7.19'
87	15.00'	49°28'34"	6.91'	12.95'
88	6.00'	129°07'12"	12.61'	13.52'
89	10.00'	72°47'41"	7.37'	12.71'
90	10.00'	22°53'37"	2.02'	4.00'
91	6.00'	130°31'26"	13.02'	13.67'
92	713.50'	4°40'05"	29.08'	58.13'

CURVE TABLE

CURVE #	RADIUS	DELTA	TANGENT	LENGTH
93	773.50'	20°18'02"	138.48'	274.06'
94	755.00'	20°18'02"	135.17'	267.50'
95	747.00'	20°18'02"	133.74'	264.67'
96	728.50'	20°18'02"	130.42'	258.11'
97	726.50'	16°52'16"	107.74'	213.92'
98	745.00'	16°52'16"	110.48'	219.37'
99	771.50'	16°52'16"	114.41'	227.17'
100	753.00'	16°52'16"	111.67'	221.72'
139	36.00'	245°12'22"	56.28'	154.07'
140	26.00'	55°03'00"	13.55'	24.98'
141	42.00'	54°33'04"	21.66'	39.99'
142	26.00'	65°12'22"	16.63'	29.59'

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL DESIGN: SL SCALE HOR. 1"=40'
CHECKED: KY DATE: 09/25/2020 SCALE VERT.
APPROVED: DATE: 9/25/2020 JOB NO. SJ-17101
SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

REGISTERED PROFESSIONAL ENGINEER MICHAEL K. COOPER No. 29072 CIVIL 3/31/2021 STATE OF CALIFORNIA

SIGNATURE DATE

MARK THOMAS

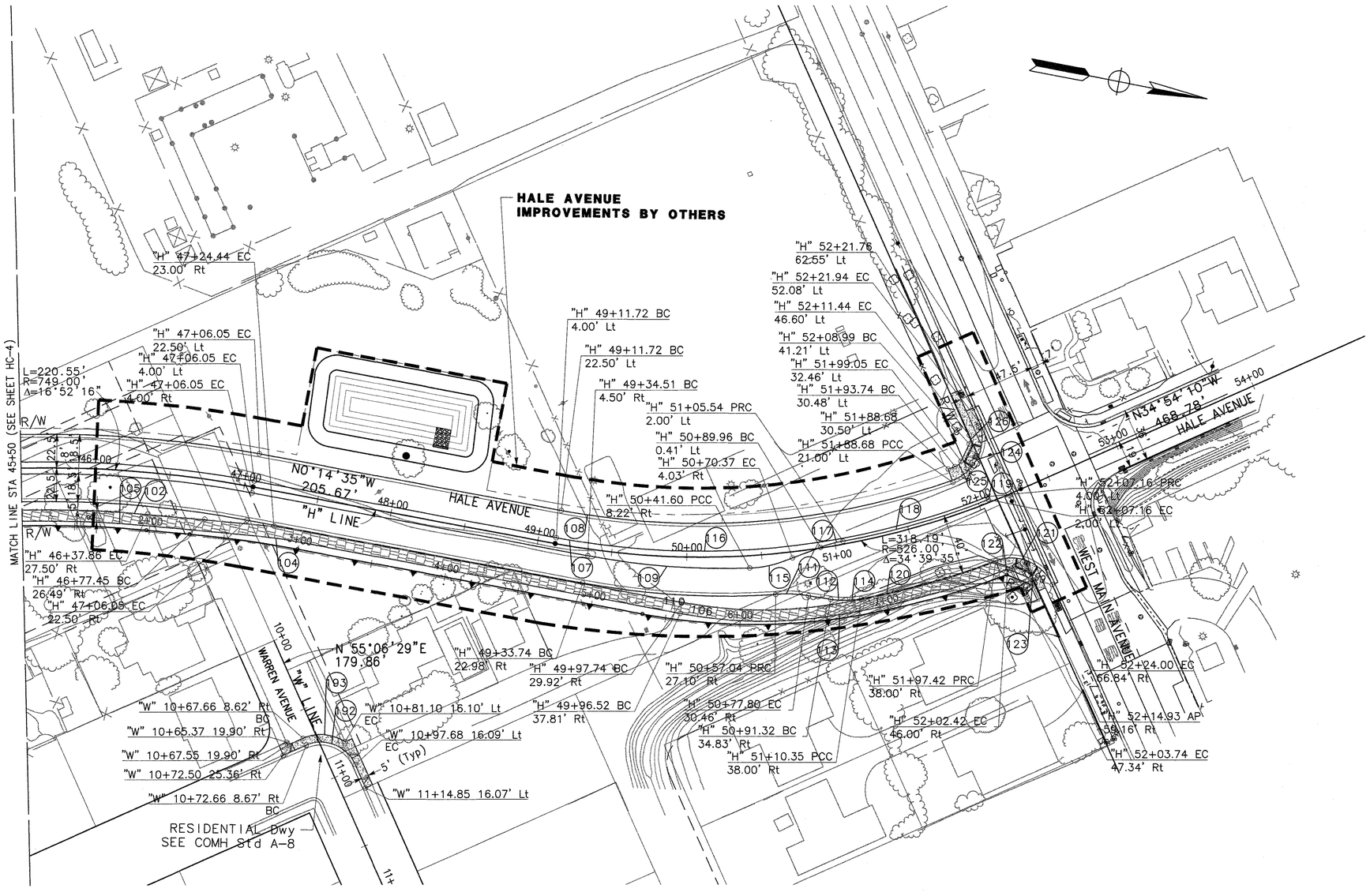
HORIZONTAL CONTROL PLAN STA 35+50 TO STA 45+50 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: HC-4
14 OF 120

CAD USER: jkohe
PLOT DATE: Sep 23, 2020-02:53:48pm
FILE NAME: HAE_HC1-5
PATH: J:\Morgan Hill-SJ-1785-Hale Avenue Extension\CADD\Sheets\

CURVE TABLE				
CURVE #	RADIUS	DELTA	TANGENT	LENGTH
102	721.50'	11°39'19"	73.64'	146.77'
104	300.00'	5°12'57"	13.66'	27.31'
105	713.50'	11°39'19"	72.82'	145.14'
106	300.00'	19°26'09"	51.38'	101.77'
107	522.50'	32°10'54"	150.72'	293.48'
108	503.50'	30°09'22"	135.65'	265.00'
109	489.00'	12°42'40"	54.47'	108.49'
110	507.50'	14°35'45"	64.99'	129.28'
111	100.00'	12°43'12"	11.15'	22.20'
112	60.00'	19°45'39"	10.45'	20.69'
113	572.00'	11°41'06"	58.53'	116.66'
114	60.00'	19°45'39"	10.45'	20.69'
115	72.00'	18°21'44"	11.64'	23.07'
116	522.00'	32°10'54"	150.58'	293.20'
117	90.00'	9°57'39"	7.84'	15.65'
118	524.00'	11°04'10"	50.78'	101.23'
119	1.00'	180°00'00"	INFINITY'	3.14'
120	564.00'	9°29'04"	46.79'	93.36'
121	30.00'	86°20'01"	28.14'	45.20'
122	7.00'	42°46'34"	2.74'	5.23'
123	7.00'	43°56'02"	2.82'	5.37'
124	30.00'	94°29'27"	32.45'	49.48'
125	7.00'	45°07'09"	2.91'	5.51'
126	7.00'	49°18'39"	3.21'	6.02'
192	25.00'	89°29'56"	24.78'	39.05'
193	30.00'	55°56'29"	15.93'	29.29'



BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=40'	
CHECKED: KY	DATE: 09/25/2020	SCALE VERT.	
APPROVED:	DATE: 9/28/2020	JOB NO. SJ-17101	

SCOTT C. GREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

SIGNATURE DATE

MARK THOMAS

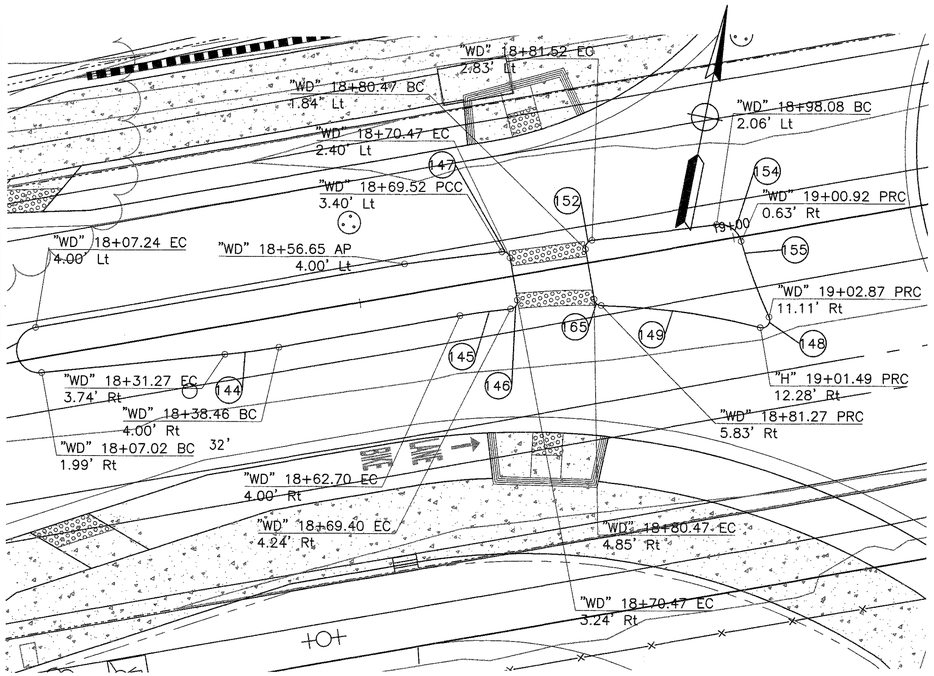
HORIZONTAL CONTROL PLAN STA 45+50 TO STA 54+50 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

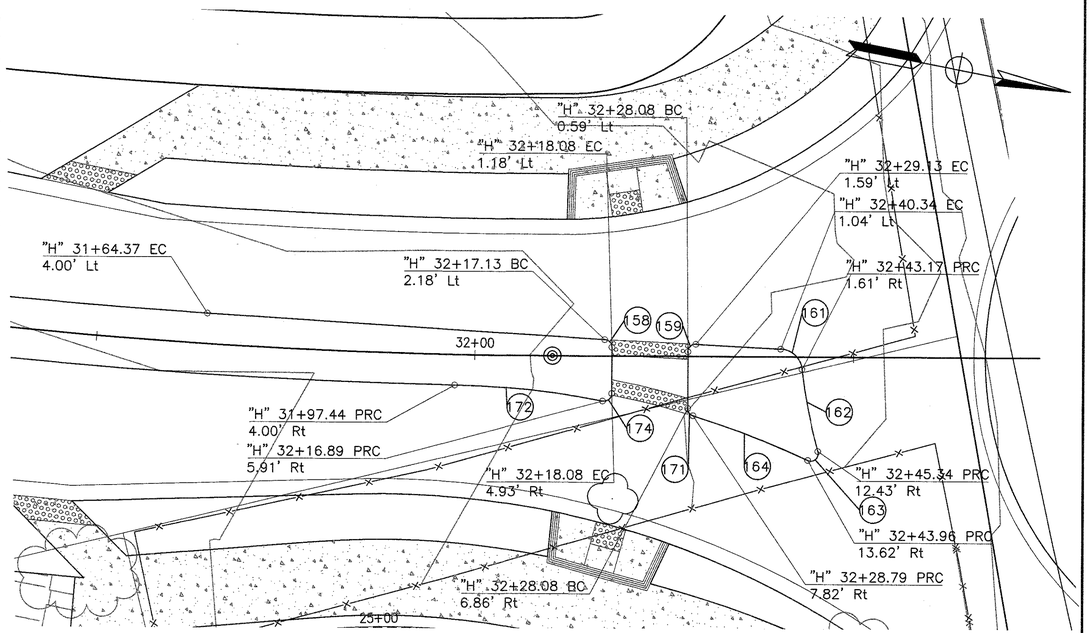
CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: HC-5
15 OF 120

CAD USER: jkelhe
PLOT DATE: Sep 23, 2020-025359pm
FILE NAME: HALE_HC1-5
PATH: J:\Morgan Hill\SJ-17101-Hale Avenue Extension\CADD\Sheets\

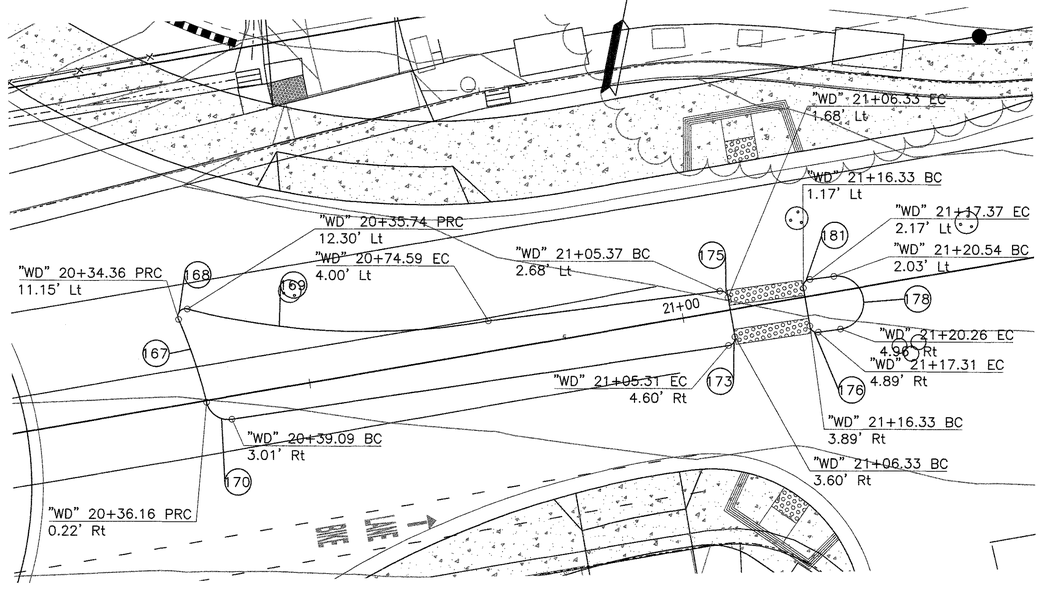
CURVE TABLE				
CURVE #	RADIUS	DELTA	TANGENT	LENGTH
144	100.00'	4°07'30"	3.60'	7.20'
145	95.00'	4°02'34"	3.35'	6.70'
146	1.00'	94°02'34"	1.07'	1.64'
147	1.00'	87°18'53"	0.95'	1.52'
148	1.00'	129°13'14"	2.11'	2.26'
149	95.00'	12°49'34"	10.68'	21.27'
152	1.00'	92°41'07"	1.05'	1.62'
154	3.00'	81°23'10"	2.58'	4.26'
155	66.50'	9°11'30"	5.35'	10.67'
158	1.00'	87°11'00"	0.95'	1.52'
159	1.00'	92°49'00"	1.05'	1.62'
161	3.00'	80°35'31"	2.54'	4.22'
162	66.50'	9°31'07"	5.54'	11.05'
163	1.00'	131°04'22"	2.20'	2.29'
164	115.00'	8°05'43"	8.14'	16.25'
165	1.00'	78°43'34"	0.82'	1.37'
167	66.50'	9°56'07"	5.78'	11.53'
168	1.00'	128°05'31"	2.05'	2.24'
169	95.00'	24°08'05"	20.31'	40.02'
170	3.00'	84°36'14"	2.73'	4.43'
171	1.00'	73°07'57"	0.74'	1.28'
172	114.00'	9°52'39"	9.85'	19.65'
173	1.00'	91°22'26"	1.02'	1.59'
174	1.00'	100°51'20"	1.21'	1.76'
175	1.00'	87°33'00"	0.96'	1.53'
176	1.00'	88°37'34"	0.98'	1.55'
177	1.00'	87°20'22"	0.95'	1.52'
178	3.50'	179°37'05"	1049.78'	10.97'
181	1.00'	92°27'00"	1.04'	1.61'
182	3.00'	80°46'17"	2.55'	4.23'
183	1.00'	92°39'38"	1.05'	1.62'
184	1.00'	73°11'23"	0.74'	1.28'
185	115.00'	8°05'25"	8.13'	16.24'
186	66.50'	9°34'51"	5.57'	11.12'
187	1.00'	131°02'58"	2.20'	2.29'
188	114.00'	10°47'57"	10.78'	21.49'
189	1.00'	100°47'57"	1.21'	1.76'



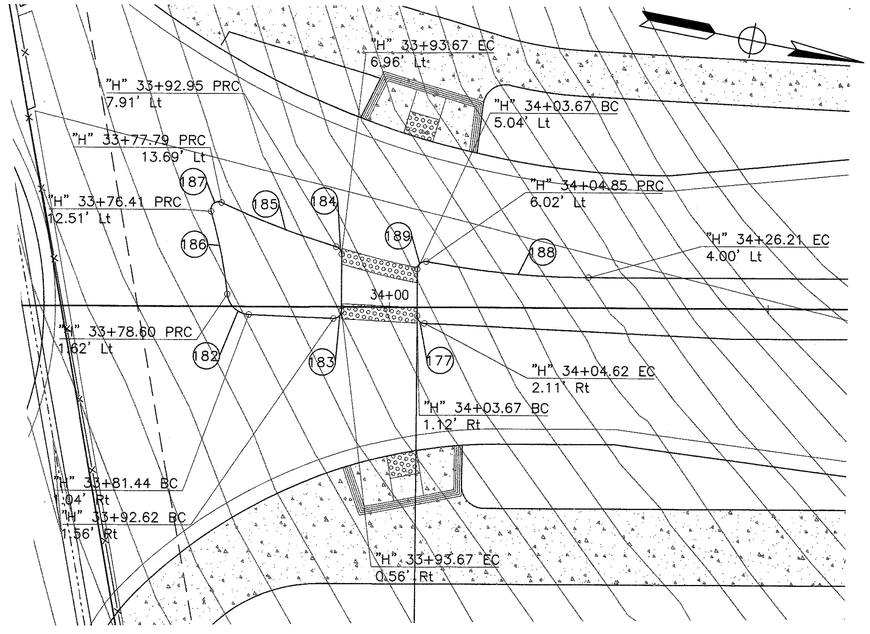
MEDIAN #1 DETAIL
SCALE: 1"=10'



MEDIAN #3 DETAIL
SCALE: 1"=10'



MEDIAN #2 DETAIL
SCALE: 1"=10'



MEDIAN #4 DETAIL
SCALE: 1"=10'

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL | DESIGN: SL | SCALE HOR. 1"=20' | SCALE VERT.
CHECKED: KY | DATE: 09/25/2020
APPROVED: Scott C. Creer | DATE: 9/25/2020 | JOB NO. SJ-17101
SCOTT C. CREER RCE 58879 | DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21
SIGNATURE DATE

MARK THOMAS

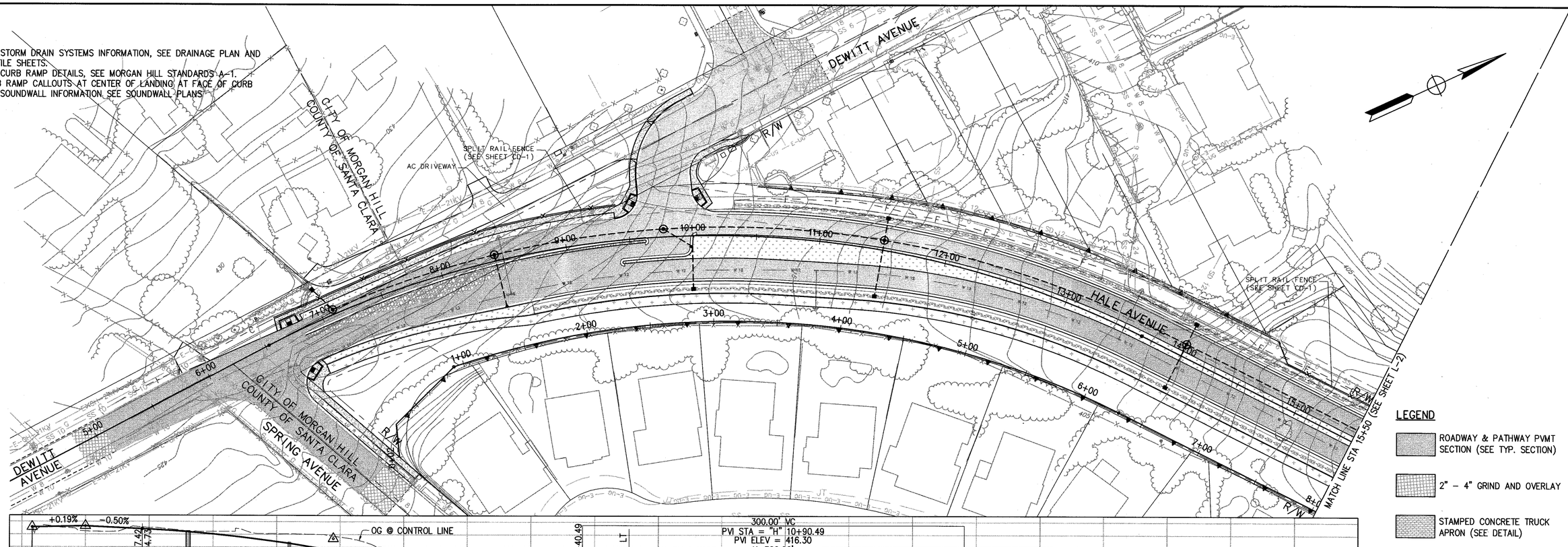
HORIZONTAL CONTROL PLAN
STA 26+50 TO STA 35+50
IMPROVEMENT PLANS FOR
MORGAN HILL HALE AVE EXTENSION CALIFORNIA

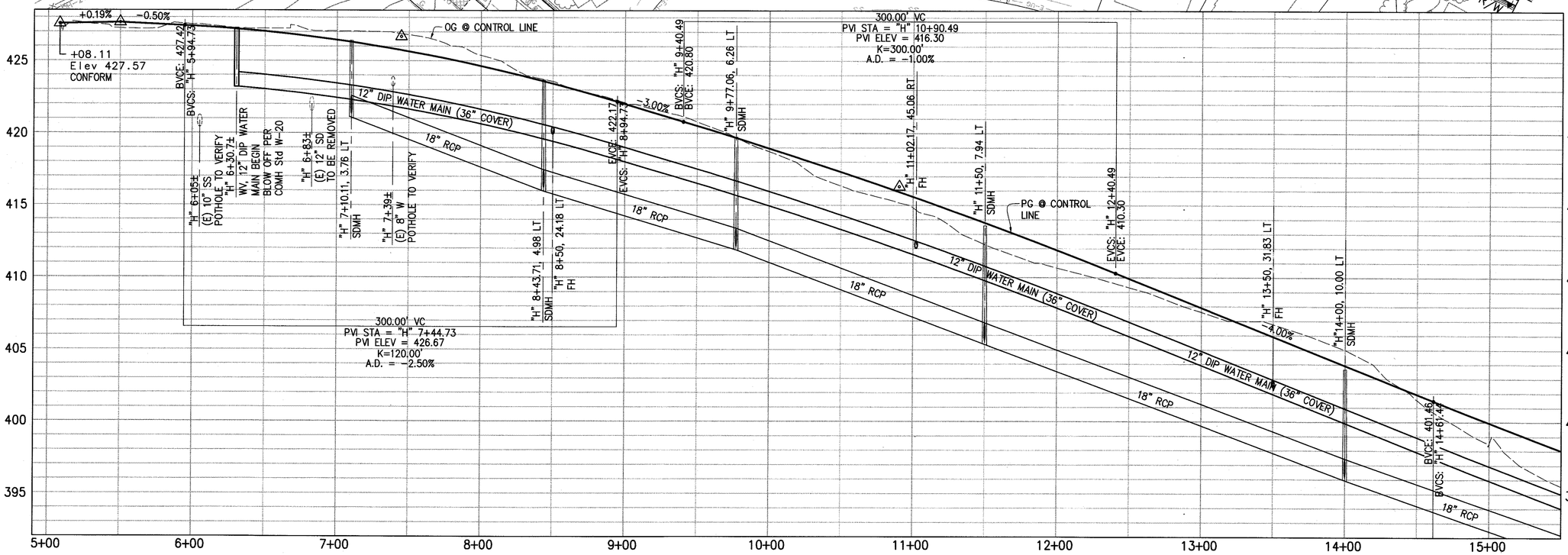
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PLAN SET: 09/25/2020
DRAWING: HC-6
16 OF 120

PLOT DATE: Sep 23, 2020-01:54:19pm
CAD USER: jbothe
FILE NAME: HALE_HC1-5
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NOTE

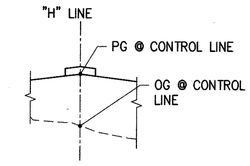
1. FOR STORM DRAIN SYSTEMS INFORMATION, SEE DRAINAGE PLAN AND PROFILE SHEETS.
2. FOR CURB RAMP DETAILS, SEE MORGAN HILL STANDARDS A-1.
3. CURB RAMP CALLOUTS AT CENTER OF LANDING AT FACE OF CURB
4. FOR SOUNDWALL INFORMATION SEE SOUNDWALL PLANS





LEGEND

- ROADWAY & PATHWAY PVMT SECTION (SEE TYP. SECTION)
- 2" – 4" GRIND AND OVERLAY
- STAMPED CONCRETE TRUCK APRON (SEE DETAIL)
- CONCRETE SIDEWALK (SEE TYP. SECTION)
- HMA PATHWAY (SEE TYP. SECTION)
- PLANTED MEDIAN (SEE LANDSCAPE PLANS)
- CONCRETE MEDIAN (SEE LANDSCAPE PLANS)
- COBBLESTONE MEDIAN (SEE LANDSCAPE PLANS)
- HMA SIDEWALK (SEE TYP. SECTION)
- RETAINING WALL (SEE SHEETS RW1–RW6)



BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL | DESIGN: SL | SCALE HOR. 1"=40'
CHECKED: KY | DATE: 09/25/2020 | SCALE VERT. 1"=4'
APPROVED: Scott C. Creer DATE: 9/25/2020 | JOB NO. SJ-17101
SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21
Michael Cooper 09/25/2020
SIGNATURE DATE

MARK THOMAS

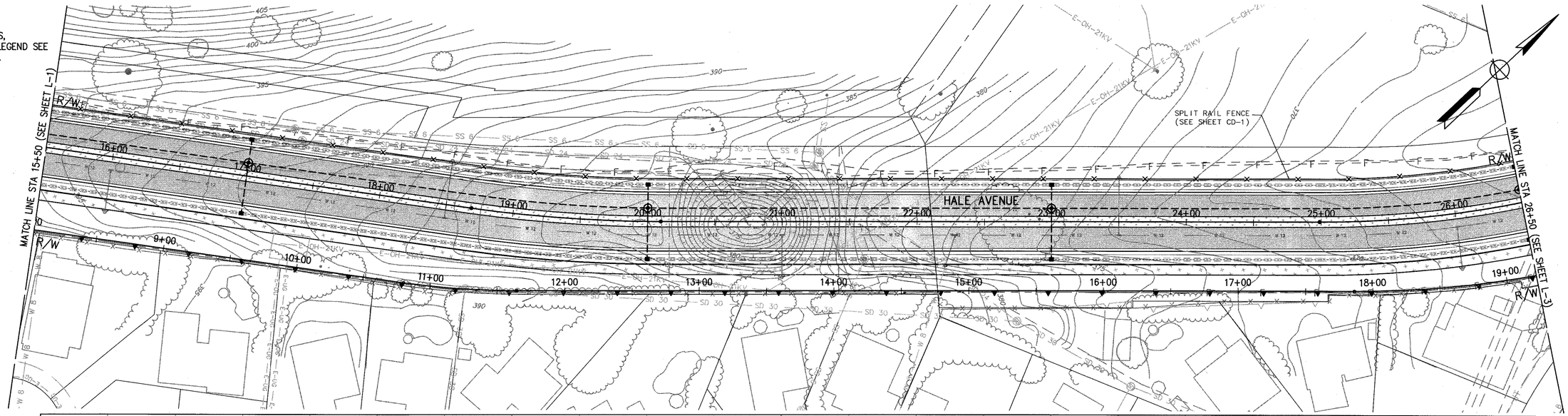
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STA 5+00 TO STA 15+50
IMPROVEMENT PLANS FOR
HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

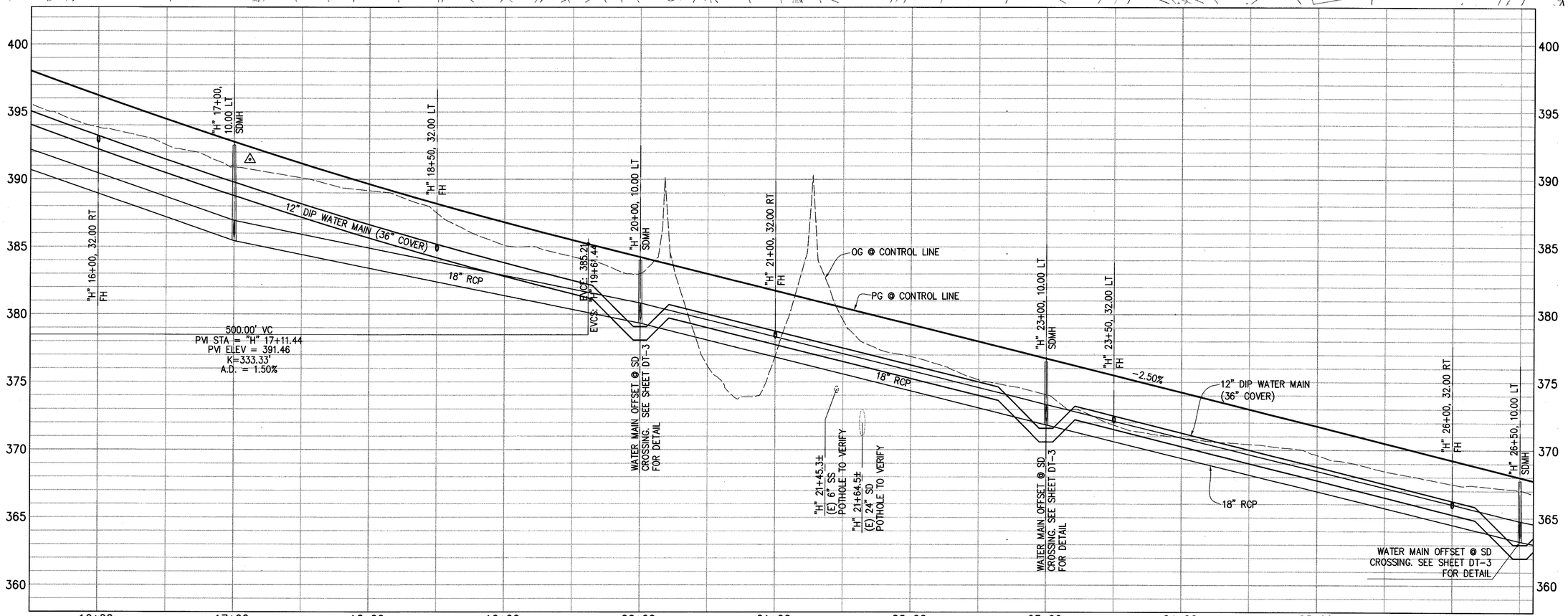
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DRAWING: **L-1**
17 OF 120

PLOT DATE: Sep 25, 2020- 14:28:44pm
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NOTE

1. FOR ADDITIONAL NOTES, ABBREVIATIONS, AND LEGEND SEE TS-1, TS-2, AND L-1.





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AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=40'	
CHECKED: KY	DATE: 09/25/2020	SCALE VERT. 1"=4'	
APPROVED:	DATE: 9/25/2020	JOB NO. SJ-17101	

SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY: MICHAEL K. COOPER REGISTERED CIVIL ENGINEER RCE 29072 EXP. DATE 3-31-21
Michael Cooper 09/25/2020
SIGNATURE DATE

MARK THOMAS

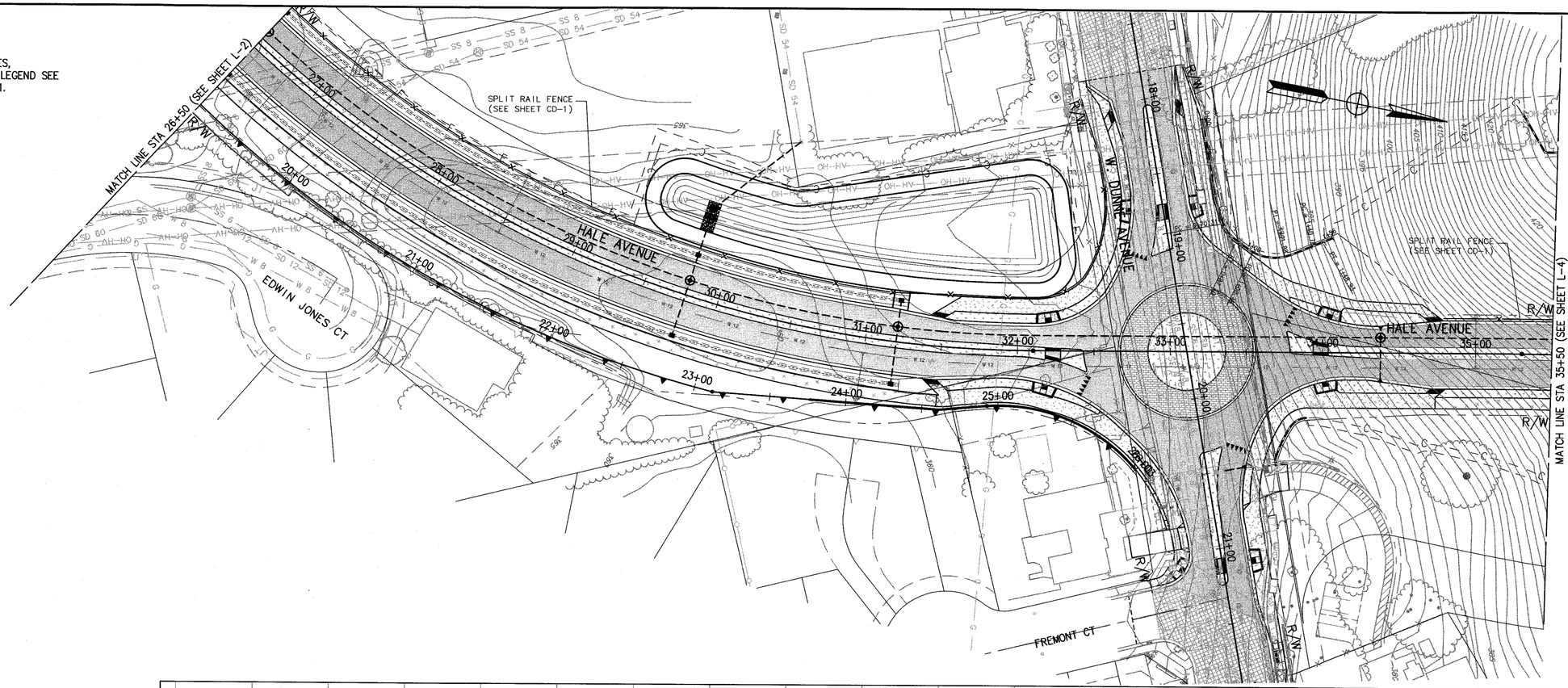
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IMPROVEMENT PLANS FOR
HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

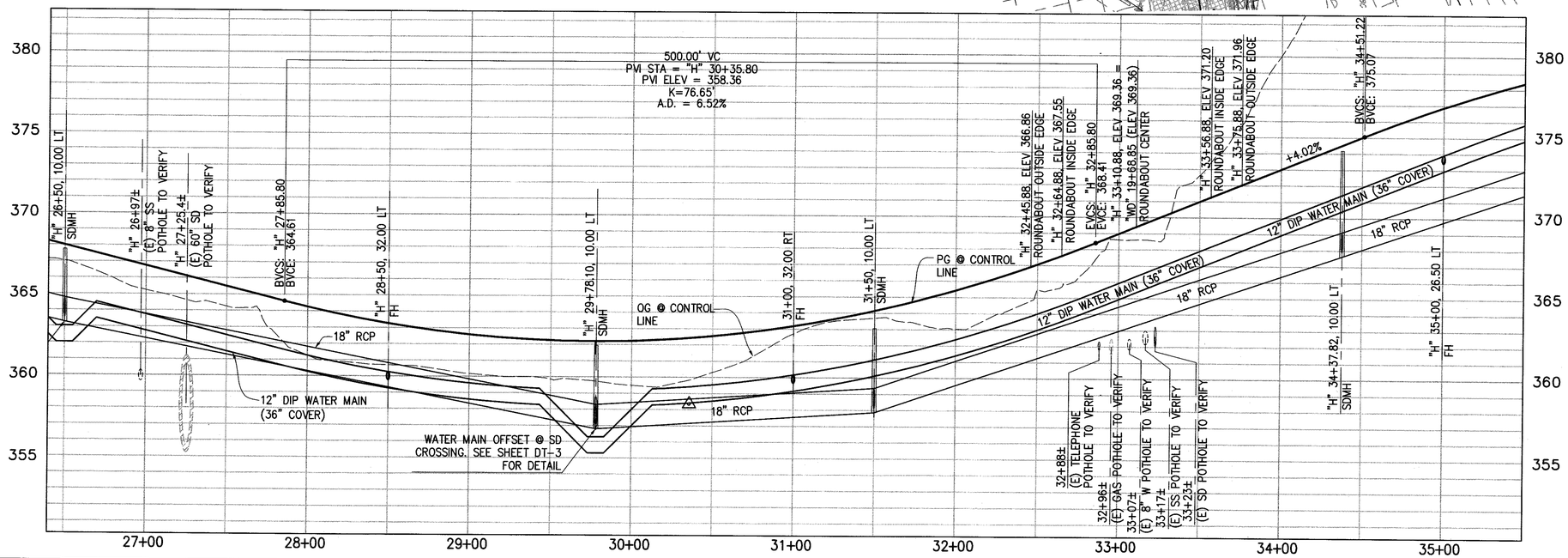
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PLAN SET: 09/25/2020
DRAWING: L-2
18 OF 120

PLOT DATE: Sep 24, 2020- 04:20:55pm CAD USER: alex
FILE NAME: HAE_L1-6
PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CADD\Sheet\

NOTE

1. FOR ADDITIONAL NOTES, ABBREVIATIONS, AND LEGEND SEE TS-1, TS-2, AND L-1.





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REVISIONS

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AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=40'	
CHECKED: KY	DATE: 09/25/2020	SCALE VERT. 1"=4'	
APPROVED: S.C.C.	DATE: 9/25/2020	JOB NO. SJ-17101	

SCOTT C. CREER RCE 58579 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

MICHAEL K. COOPER No. 29072 3/31/2021 CIVIL STATE OF CALIFORNIA

Michael Cooper 09/25/2020
SIGNATURE DATE

MARK THOMAS

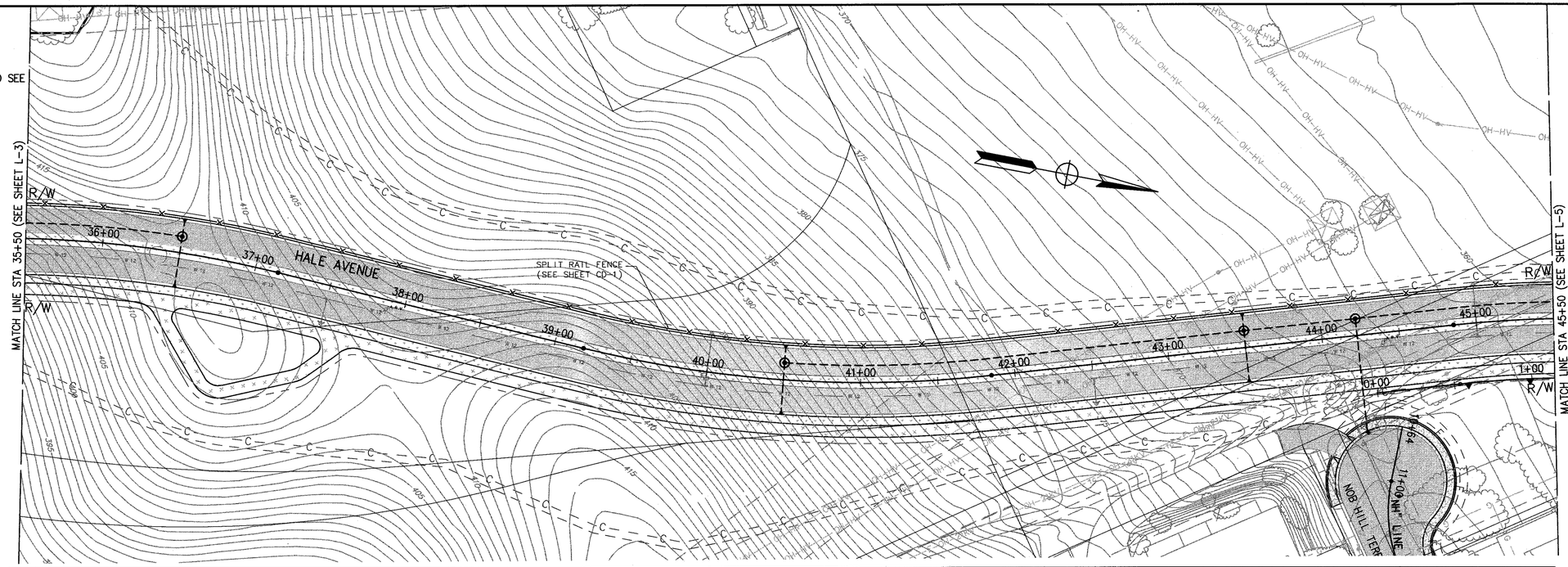
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IMPROVEMENT PLANS FOR
MORGAN HILL HALE AVE EXTENSION CALIFORNIA

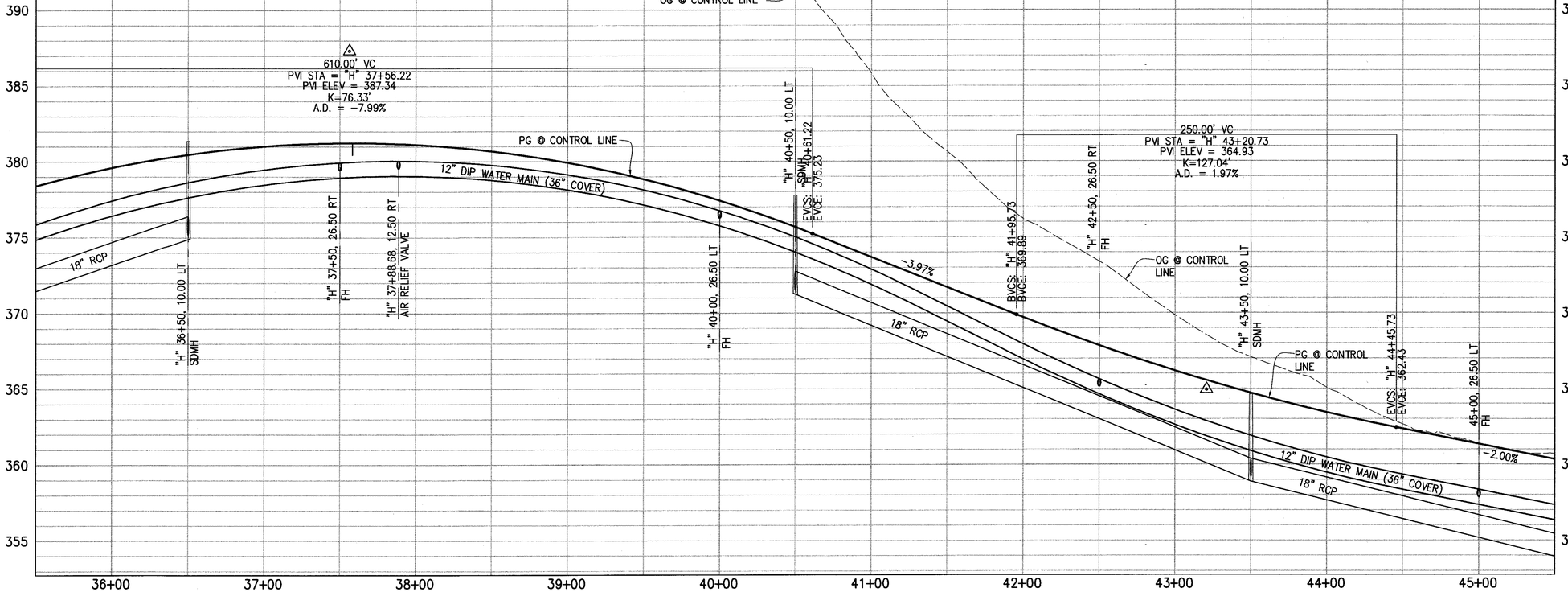
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19 OF 120

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NOTE

1. FOR ADDITIONAL NOTES, ABBREVIATIONS, AND LEGEND SEE TS-1, TS-2, AND L-1.





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APPROVED:	DATE: 9/30/2020	JOB NO. SJ-17101	

SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

Michael Cooper 09/25/2020
SIGNATURE DATE

MARK THOMAS

PLAN & PROFILE
STA 35+50 TO STA 45+50
IMPROVEMENT PLANS FOR
HALE AVE EXTENSION

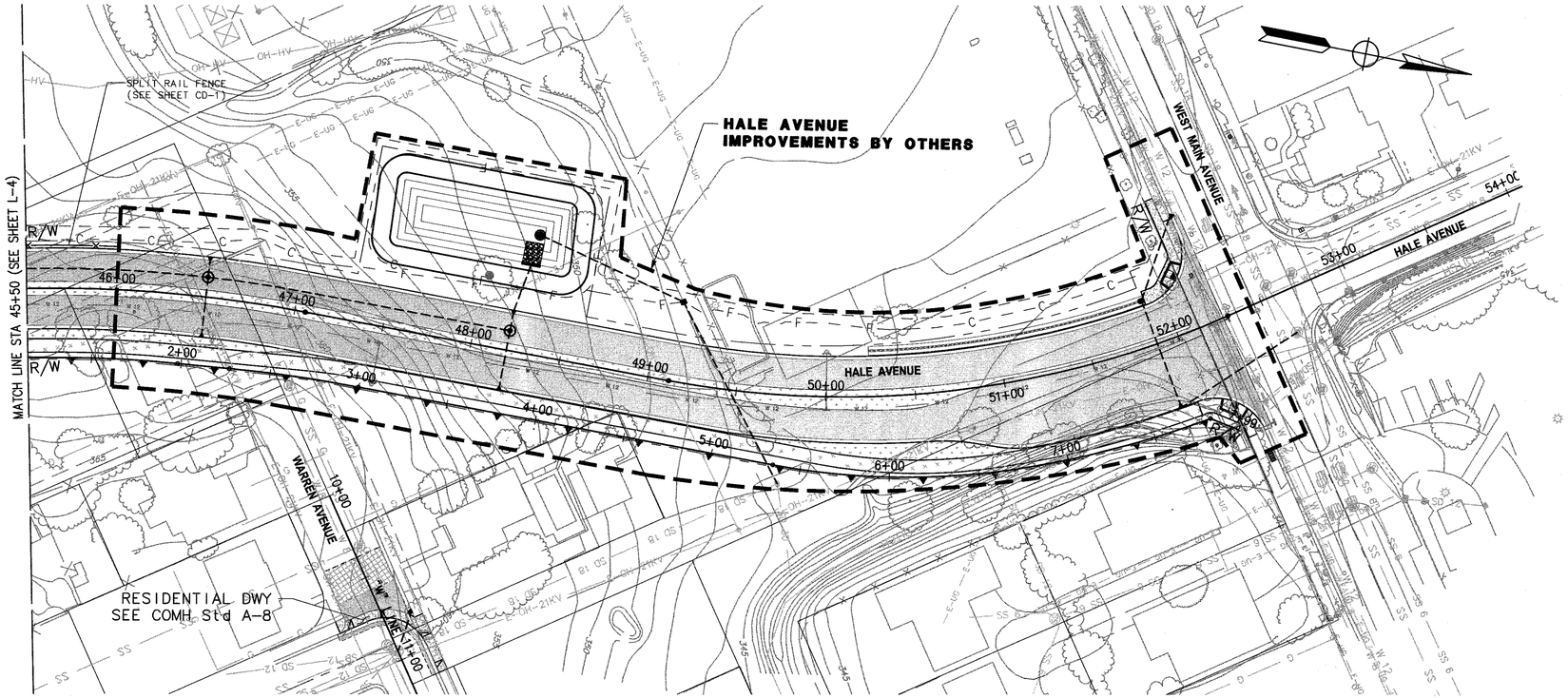
MORGAN HILL CALIFORNIA

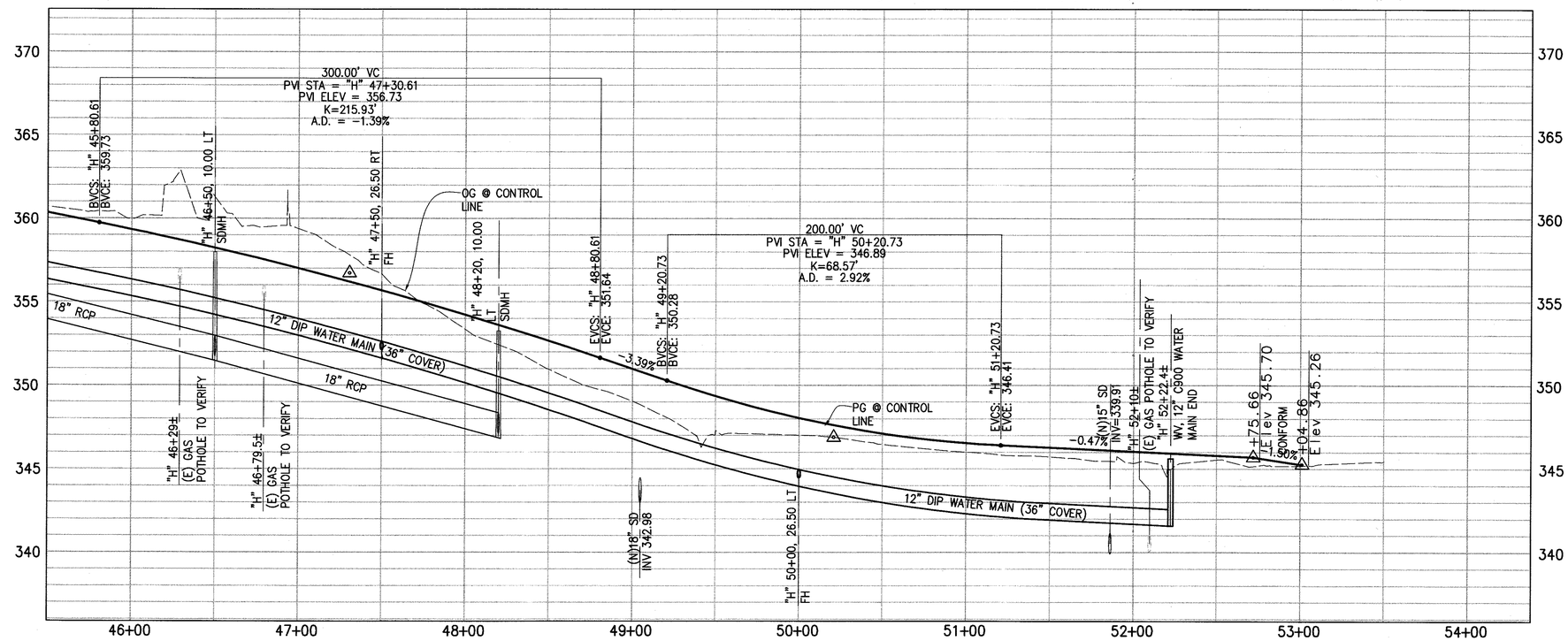
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PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CADD\Sheets\

NOTE

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REVISIONS

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BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=40'	
CHECKED: KY	DATE: 09/25/2020	SCALE VERT. 1"=4'	
APPROVED:	DATE: 9/25/2020	JOB NO. SJ-17101	

SCOTT C. CREER RCE 58579 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

MICHAEL K. COOPER 29072 3/31/2021 CIVIL STATE OF CALIFORNIA

Michael Cooper 09/25/2020
SIGNATURE DATE

MARK THOMAS

PLAN & PROFILE STA 45+50 TO STA 54+00 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: L-5
21 OF 120

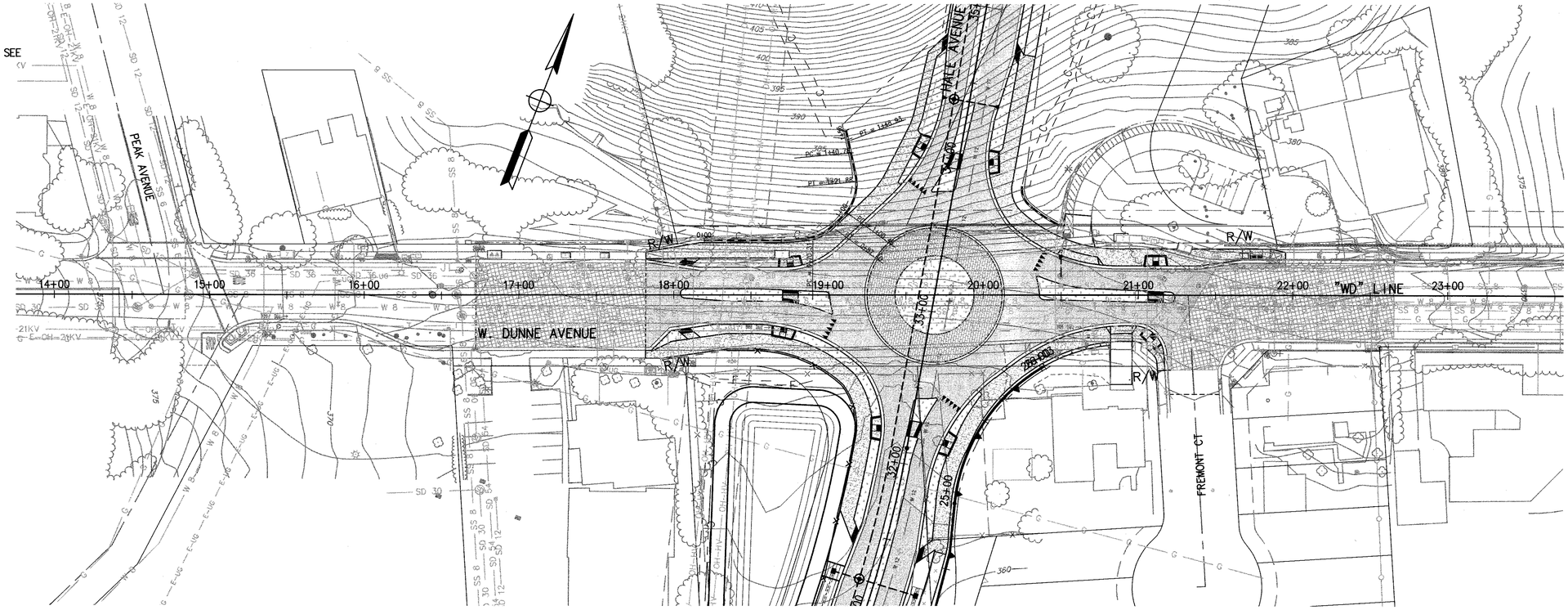
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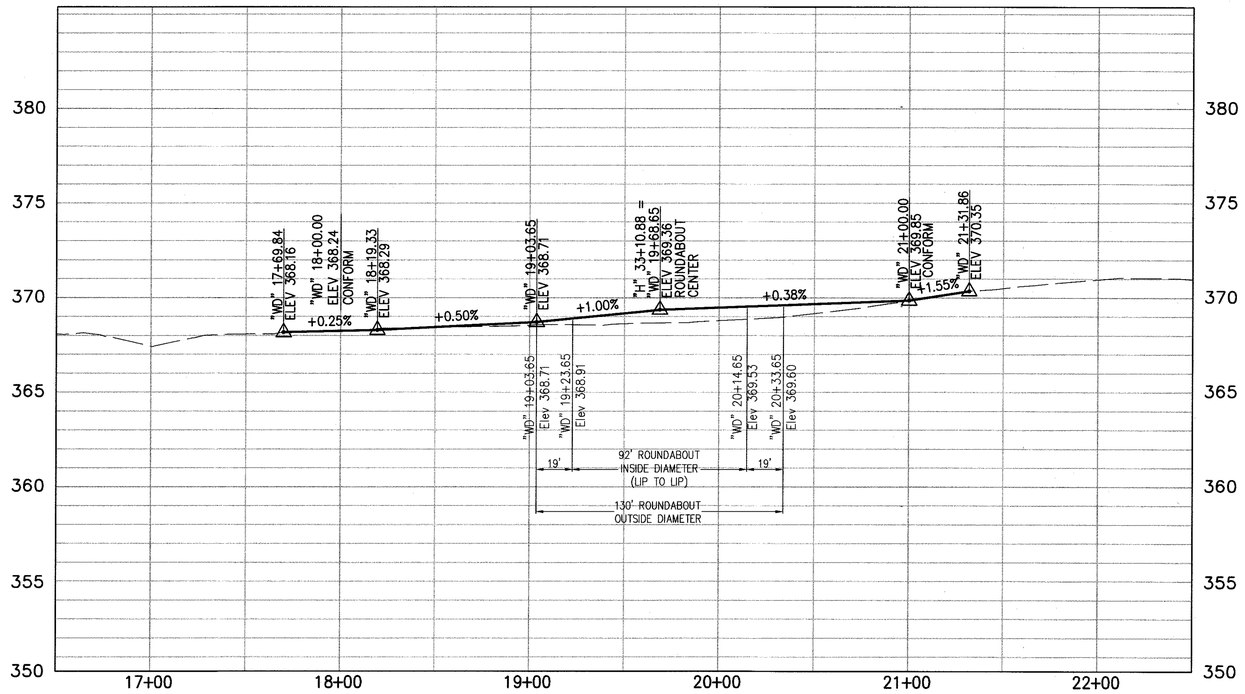
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NOTE

1. FOR ADDITIONAL NOTES, ABBREVIATIONS, AND LEGEND SEE TS-1, TS-2, AND L-1.





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BY: DATE:

CITY OF MORGAN HILL

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Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

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APPROVED: DATE: 9/25/2020 | JOB NO. SJ-17101
SCOTT C. CRIDER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

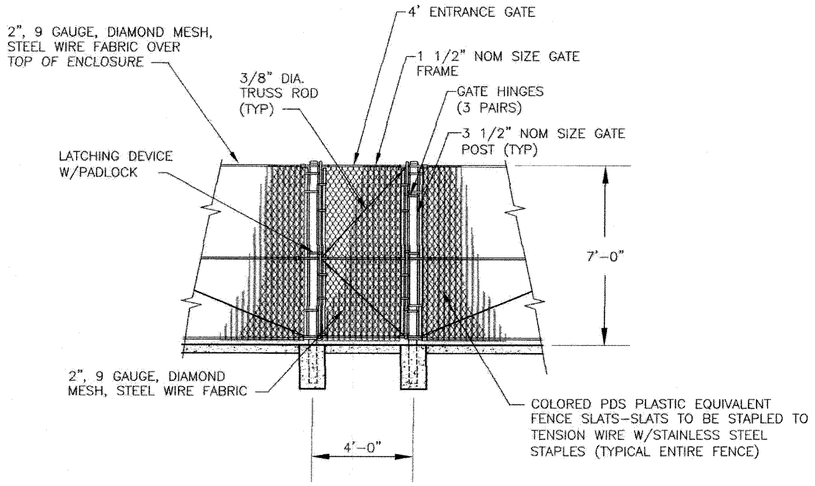
SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21
09/25/2020
SIGNATURE DATE

MARK THOMAS

PLAN & PROFILE
STA 26+50 TO STA 35+50
IMPROVEMENT PLANS FOR
HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: L-6
22 OF 120

PLOT DATE: Sep 24, 2020-04:29:09pm CAD USER: alex
FILE NAME: HAE_L1-6
PATH: J:\Morgan Hill\SJ-17101-Hale Avenue Extension\CADD\Sheet's\



CHAINLINK FENCE AROUND STORM DRAIN OVERBOARD

N.T.S.

A / C-1

GENERAL NOTES:

1. ALL CONSTRUCTION TO MEET LOCAL CODES AND AMENDMENTS
2. ALL CONCRETE FOOTINGS SHALL USE TYPE I/II CEMENT.
3. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60.
4. ALL PIER FOUNDATIONS ARE TO BE LOCATED IN UNDISTURBED SOIL, UNLESS APPROVED BY A GEOTECHNICAL ENGINEER.
5. FENCE WALL PANEL STANDARD DESIGN IS FOR A WIND LOAD OF 140 MPH (ULTIMATE). WIND PRESSURE IS BASED ON IBC WIND PRESSURES.
6. APPROVAL OF THE ENGINEER IS REQUIRED WHEN FENCE IS USED UNDER A CONDITION WHERE THE SPECIFICATIONS ARE DIFFERENT THAN SHOWN.
7. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AT THE JOB SITE.
8. THE POSTS, PANELS AND CAPS ARE MADE OF CONCRETE AND ARE MANUFACTURED BY A NATIONAL READY MIX CONCRETE ASSOCIATION APPROVED MANUFACTURER.
9. A FULLY DIMENSIONED PLOT PLAN IS REQUIRED FOR A BUILDING PERMIT AND MUST BE PROVIDED WITH EACH STANDARD PLAN.
10. LOCATION AND FENCE HEIGHT SHALL COMPLY WITH CITY/COUNTY FENCING CODES AND CURRENT CONDITIONS.
11. ALL WORK SHALL COMPLY WITH CITY/COUNTY GRADING ORDINANCES.
12. EPOXY SHALL BE SIKAFLEX-1a (175 PSI TENSILE STRENGTH) OR APPROVED EQUIVALENT. CONTRACTOR SHALL USE EPOXY ON ALL ADJOINING SURFACES OF COLUMN SEGMENTS.

SPECIFICATION DATA

1. PRODUCT NAMES:
SPLIT RAIL FENCE

2. MANUFACTURER:
SIGNATURE STONE LLC.
211 20 TH STREET
GREELY, CO 80631
(OR APPROVED EQUAL)

3. PRODUCTS DESCRIPTION:
PRODUCTS ARE INTENDED FOR RESIDENTIAL, COMMERCIAL, AND INDUSTRIAL EXTERIOR FENCING, SCREENING WALLS AND NOISE BARRIERS.

4. COMPOSITION AND MATERIALS:
A MIX OF HIGH STRENGTH PORTLAND CEMENT CONCRETE W/ FIBER MESH REINFORCING, MEETING OR EXCEEDING THE REQUIREMENTS OF ASTM-C150, NATURAL AGGREGATES, AND IRON OXIDE COLORS PLACED AND CAST WITHIN FACTORY MOLDS. FILLED MOLDS ARE VIBRATED AFTER SETUP OF MIX, CURED, AND PACKAGED FOR SHIPMENT.

5. SIZES:
FENCE POSTS ARE TYPICALLY PLACED AT 90.0 in. CENTERS WITH THE FENCE PANELS BEING 12.0 in. IN HEIGHT AND APPROXIMATELY 2.0 in. IN THICKNESS. HEIGHT OF THE FENCE SYSTEM SHOULD NOT EXCEED THAT SHOWN. CONTACT MANUFACTURER FOR ENGINEERING NOT INCLUDED IN THESE SPECIFICATIONS.

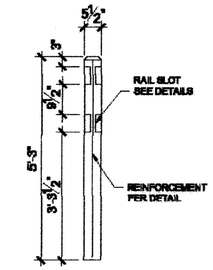
6. LIMITATIONS:
FENCE SYSTEM IS DESIGNED FOR TYPICAL CONDITIONS AND APPLICATIONS. SIGNATURE STONE RECOMMENDS FENCE SYSTEM APPLICATION AND FOUNDATION INSTALLATION BE APPROVED BY LOCAL PROFESSIONAL ENGINEER ON EVERY PROJECT. FENCE SYSTEM SHOULD NOT BE USED AS AN EARTH RETENTION SYSTEM UNLESS MODIFICATIONS IN DESIGN AND CONSTRUCTION ARE DONE BY A REGISTERED PROFESSIONAL ENGINEER AND APPROVED BY THE MANUFACTURER.

7. TECHNICAL DATA FOR CONCRETE MIX:
PRE-CAST FENCE POSTS AND PANELS:
MIN. 28 DAY COMPRESSIVE STRENGTH = 5,000 psi
CAST-IN-PLACE FOUNDATION PIERS:
MIN. 28 DAY COMPRESSIVE STRENGTH = 3,000 psi

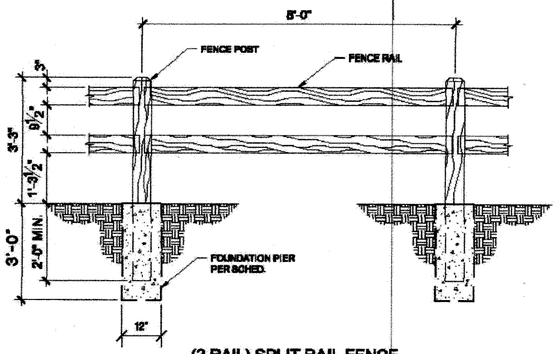
8. BUILDING CODES:
DESIGN OF FENCE POSTS, PANELS AND FOUNDATION PIERS IS BASED ON 2015 VERSION OF IBC, ACI, AND AASHTO CODES.

9. INSTALLATION:
THE POSTS ARE POSITIONED AND WET-SET INTO A DRILLED CONCRETE FOUNDATION PIER. THE PIER SIZE, DEPTH AND REINFORCEMENT SHALL BE AS SPECIFIED BY LOCAL ENGINEER OR AS SHOWN ON SCHEDULE. AFTER POSTS AND RAILS ARE ACCURATELY SPACED, PLUMBED AND LEVELED, THEY ARE BRACED UNTIL PIER CONCRETE HAS OBTAINED ITS INITIAL STRENGTH.

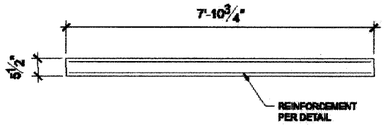
10. COLOR
CONCRETE SHALL BE COLORED BY MANUFACTURER, OWNER SHALL SELECT CONCRETE COLOR.



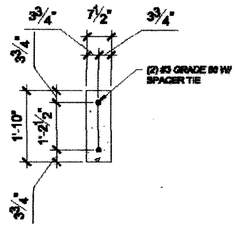
(2 RAIL) POST



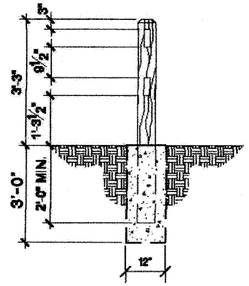
(2 RAIL) SPLIT RAIL FENCE
ELEVATION



TYPICAL FENCE RAIL



TYPICAL RAIL



(2 RAIL) SPLIT RAIL FENCE
ELEVATION

SCHEDULE OF RECOMMENDED FOUNDATION PIER MIN. SIZES

SPLIT RAIL FENCE W/ 2 RAILS MIN. FOUNDATION SIZES

Exposure	Wind Speed (mph)	Bedrock			Gravel			Sand			Clay			Unknown Fill / Organics
		Friction Angle, ϕ = 40° (min) Cohesion, c = 10,000 psf (min) Bearing = 3000 psf Total Density γ_t = 130 pcf (min)			Friction Angle, ϕ = 35° (min) Cohesion, c = 0 psf (min) Bearing = 2000 psf Total Density γ_t = 120 pcf (min)			Friction Angle, ϕ = 30° (min) Cohesion, c = 0 psf (min) Bearing = 2000 psf Total Density γ_t = 115 pcf (min)			Friction Angle, ϕ = 0° (min) Cohesion, c = 1000 psf (min) Bearing = 1500 psf Total Density γ_t = 110 pcf (min)			Poorly-Characterized
		Pier Diameter (in)	Pier Depth (in)	Pier Steel	Pier Diameter (in)	Pier Depth (in)	Pier Steel	Pier Diameter (in)	Pier Depth (in)	Pier Steel	Pier Diameter (in)	Pier Depth (in)	Pier Steel	REQUIRES SITE SPECIFIC ENGINEERED FOUNDATION
B	110	12	30	NIL	12	30	NIL	12	36	NIL	12	30	NIL	
	130	12	30	NIL	12	30	NIL	12	36	NIL	12	30	NIL	
	140	12	30	NIL	12	30	NIL	12	36	NIL	12	30	NIL	
C	110	12	30	NIL	12	30	NIL	12	36	NIL	12	30	NIL	
	130	12	30	NIL	12	30	NIL	12	36	NIL	12	30	NIL	
	140	12	30	NIL	12	30	NIL	12	36	NIL	12	30	NIL	

Note: Foundation pier minimum depth shall exceed depth required locally for frost protection.

(2 RAIL) SPLIT RAIL FENCE

DETAIL B / C-1

SCALE: NONE

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL CHECKED: SL SCALE: NA
HEIGHT: N/A DATE: 09/25/2020 SCALE: 1"=1'
APPROVED: 9/25/2020 JOB NO.: 21-1700
SCOTT S. CREER, PUBLIC WORKS DIRECTOR / CITY ENGINEER

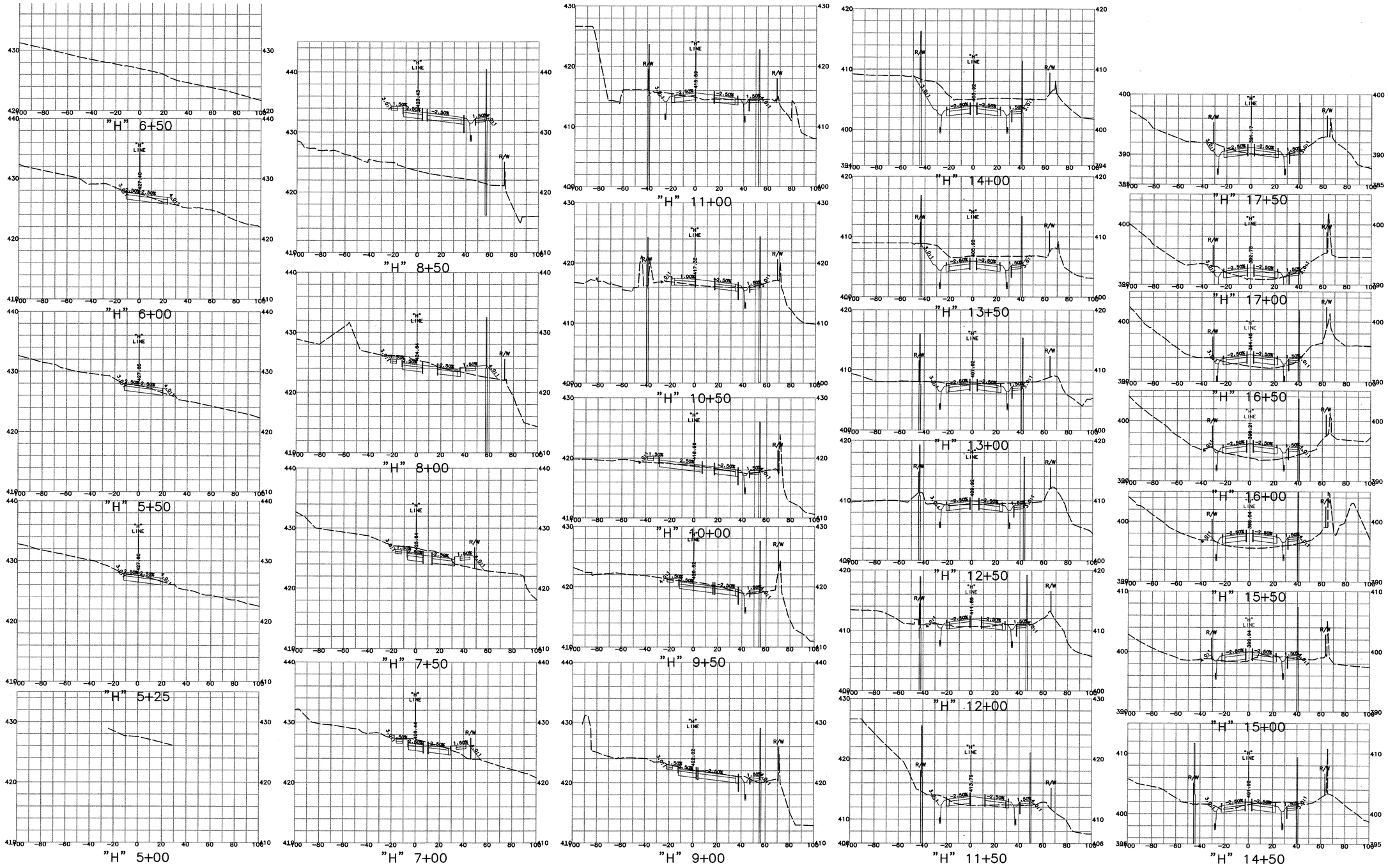
PREPARED BY: MICHAEL L. COOPER, REGISTERED CIVIL ENGINEER, RCE 34547, EXP. DATE 9-30-21
9/25/2020

MARK THOMAS

CONSTRUCTION DETAILS

IMPROVEMENT PLANS FOR HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

CITY FILE NO.: 504E02
PLAN SET: 09/25/2020
DRAWING: CD-1
25 OF 100



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BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: BF | DESIGN: BF | SCALE HOR. 1"=40'
CHECKED: JK | DATE: 09/25/2020 | SCALE VERT. 1"=8'
APPROVED: Scott C. Creer 9/25/2020 | JOB NO. SJ-17101
SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21
Michael Cooper 09/25/2020
SIGNATURE DATE

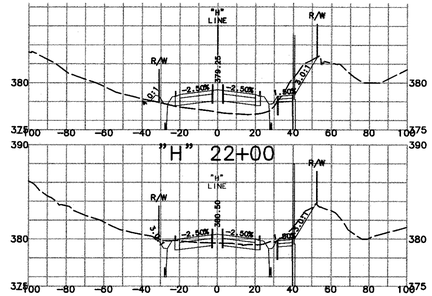
MARK THOMAS

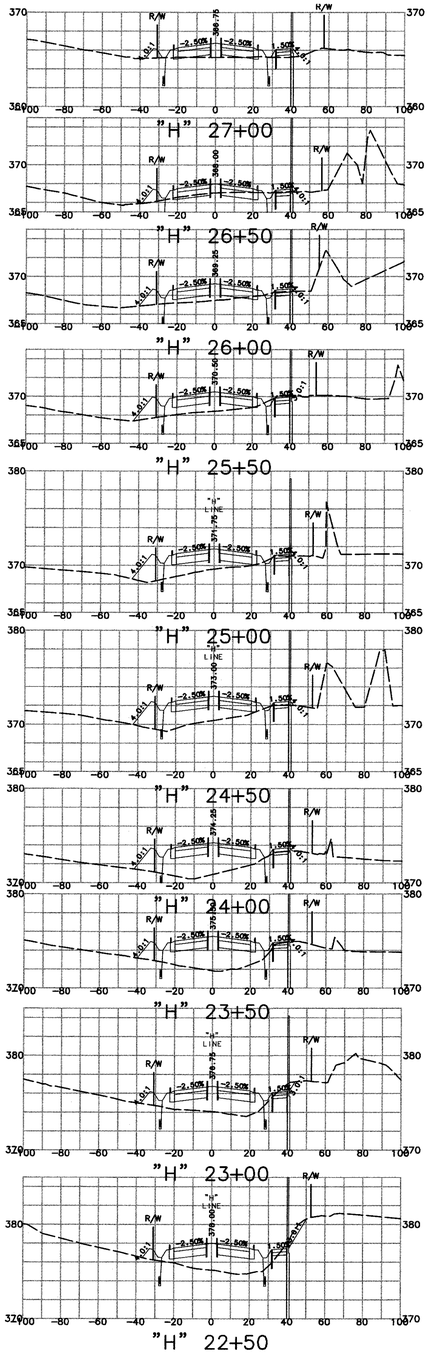
CROSS SECTIONS STA 5+00 TO STA 17+50 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

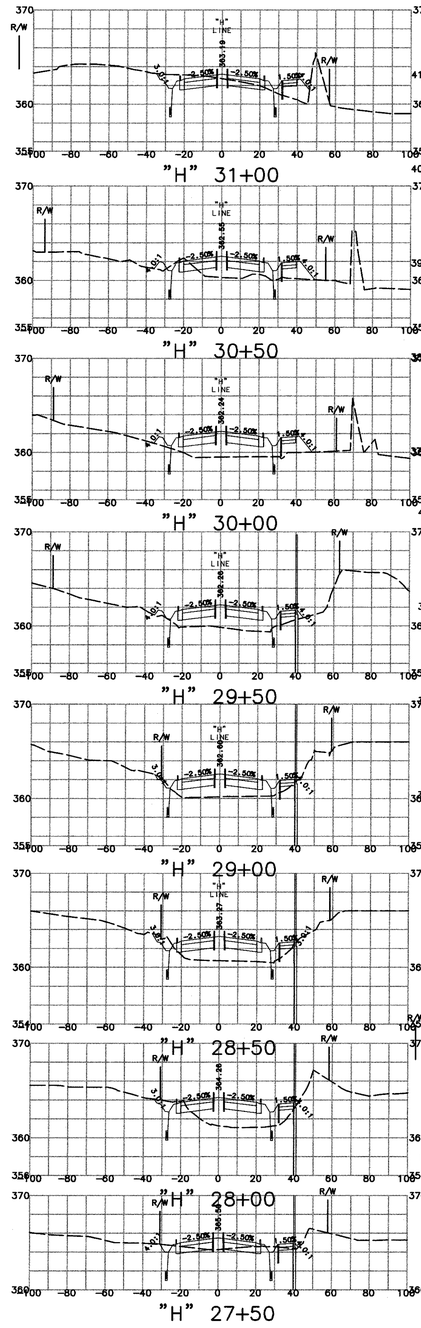
MORGAN HILL CALIFORNIA

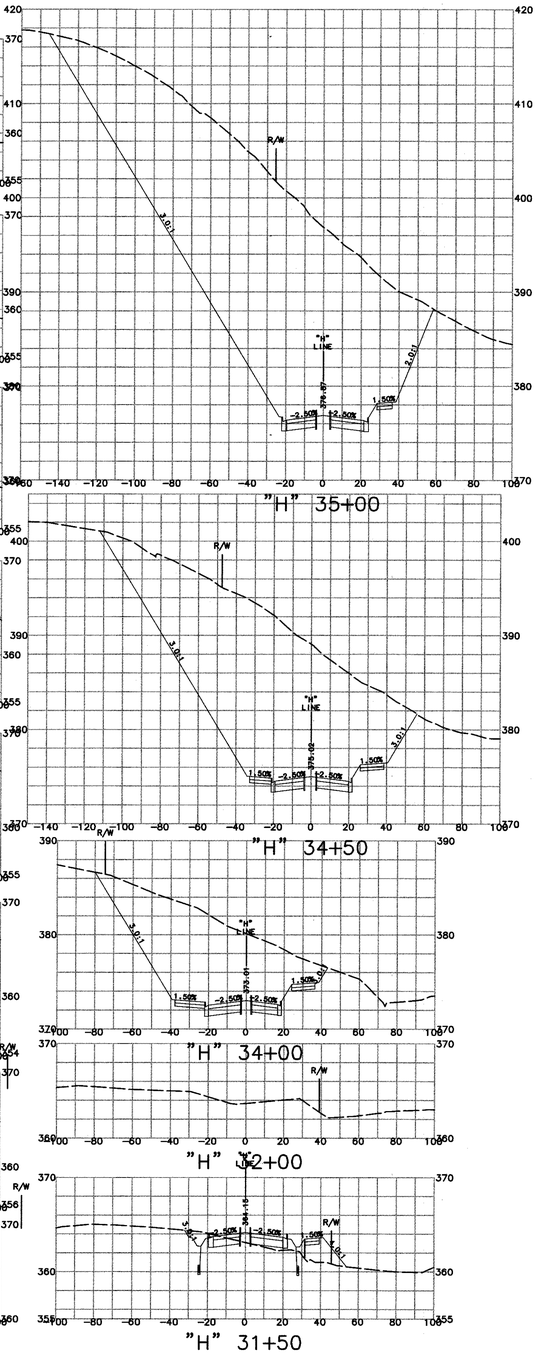
CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: X-1
24 OF 120

PLOT DATE: Sep 25, 2020-04:24:42pm CAD USER: sles
FILE NAME: HAE_XS1-4
PATH: J:\Morgan Hill\--SJ-17101-Hale Avenue Extension\CADD\Sheets\









BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: BF	DESIGN: BF	SCALE HOR.	1"=40'
CHECKED: JK.	DATE: 09/25/2020	SCALE VERT.	1"=8'
APPROVED:	DATE: 9/25/2020	JOB NO.	SJ-17101

SCOTT C. CREER, RCE 58579 — DEPUTY DIRECTOR FOR ENGINEERING, EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

REGISTERED PROFESSIONAL ENGINEER — MICHAEL K. COOPER — No. 29072 — 3/31/2021 — CIVIL — STATE OF CALIFORNIA

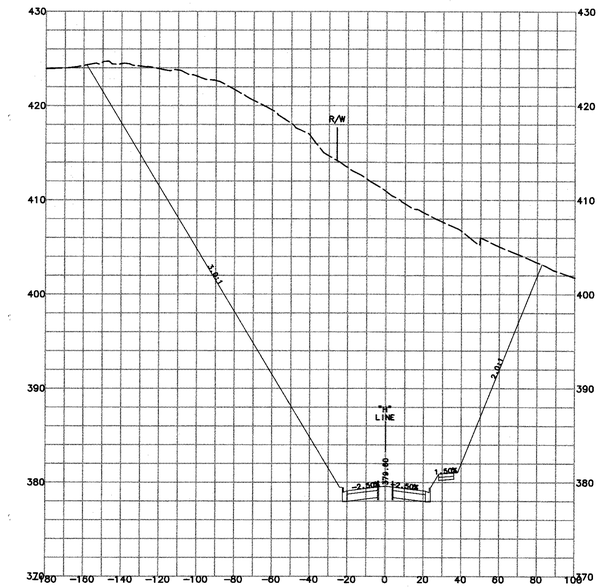
Michael Cooper — SIGNATURE — 09/25/2020 DATE

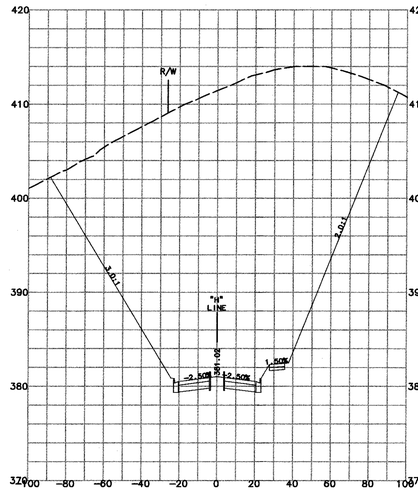
MARK THOMAS

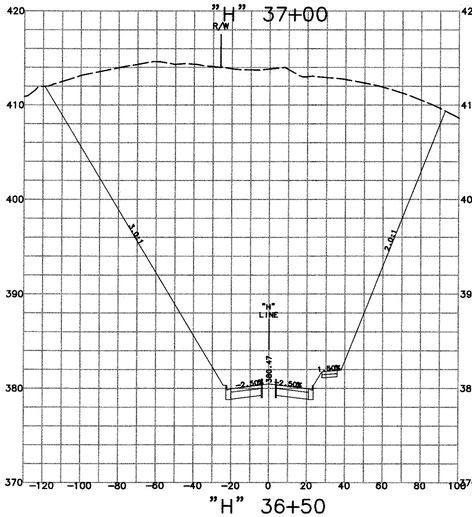
CROSS SECTIONS
STA 18+00 TO STA 35+00
IMPROVEMENT PLANS FOR
HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

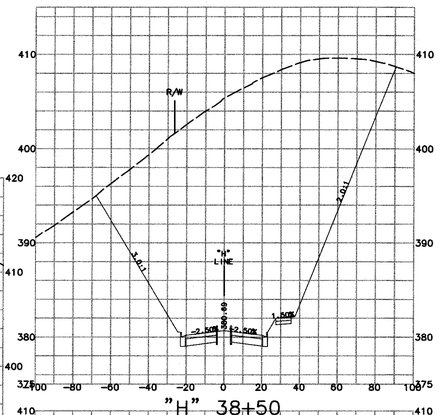
CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **X-2**
25 OF 120

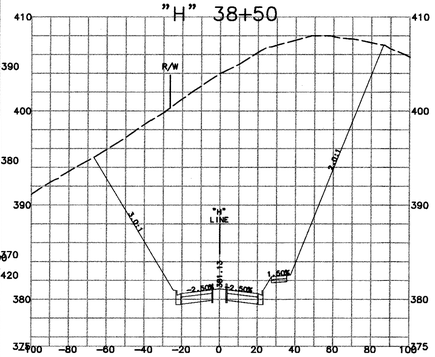
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PATH: J:\Morgan Hill\-SJ-17101-Hale Avenue Extension\CAD\Sheets\

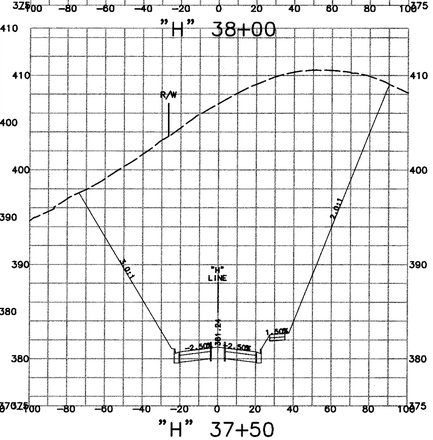


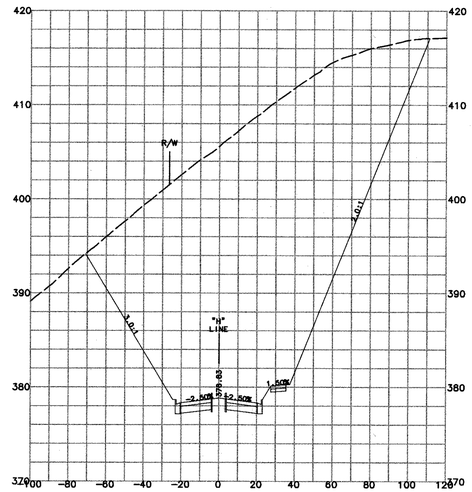


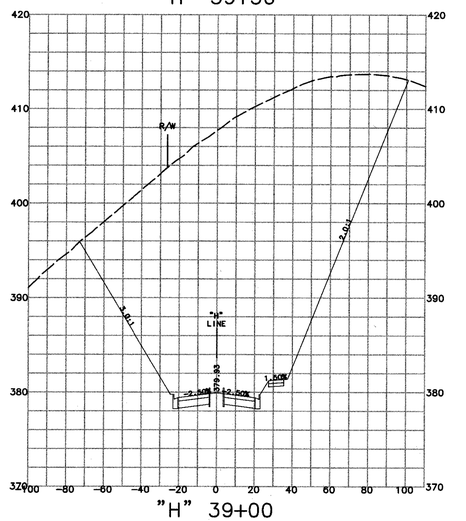












BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:

AS-BUILT CORRECTIONS

BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: BF	DESIGN: BF	SCALE HOR.	1"=40'
CHECKED: JK	DATE: 09/25/2020	SCALE VERT.	1"=8'
APPROVED: Scott C. Creer	DATE: 9/29/2020	JOB NO.	SJ-17101

SCOTT C. CREER
RCE 66579
DEPUTY DIRECTOR FOR ENGINEERING
EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

REGISTERED PROFESSIONAL ENGINEER
MICHAEL K. COOPER
No. 29072
Exp. 3/31/2021
CIVIL
STATE OF CALIFORNIA

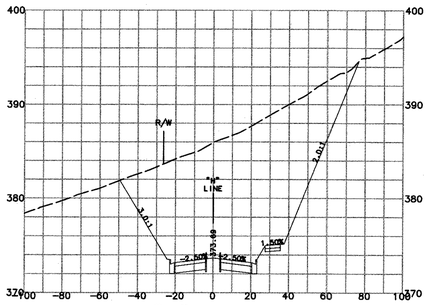
Michael Cooper 09/25/2020
SIGNATURE DATE

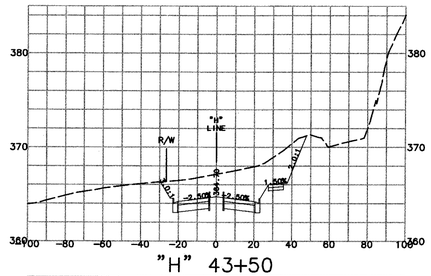
MARK THOMAS

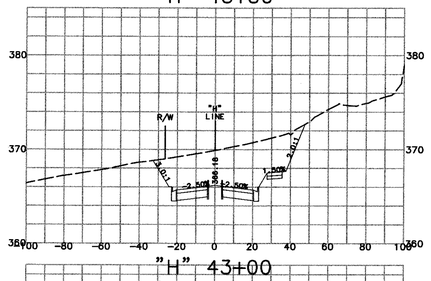
CROSS SECTIONS
STA 35+50 TO STA 39+50
IMPROVEMENT PLANS FOR
MORGAN HILL **HALE AVE EXTENSION** CALIFORNIA

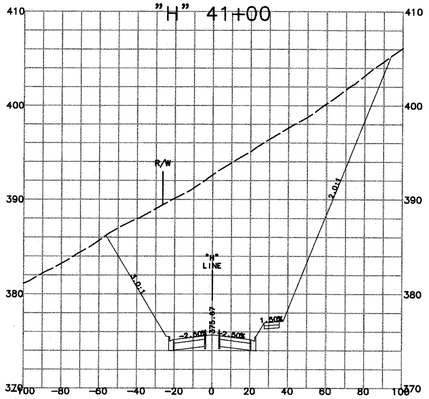
CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **X-3**
26 OF 120

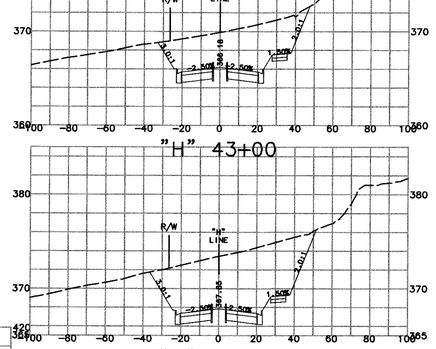
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PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CADD\Sheet\1

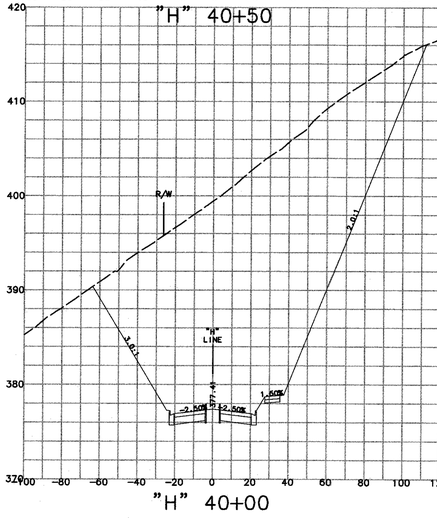


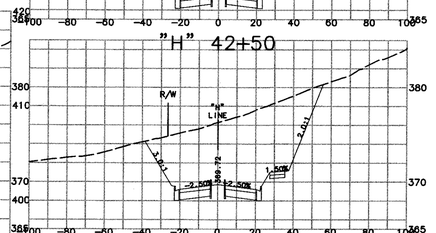


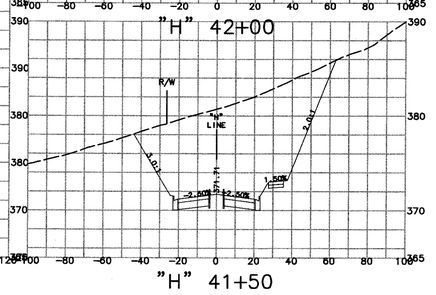


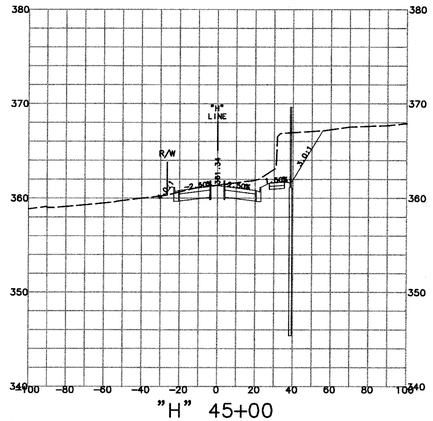


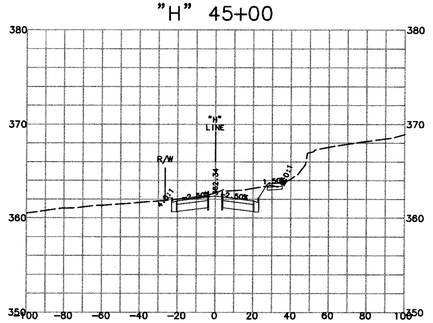


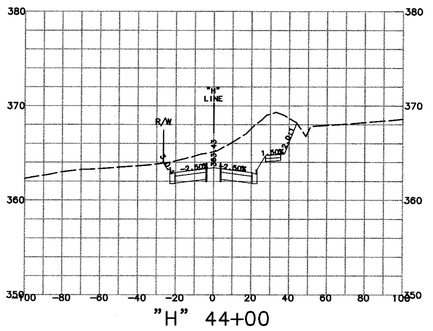


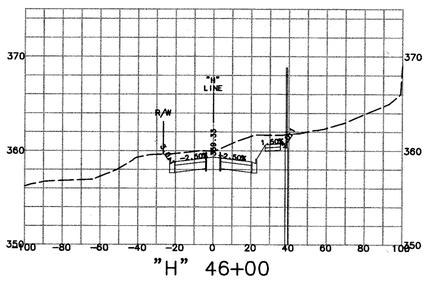


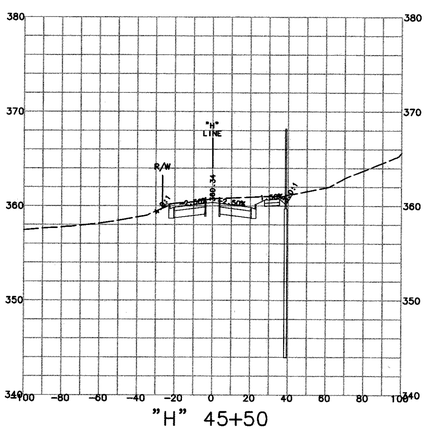












BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: BF DESIGN: BF
CHECKED: JK DATE: 09/25/2020
APPROVED: DATE: 9/25/2020
SCOTT C. GREER RCE 58079 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SCALE HOR. 1"=40'
SCALE VERT. 1"=8'
JOB NO. SJ-17101

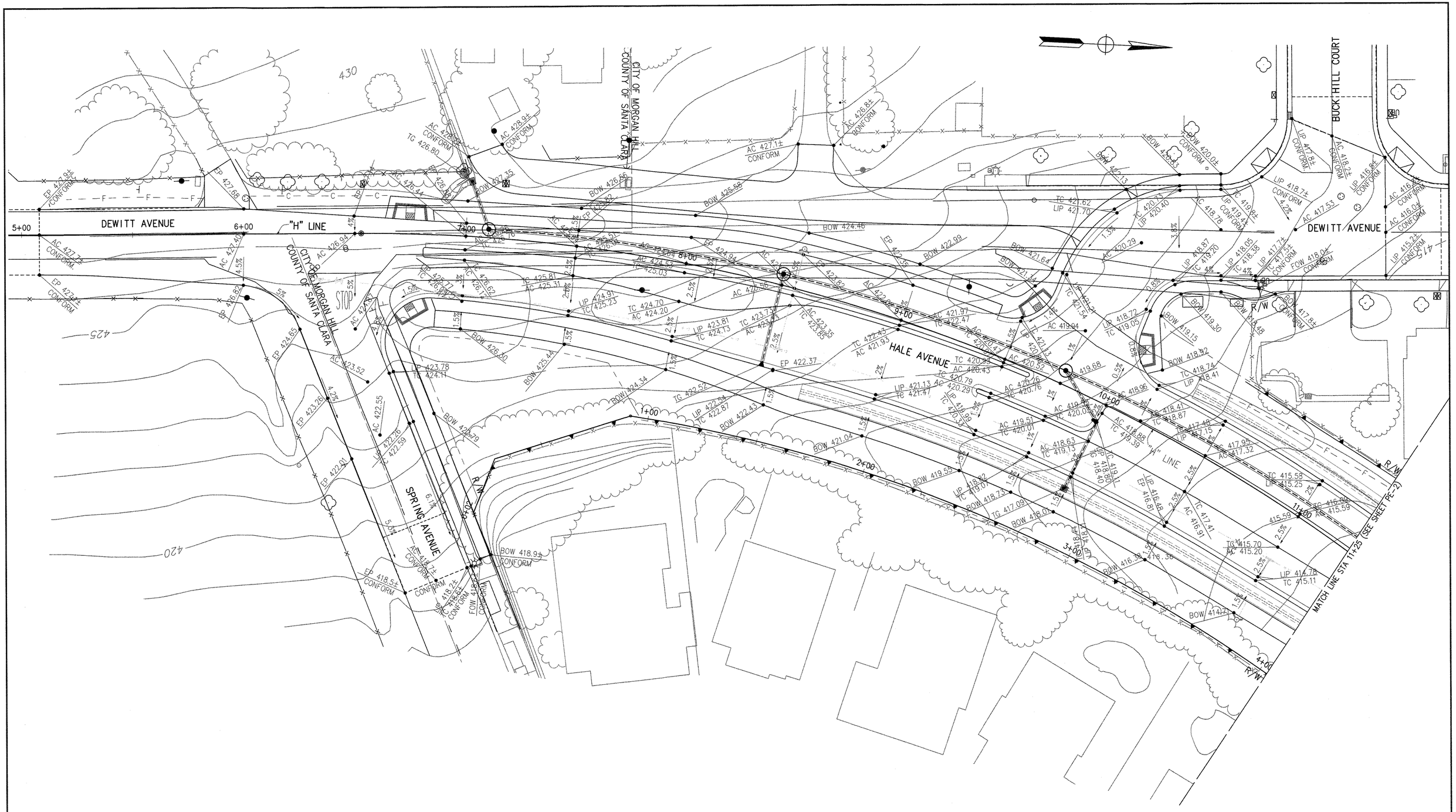
SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21
SIGNATURE
09/25/2020
DATE

MARK THOMAS

CROSS SECTIONS
STA 40+00 TO STA 43+00
IMPROVEMENT PLANS FOR
MORGAN HILL HALE AVE EXTENSION CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: X-4
27 OF 120

PLOT DATE: Sep 24, 2020-04:25:50pm CAD USER: alee
FILE NAME: HAE_XS1-4
PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CADD\Sheets\



BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:

AS-BUILT CORRECTIONS

BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=20'
CHECKED: MC	DATE: 09/25/2020	SCALE VERT.
APPROVED: DATE: 9/25/2020		JOB NO. SJ-17101

SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

REGISTERED PROFESSIONAL ENGINEER MICHAEL K. COOPER No. 29072 Exp. 3/31/2021 CIVIL STATE OF CALIFORNIA

SIGNATURE DATE

MARK THOMAS

PAVEMENT ELEVATION PLAN STA 5+00 TO STA 11+25 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02

PLAN SET: 09/25/2020

DRAWING: PE-1

28 OF 120

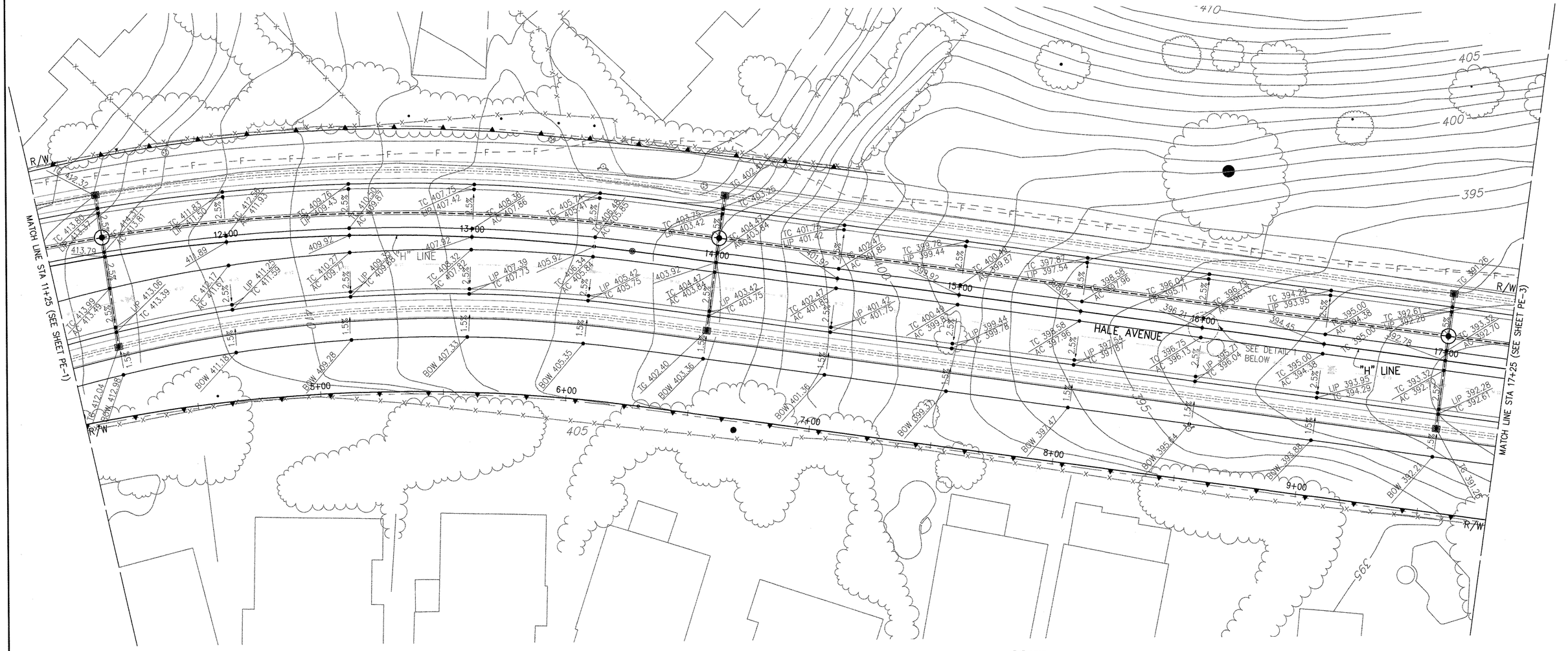
CAD USER: skee

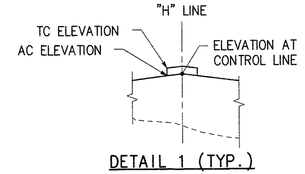
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PATH: X:\Morgan Hill-SJ-17101-Hale Avenue Extension\CAD\Sheets\

CAD USER: jachin
PLOT DATE: Sep 23, 2020-02:56:29pm
FILE NAME: HAE_PE1-3
PATH: J:\Morgan Hill\SJ-17101-Hale Avenue Extension\CAD\Sheet\1





DETAIL 1 (TYP.)

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: AS-BUILT CORRECTIONS BY: DATE: INSPECTOR:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=20'
CHECKED: MC	DATE: 09/25/2020	SCALE VERT.
APPROVED: Scott C. Creer	DATE: 9/25/2020	JOB NO. SJ-17101

SCOTT C. CREER RCE 56879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY: MICHAEL K. COOPER REGISTERED CIVIL ENGINEER RCE 29072 EXP. DATE 3-31-21

SIGNATURE DATE

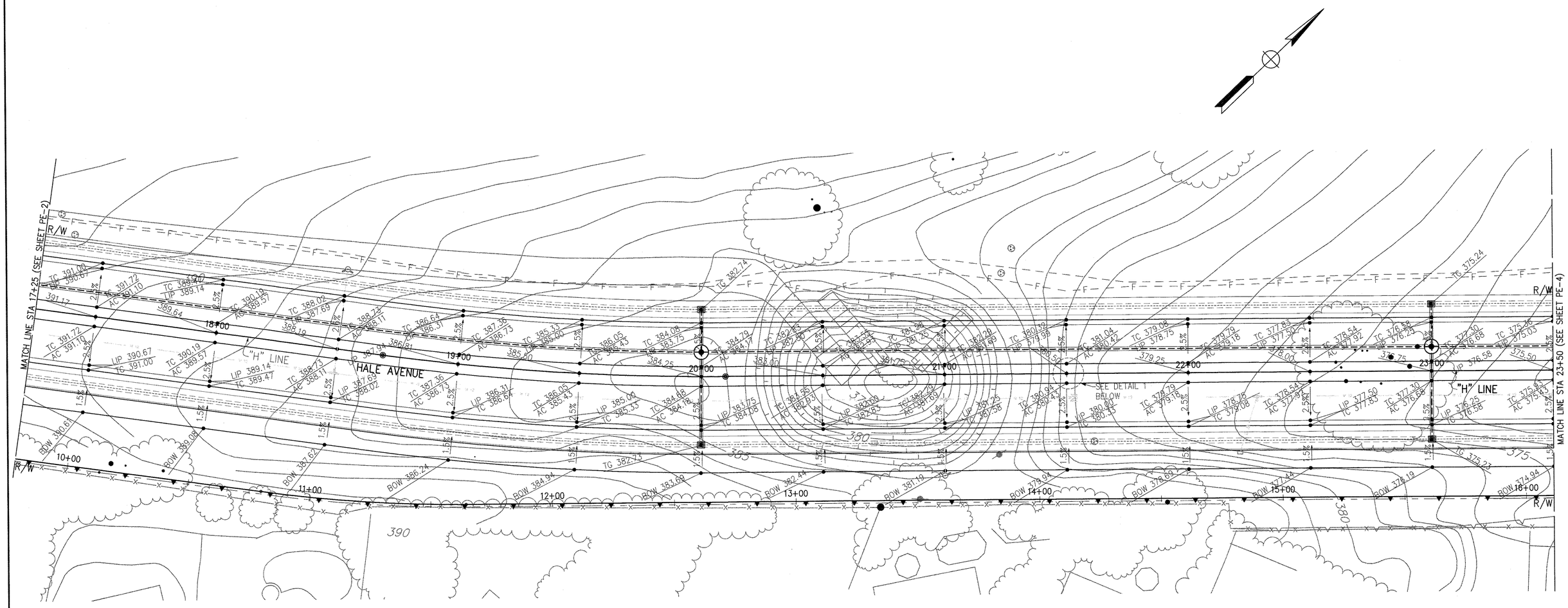
MARK THOMAS

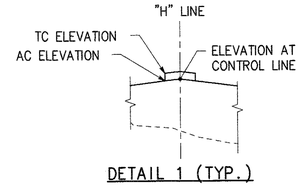
PAVEMENT ELEVATION PLAN STA 11+25 TO STA 17+25 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: PE-2
29 OF 120

PLOT DATE: Sep 23, 2020-02:54:29pm
CAD USER: jkohe
FILE NAME: HAE_PE1-8
PATH: J:\Morgan Hill\SJ-17101-Hale Avenue Extension\CADD\Sheet\1





DETAIL 1 (TYP.)

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=20'	
CHECKED: MC	DATE: 09/25/2020	SCALE VERT.	
APPROVED:	DATE: 9/20/2020	JOB NO. SJ-17101	

SCOTT C. CREER RCE 58679 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

REGISTERED PROFESSIONAL ENGINEER MICHAEL K. COOPER 29072 3/31/2021 CIVIL STATE OF CALIFORNIA

SIGNATURE DATE

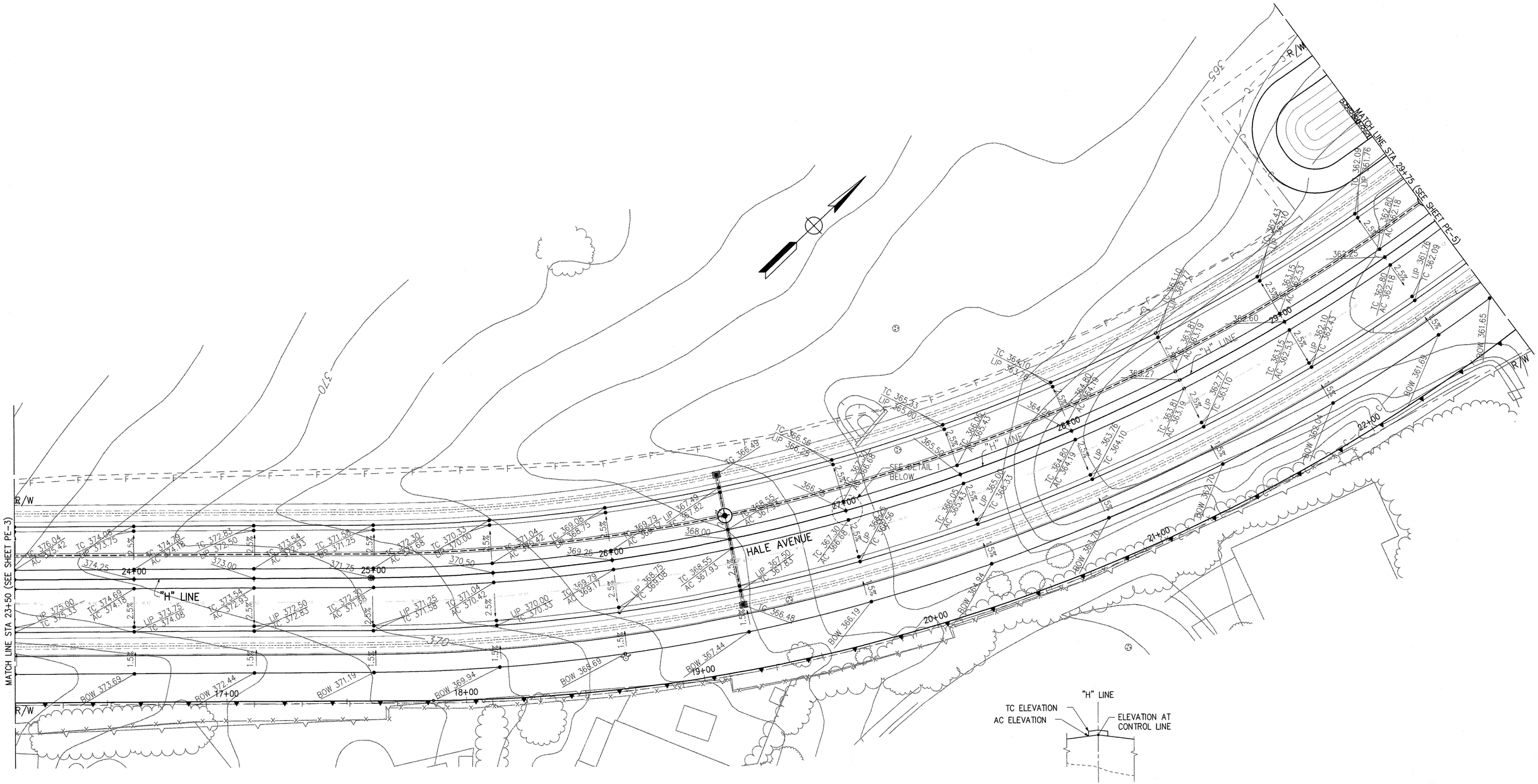
MARK THOMAS

PAVEMENT ELEVATION PLAN STA 17+25 TO STA 23+50 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: PE-3
30 OF 120

FILE NAME: HAE_PE1-8
PLOT DATE: Sep 23, 2020-02:56:37pm
CAD USER: Jkohe
PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CAD\01Sheet\1


MATCH LINE STA 23+50 (SEE SHEET PE-3)
MATCH LINE STA 29+75 (SEE SHEET PE-5)
HALE AVENUE
"H" LINE
R/W
SEE DETAIL 1 BELOW
17+00
18+00
19+00
20+00
21+00
22+00
23+00
24+00
25+00
26+00
27+00
28+00
29+00
TC 374.69
AC 374.18
LIP 373.75
TC 374.08
TC 373.54
AC 372.93
LIP 372.50
TC 372.83
TC 371.30
AC 371.55
LIP 371.25
TC 371.58
TC 371.04
AC 370.42
LIP 370.00
TC 370.33
TC 369.79
AC 369.17
LIP 368.75
TC 369.08
TC 368.55
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LIP 367.50
TC 367.83
TC 366.48
BOW 373.69
BOW 372.44
BOW 371.19
BOW 369.94
BOW 368.69
BOW 367.44
BOW 366.19
BOW 364.94
BOW 363.70
BOW 362.45
BOW 361.65
TC 365.53
LIP 365.00
TC 366.56
LIP 366.25
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TC 366.05
AC 365.43
LIP 365.00
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TC 365.55
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LIP 362.75
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AC 364.38
LIP 363.95
TC 365.33
AC 364.71
LIP 364.28
TC 366.56
AC 365.94
LIP 365.51
TC 366.25
AC 365.63
LIP 365.20
TC 366.49
AC 365.87
LIP 365.44
TC 366.05
AC 365.43
LIP 365.00
TC 366.08
AC 365.46
LIP 365.03
TC 365.55
AC 364.93
LIP 364.50
TC 364.83
AC 364.21
LIP 363.78
TC 364.10
AC 363.48
LIP 363.05
TC 363.76
AC 363.14
LIP 362.71
TC 362.77
AC 362.15
LIP 361.73
TC 362.09
AC 361.76
TC 362.80
AC 362.18
LIP 361.76
TC 362.09
TC 363.15
AC 362.53
LIP 362.10
TC 362.43
AC 361.80
LIP 361.38
TC 363.81
AC 363.19
LIP 362.75
TC 364.10
AC 363.48
LIP 363.05
TC 364.80
AC 364.19
LIP 363.76

PLOT DATE: Sep 23, 2020-02:56:42pm CAD USER: jachn

FILE NAME: HAE_PE1-8

PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\LA\DWSheet\1

MATCH LINE STA 29+75 (SEE SHEET PE-4)

MATCH LINE STA 35+25 (SEE SHEET PE-6)

WEST DUNNE AVENUE

HALE AVENUE

"H" LINE

"M" LINE

"N" LINE

REFER TO RETAINING WALL #1 PLAN & PROFILE FOR WALL ELEVATIONS SEE Sht RW-

REFER TO RETAINING WALL #2 PLAN & PROFILE FOR WALL ELEVATIONS SEE Sht RW-

REFER TO RETAINING WALL #4 PLAN & PROFILE FOR WALL ELEVATIONS SEE RW-2

CONFORM

"H" LINE

TC ELEVATION

AC ELEVATION

ELEVATION AT CONTROL LINE

DETAIL 1 (TYP.)

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:

AS-BUILT CORRECTIONS

BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=20'
CHECKED: MC	DATE: 09/25/2020	SCALE VERT.
APPROVED:	DATE: 9/25/2020	JOB NO. SJ-17101

SCOTT C. CREER RCE 58579 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

SIGNATURE DATE

MARK THOMAS

PAVEMENT ELEVATION PLAN STA 29+75 TO STA 35+25 IMPROVEMENT PLANS FOR MORGAN HILL HALE AVE EXTENSION CALIFORNIA

CITY FILE NO. 504E02

PLAN SET: 09/25/2020

DRAWING: PE-5

32 OF 120

FILE NAME: HALE_PE1-8
PLOT DATE: Sep 23, 2021-02:56:47pm
CAD USER: jsiche
PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CADD\Sheets\

REFER TO RETAINING WALL #3 PLAN & PROFILE FOR WALL ELEVATIONS SEE RW-1

MATCH LINE STA 35+25 (SEE SHEET PE-5)

MATCH LINE STA 41+75 (SEE SHEET PE-7)

R/W

"H" LINE

HALE AVENUE

SEE DETAIL 1 BELOW

DETAIL 1 (TYP.)

"H" LINE
TC ELEVATION
AC ELEVATION
ELEVATION AT CONTROL LINE

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

City of Morgan Hill
Public Works Department
CITY OF MORGAN HILL
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR.	1"=20'
CHECKED: MC	DATE: 09/25/2020	SCALE VERT.	
APPROVED:	DATE: 9/25/2020	JOB NO.	SJ-17101

SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

SIGNATURE DATE

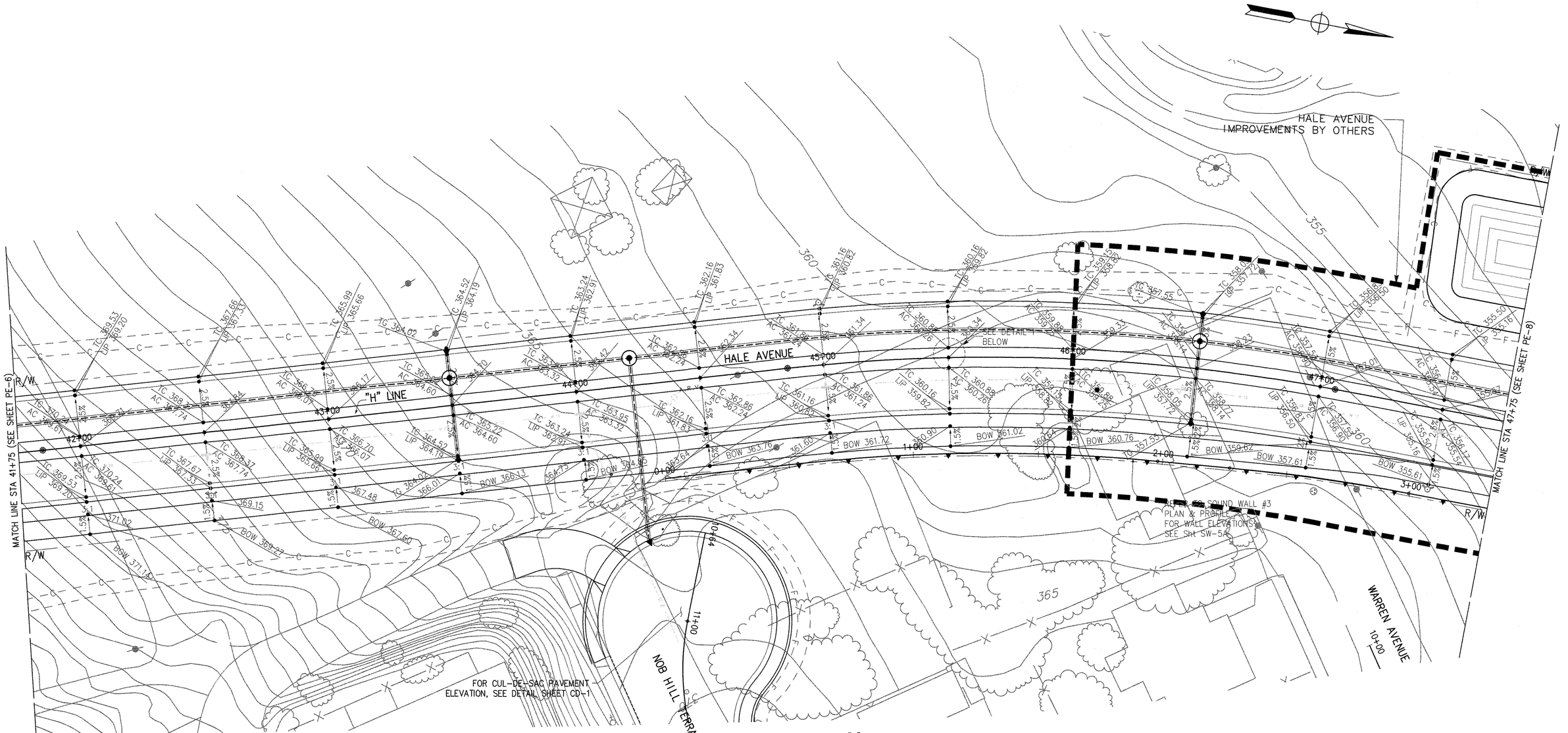
MARK THOMAS

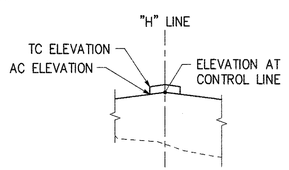
PAVEMENT ELEVATION PLAN STA 35+25 TO STA 41+75 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: PE-6
33 OF 120

PLOT DATE: Sep 23, 2020-02:56:52pm
CAD USER: jkohn
FILE NAME: HAE_PE7-8
PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CADD\Sheets\





DETAIL 1 (TYP.)

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=20'	
CHECKED: MC	DATE: 09/25/2020	SCALE VERT.	
APPROVED: DATE: 9/25/2020		JOB NO. SJ-17101	
SCOTT C. CREER RCE 58879	DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21		

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

REGISTERED PROFESSIONAL ENGINEER MICHAEL K. COOPER No. 29072 3/31/2021 CIVIL STATE OF CALIFORNIA

SIGNATURE DATE

MARK THOMAS

PAVEMENT ELEVATION PLAN STA 41+75 TO STA 47+75 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: PE-7
34 OF 120

PLOT DATE: Sep 23, 2020-02:54:54pm
CAD USER: jkuhn
FILE NAME: HAE_PE1-8

HALE AVENUE
IMPROVEMENTS BY OTHERS

WEST MAIN AVENUE

HALE AVENUE

"H" LINE

MATCH LINE STA 47+75 (SEE SHEET PE-7)

SEE DETAIL BELOW

REFER TO SOUND WALL #2 PLAN & PROFILE FOR WALL ELEVATIONS SEE Sht SW-5A

REFER TO RETAINING WALL #6 PLAN & PROFILE FOR WALL ELEVATIONS SEE Sht RW-3

STOP

"H" LINE

TC ELEVATION
AC ELEVATION

ELEVATION AT CONTROL LINE

DETAIL 1 (TYP.)

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=20'	
CHECKED: MC	DATE: 09/25/2020	SCALE VERT.	
APPROVED: Scott C. Greer	DATE: 9/25/2020	JOB NO. SJ-17101	
SCOTT C. GREER RCE: 58879	DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21		

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

REGISTERED PROFESSIONAL ENGINEER MICHAEL K. COOPER No. 29072 3/31/2021 CIVIL STATE OF CALIFORNIA

SIGNATURE DATE

MARK THOMAS

PAVEMENT ELEVATION PLAN STA 47+75 TO STA 53+50 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: PE-8
35 OF 120

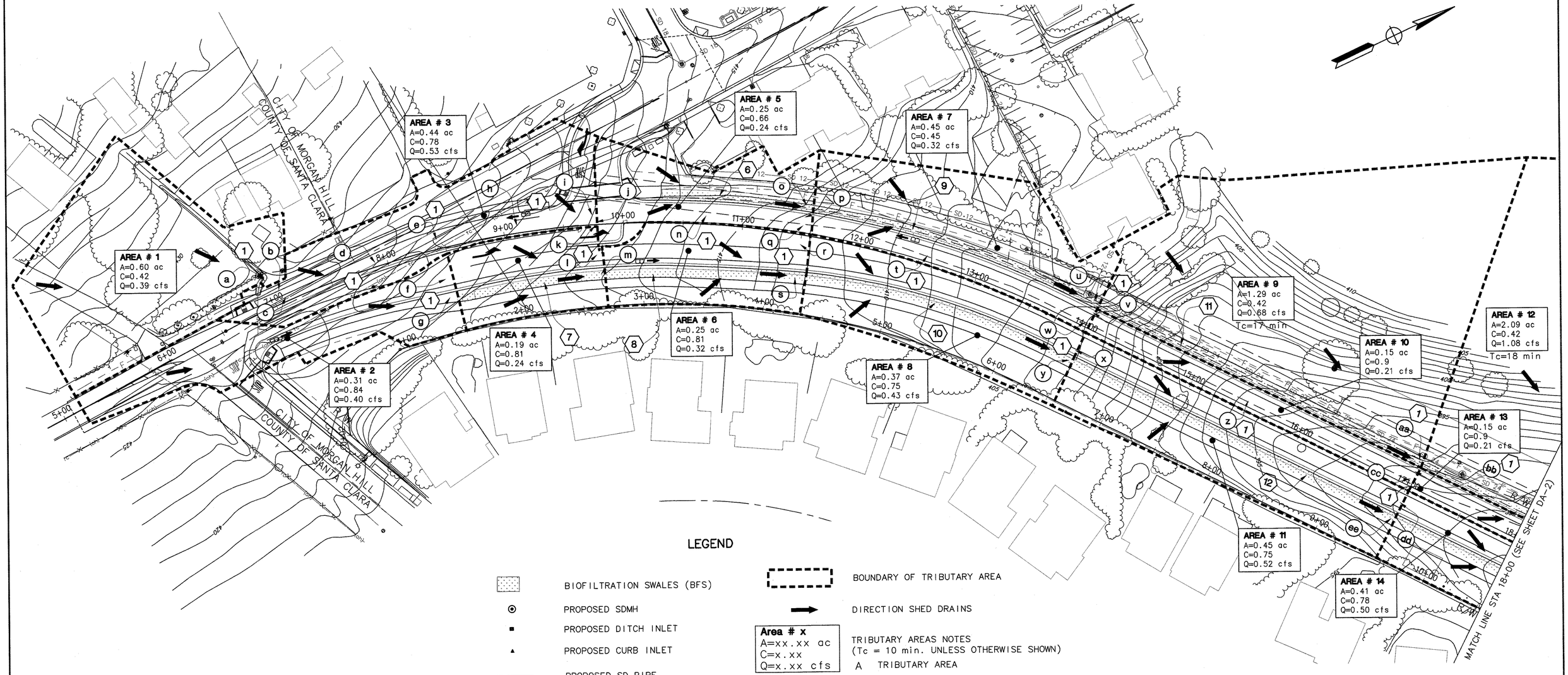
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CAD USER: jsche

PLOT DATE: Sep 23, 2020-02:56:03pm

FILE NAME: HAE_DA1-5

PATH: J:\Morgan Hill-SJ-7197-Hale Avenue Extension\CADD\Sheet1\



LEGEND

- BIOFILTRATION SWALES (BFS)
- PROPOSED SDMH
- PROPOSED DITCH INLET
- PROPOSED CURB INLET
- PROPOSED SD PIPE
- SD12 — EXICTING SD PIPE
- EXICTING SD MANHOLE
- EXICTING SD INLET
- BOUNDARY OF TRIBUTARY AREA
- DIRECTION SHED DRAINS

Area # x
A=xx.xx ac
C=x.xx
Q=x.xx cfs

TRIBUTARY AREAS NOTES
(Tc = 10 min. UNLESS OTHERWISE SHOWN)
A TRIBUTARY AREA
C RUNOFF COEFFICIENT
Q FLOW TO INLET (cfs)

- (1) DRAINAGE SYSTEM NUMBER
- (e) DRAINAGE SYSTEM UNIT

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: AS-BUILT CORRECTIONS
INSPECTOR:
BY: DATE:

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: BF | DESIGN: BF | SCALE HOR.
CHECKED: JS | DATE: 09/25/2020 | SCALE VERT.
APPROVED: DATE: 9/25/2020 | JOB NO. SJ-17101
SCOTT C. CREER RCE 58579 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21
09/25/2020
SIGNATURE DATE

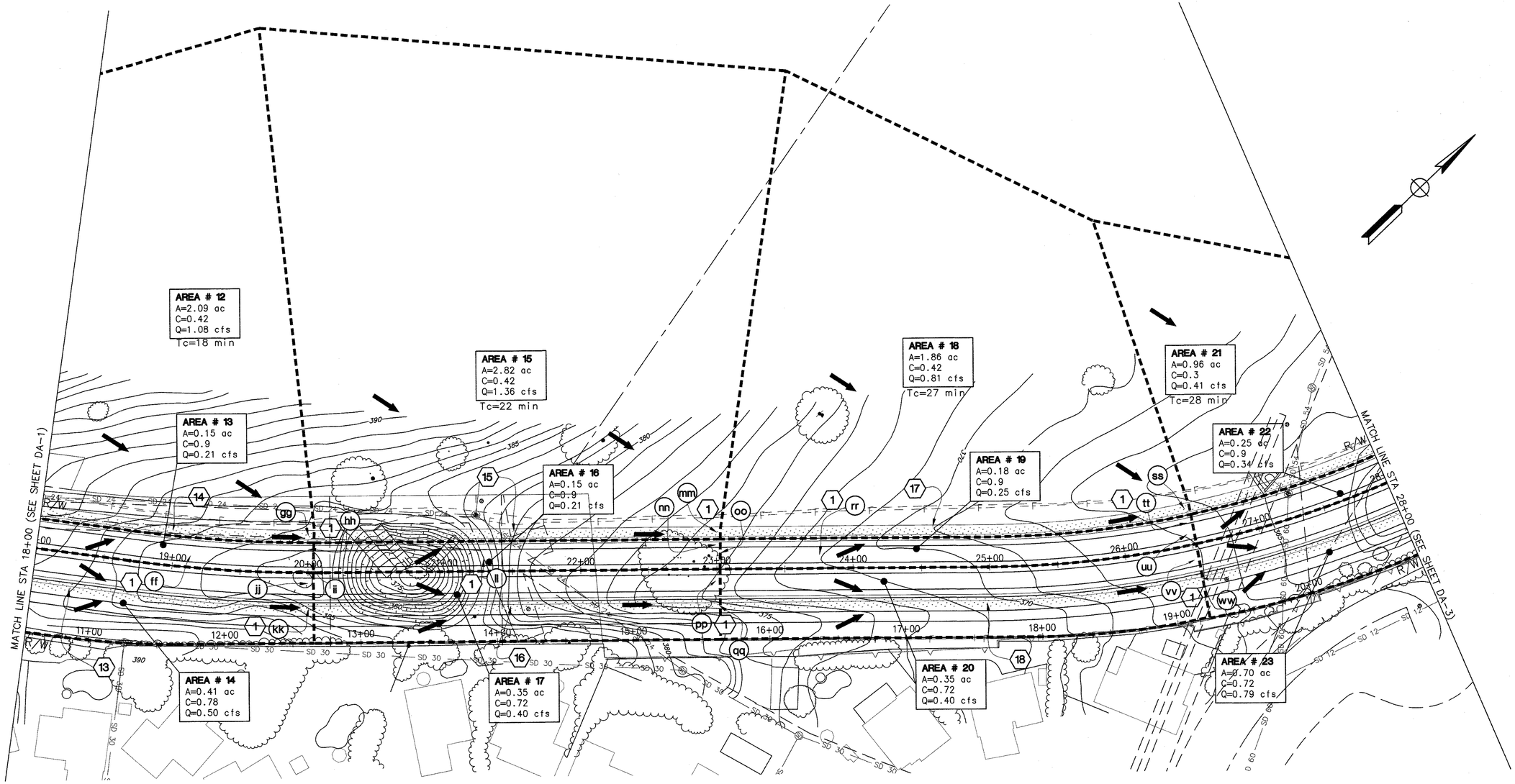
MARK THOMAS

DRAINAGE AREA MAP STA 5+00 TO STA 18+00 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: DA-1
36 OF 120

FILE NAME: HAE_DA1-5
PLOT DATE: Sep 23, 2020-02:58:47pm
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NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: BF	DESIGN: BF	SCALE HOR.	
CHECKED: JS	DATE: 09/25/2020	SCALE VERT.	
APPROVED:	DATE: 9/25/2020	JOB NO.	SJ-17101

SCOTT C. CREER RCE 58579 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

REGISTERED PROFESSIONAL ENGINEER — MICHAEL K COOPER — 29072 — 3/31/2021 — CIVIL — STATE OF CALIFORNIA

Michael Cooper 09/25/2020
SIGNATURE DATE

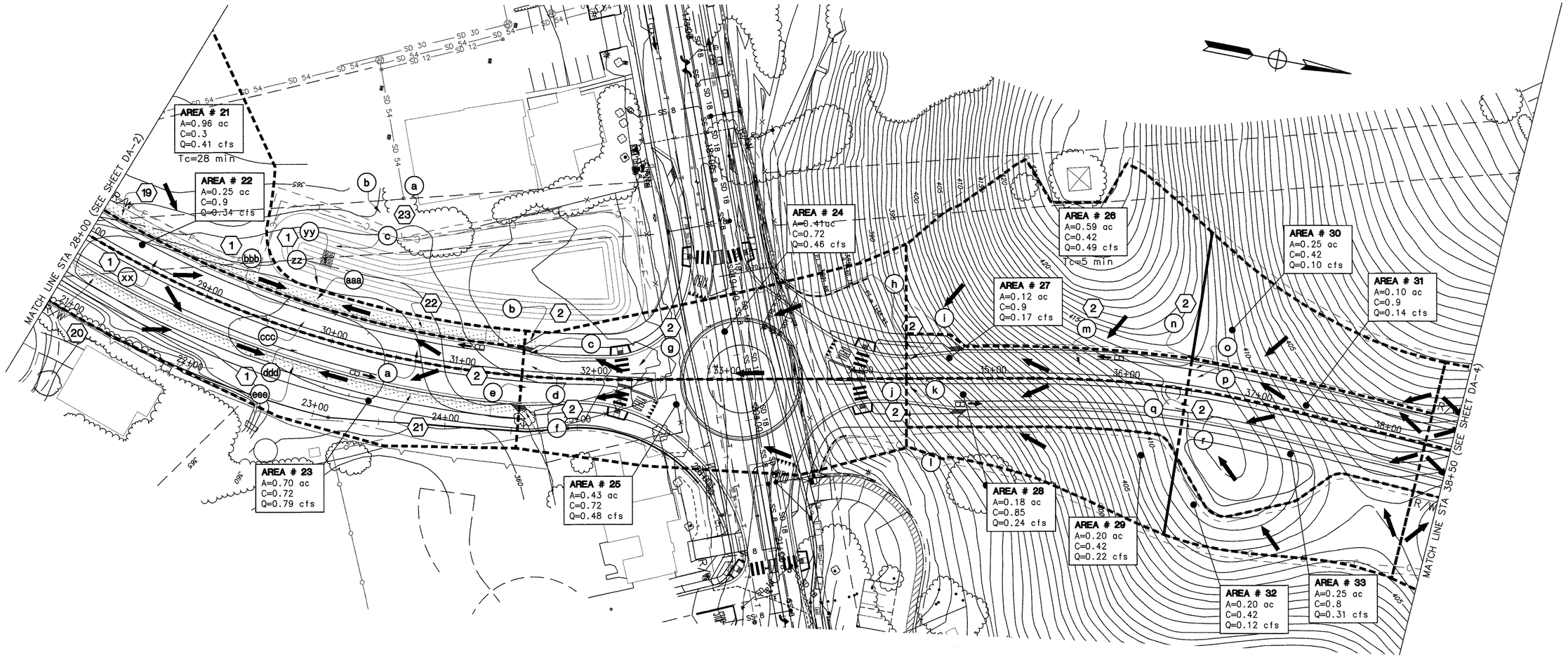
MARK THOMAS

DRAINAGE AREA MAP STA 18+00 TO STA 28+00 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: DA-2
37 OF 120

FILE NAME: HAE_DA1-5
PLOT DATE: Sep 25, 2020 - 02:58:12pm
CAD USER: jache
PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CADD\Sheets\



BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: BF	DESIGN: BF	SCALE HOR.	
CHECKED: JS	DATE: 09/25/2020	SCALE VERT.	
APPROVED:	DATE: 9/25/2020	JOB NO.	SJ-17101

SCOTT C. CREER RCE 58879 — DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21
Michael Cooper 09/25/2020
SIGNATURE DATE

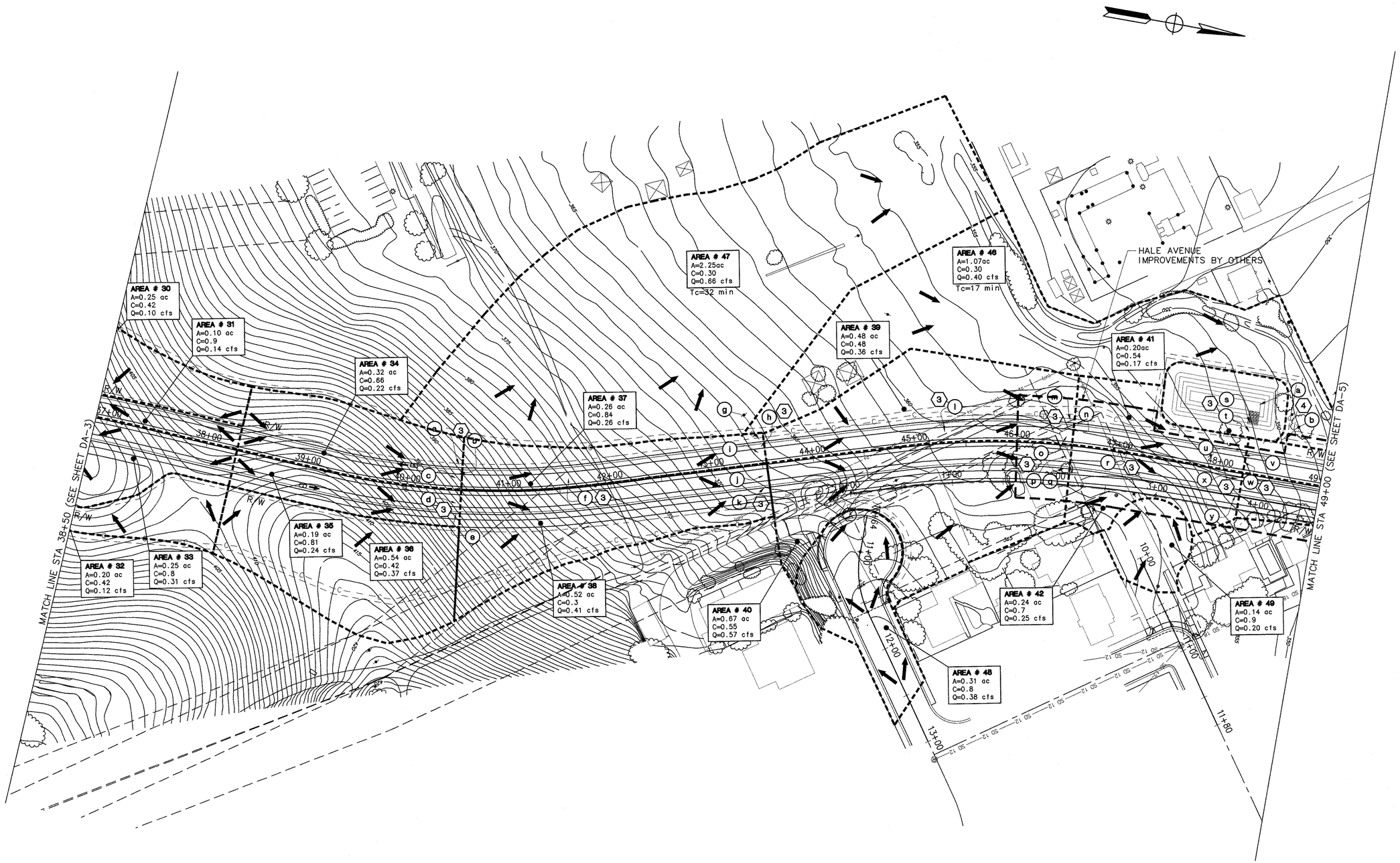
MARK THOMAS

DRAINAGE AREA MAP STA 28+00 TO STA 38+50 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: DA-3
38 OF 120

PLOT DATE: Sep 23, 2020-10:58:17pm CAD USER: jsoche
FILE NAME: HAE_DA1-5
PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CADD\Sheet\



BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: BF	DESIGN: BF	SCALE HOR.	
CHECKED: JS	DATE: 09/25/2020	SCALE VERT.	
APPROVED: S.C.C.	DATE: 9/25/2020	JOB NO.	SJ-17101

SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21
Michael Cooper 09/25/2020
SIGNATURE DATE

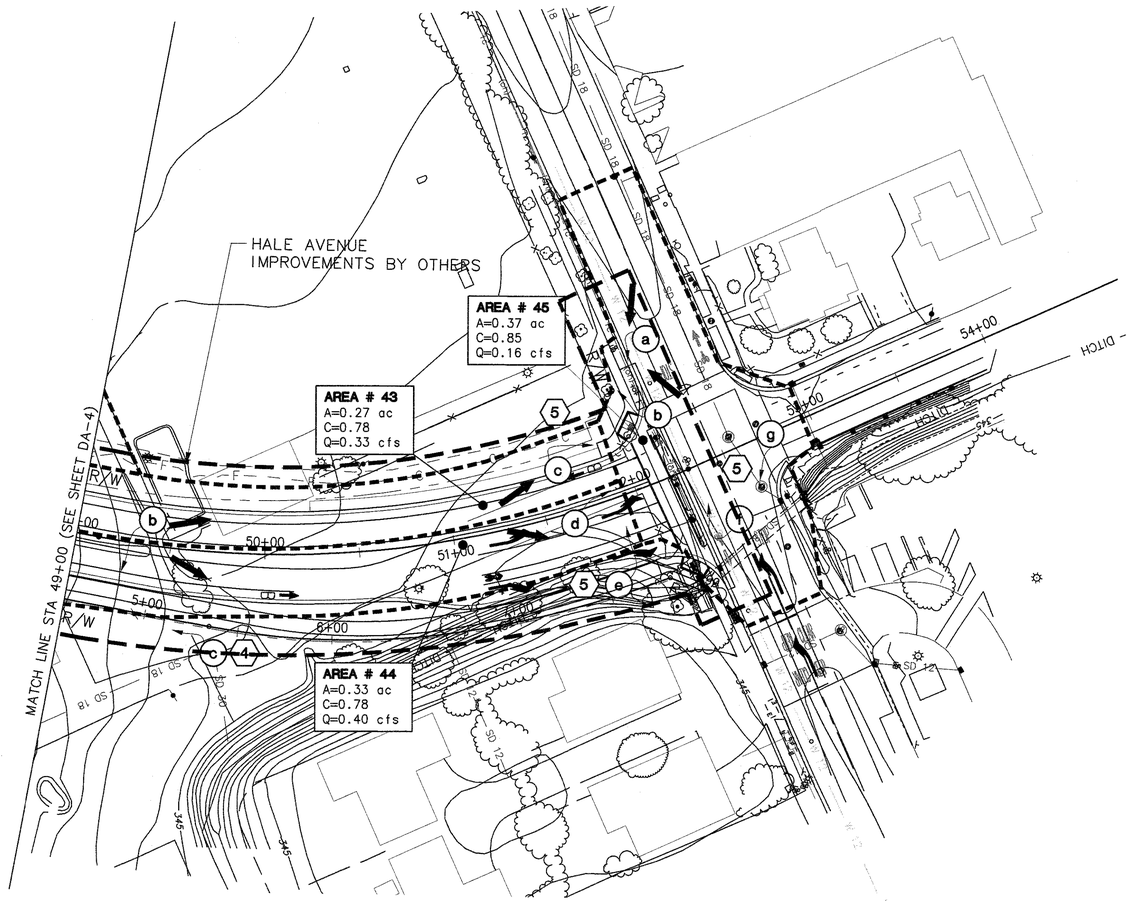
REGISTERED PROFESSIONAL ENGINEER MICHAEL K. COOPER No. 29072 CIVIL STATE OF CALIFORNIA 12/31/2020

MARK THOMAS

DRAINAGE AREA MAP
STA 38+50 TO STA 49+00
IMPROVEMENT PLANS FOR
HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: DA-4
39 OF 120

PLOT DATE: Sep 23, 2020-05:57pm CAD USER: jkeske
FILE NAME: HALE_DA1-5
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BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

City of Morgan Hill
Public Works Department
CITY OF MORGAN HILL
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: BF	DESIGN: BF	SCALE HOR.
CHECKED: JS	DATE: 09/25/2020	SCALE VERT.
APPROVED:	DATE: 9/25/2020	JOB NO. SJ-17101

SCOTT C. CREER
RCE 58879
DEPUTY DIRECTOR FOR ENGINEERING
EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

MICHAEL K. COOPER 29072 CIVIL 3/31/2021 STATE OF CALIFORNIA

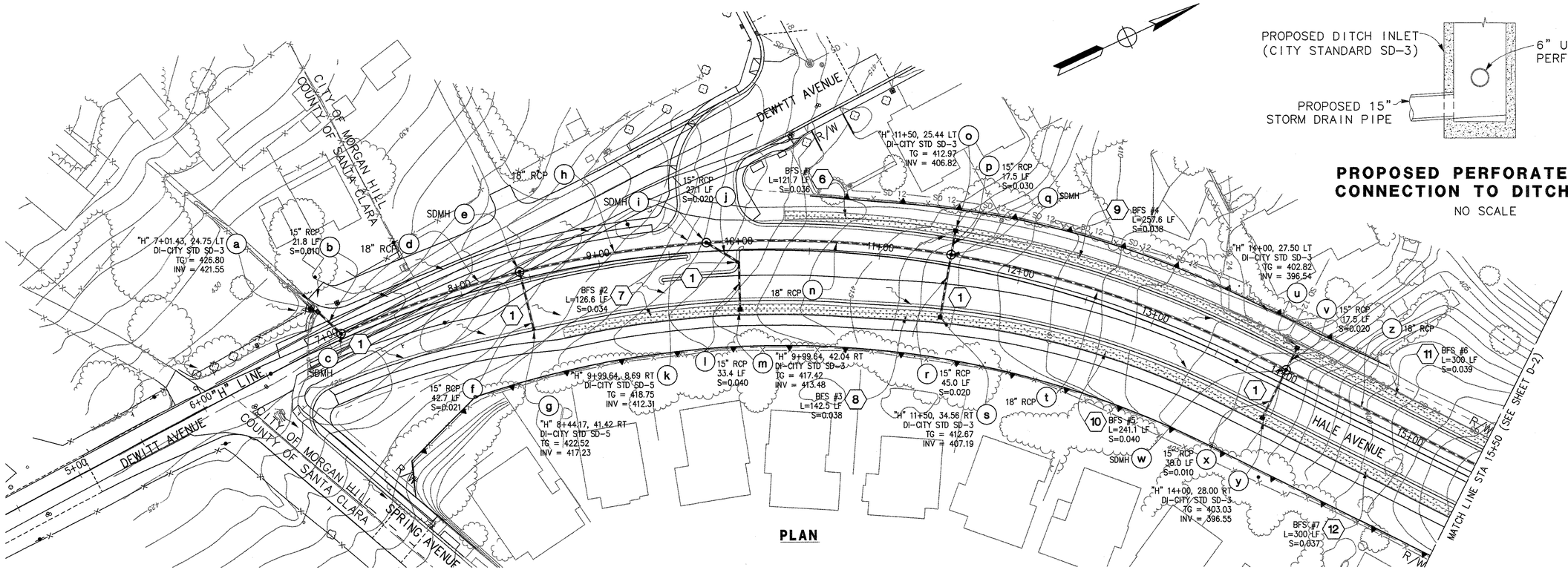
Michael Cooper 09/25/2020
SIGNATURE DATE

MARK THOMAS

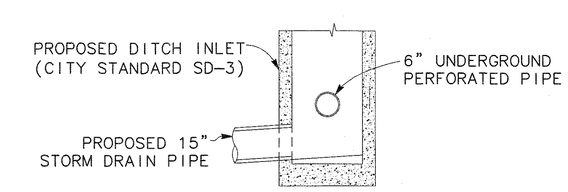
DRAINAGE AREA MAP STA 49+00 TO STA 54+00 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: DA-5
40 OF 120



PLAN

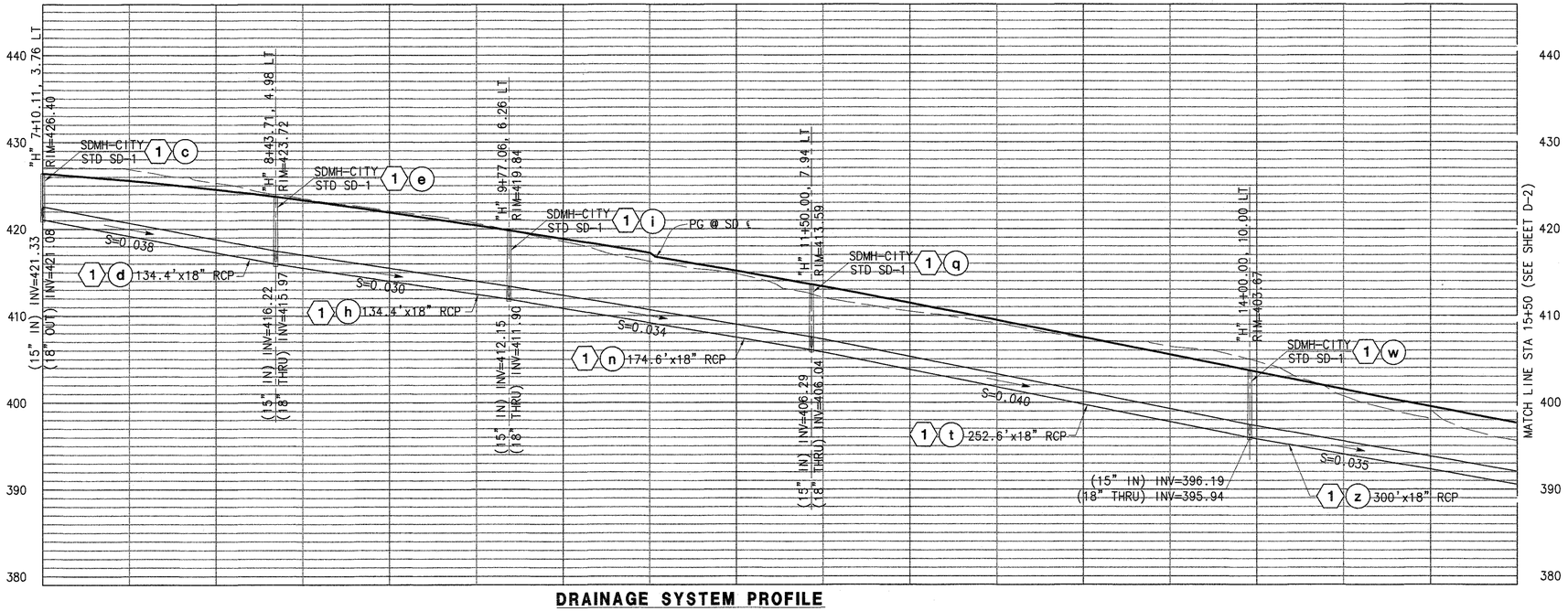


PROPOSED PERFORATED PIPE CONNECTION TO DITCH INLET

NO SCALE

LEGEND:

- DRAINAGE SYSTEM NUMBER
- DRAINAGE SYSTEM UNIT
- ROCK SLOPE PROTECTION (RSP)
- BIOFILTRATION SWALES (BFS)
- PROPOSED SDMH
- PROPOSED DITCH INLET
- PROPOSED CURB INLET
- DIRECTION OF FLOW
- PROPOSED SD PIPE
- SD12 — EXICTING SD PIPE
- EXICTING SD MANHOLE
- EXICTING SD INLET



DRAINAGE SYSTEM PROFILE

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL | DESIGN: SL | SCALE HOR. 1"=40'
CHECKED: KY | DATE: 09/25/2020 | SCALE VERT. 1"=8'
APPROVED: Scott C. Creer | DATE: 9/25/2020 | JOB NO. SJ-17101
SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

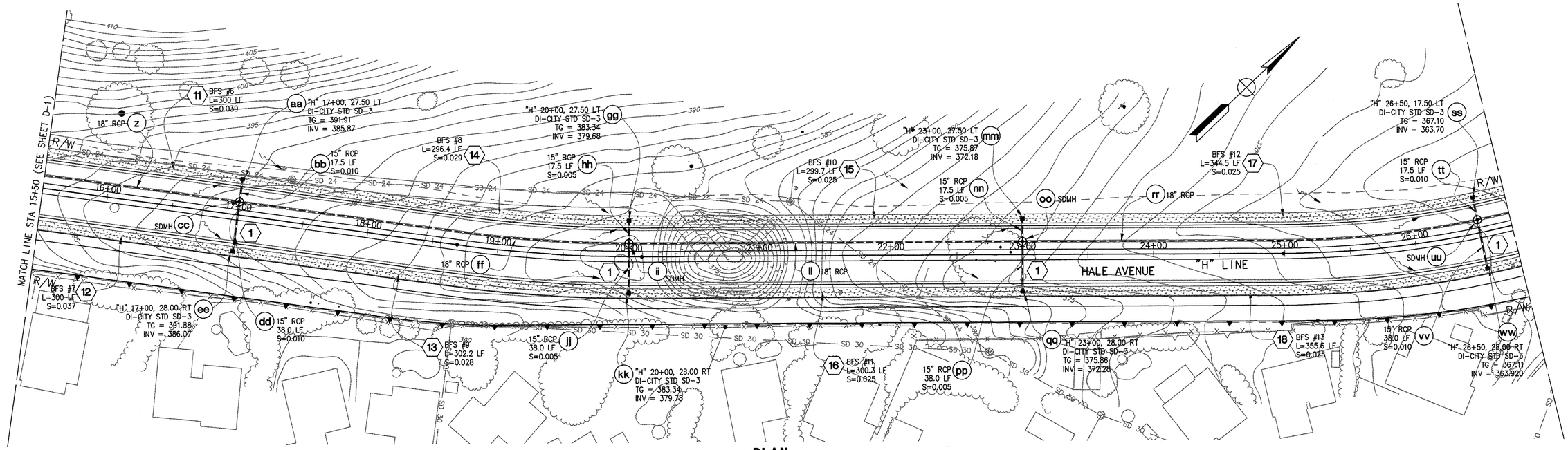
SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21
Michael Cooper 09/25/2020
SIGNATURE DATE

MARK THOMAS

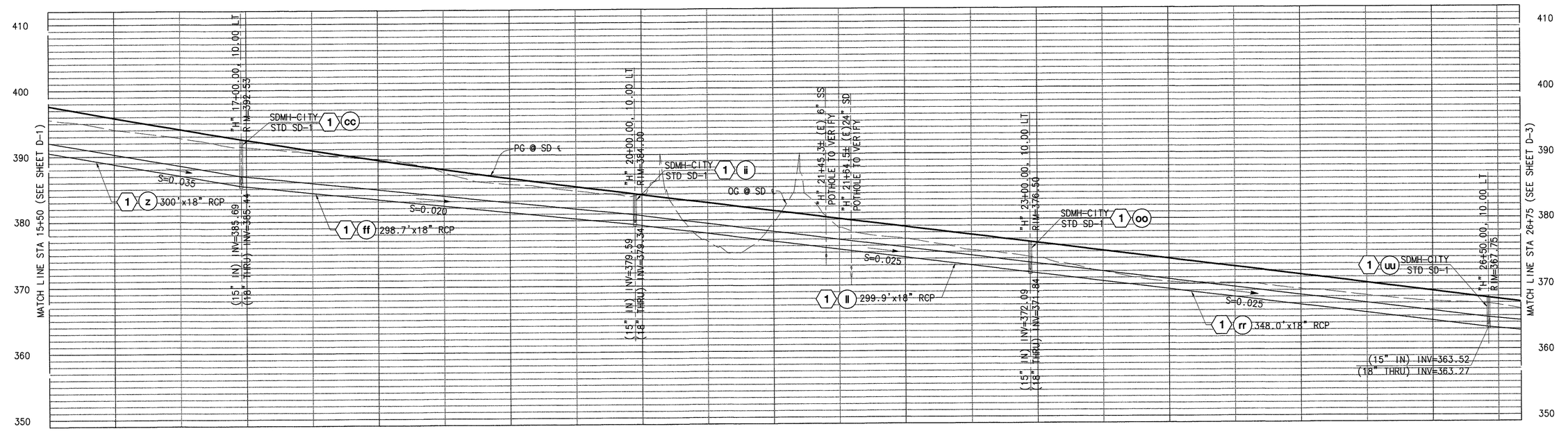
DRAINAGE SYSTEM PLAN & PROFILE
STA 5+00 TO STA 15+50
IMPROVEMENT PLANS FOR
MORGAN HILL **HALE AVE EXTENSION** CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: D-1
41 OF 120

PLOT DATE: Sep 23, 2020-8:59:40pm CAD USER: jleslie
FILE NAME: HAE_01-5
PATH: J:\Morgan Hill-SJ-17191-Hale Avenue Extension\CADD\Sheets\



PLAN



DRAINAGE SYSTEM PROFILE

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR.	1"=40'
CHECKED: KY	DATE: 09/25/2020	SCALE VERT.	1"=8'
APPROVED:	DATE: 9/25/2020	JOB NO.	SJ-17101

SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE. 29072
EXP. DATE 3-31-21

Michael Cooper 09/25/2020
SIGNATURE DATE

MARK THOMAS

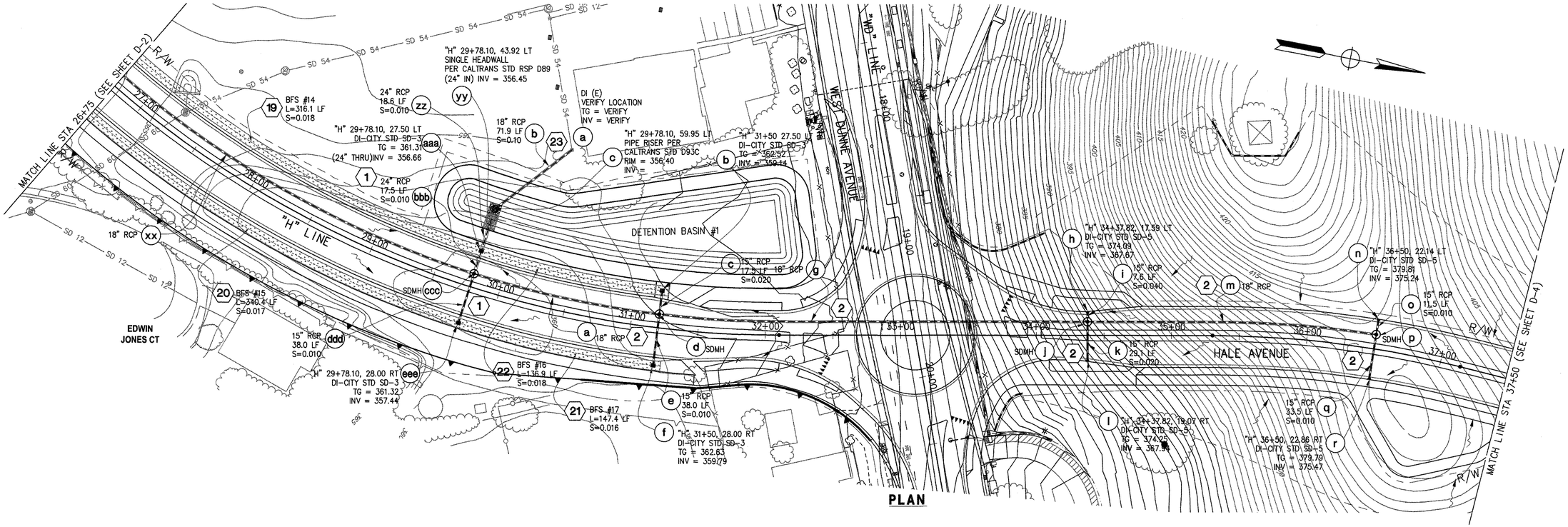
DRAINAGE SYSTEM PLAN & PROFILE STA 15+50 TO STA 26+75 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

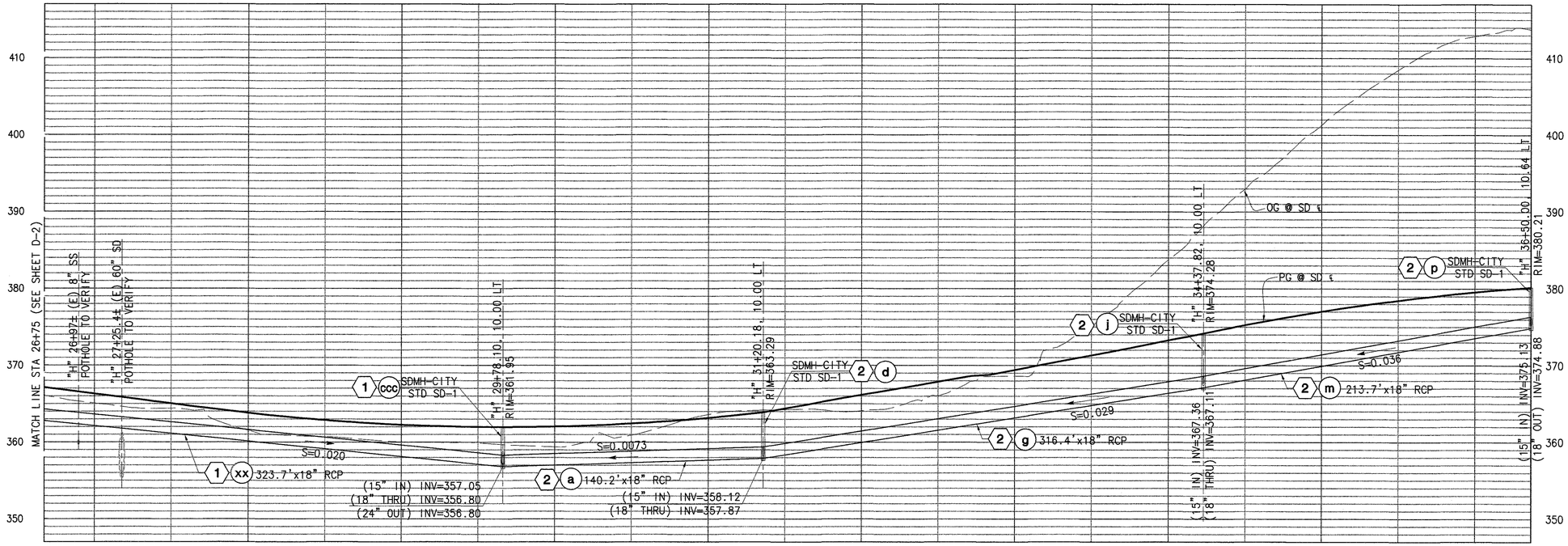
CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: D-2
42 OF 120

FILE NAME: HAE_D1-5
CAD USER: jlocke
PLOT DATE: Sep 23, 2020 - 8:04:14pm
PATH: J:\Morgan Hill\SJ-17101-Hale Avenue Extension\CADD\Sheets\

PLOT DATE: Sep 23, 2020-03:47:22pm
CAD USER: jkohn
FILE NAME: HAE_D1-5
PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CAD\D Sheets\



PLAN



DRAINAGE SYSTEM PROFILE

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=40'	
CHECKED: KY	DATE: 09/25/2020	SCALE VERT. 1"=8'	
APPROVED:	DATE: 9/25/2020	JOB NO. SJ-17101	

SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

MICHAEL K. COOPER No. 29072 EXP. 3/31/2021 CIVIL STATE OF CALIFORNIA

Michael Cooper 09/25/2020
SIGNATURE DATE

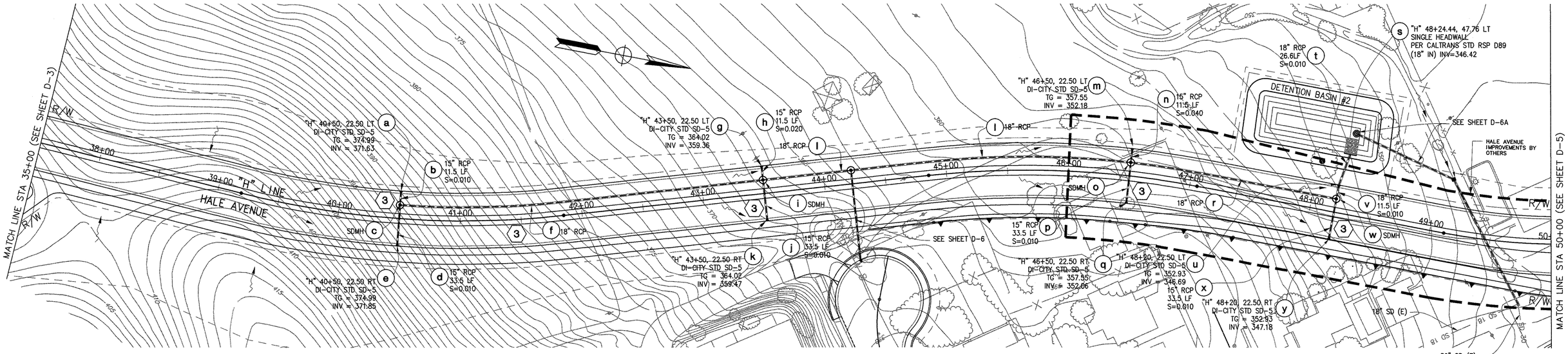
MARK THOMAS

DRAINAGE SYSTEM PLAN & PROFILE STA 26+50 TO STA 37+50 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

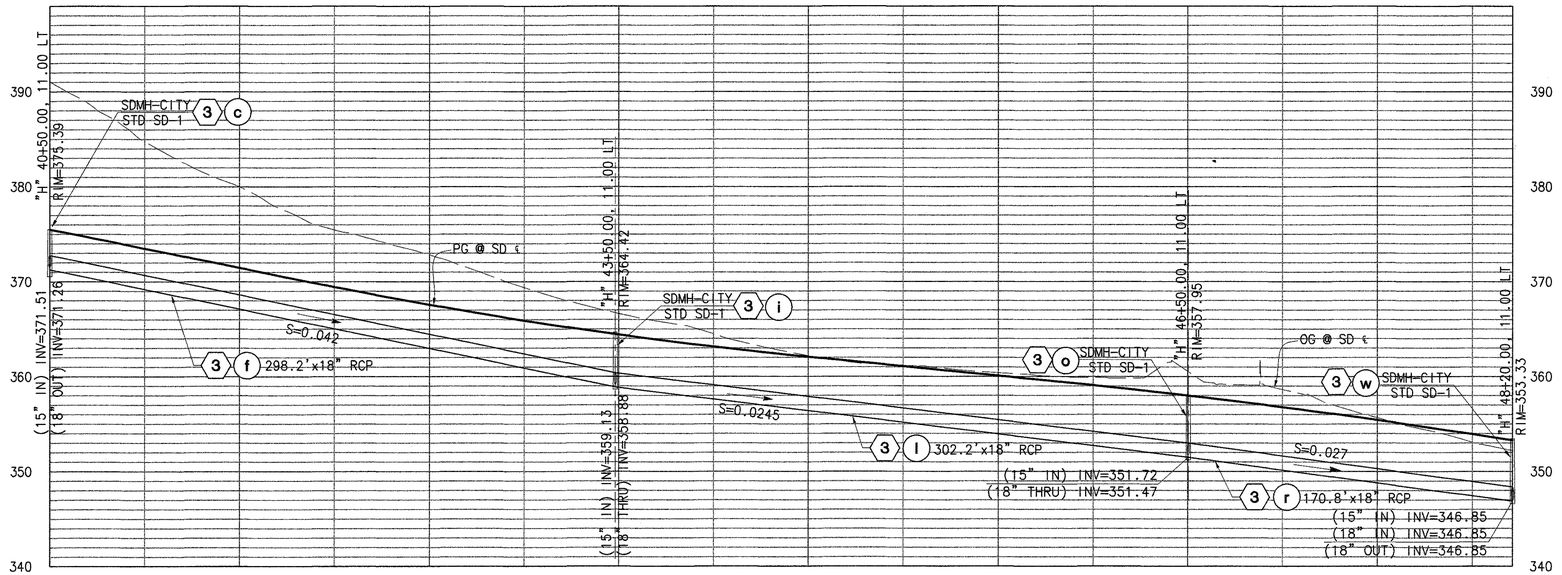
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: D-3
43 OF 120

PLOT DATE: Sep 23, 2020-03:49:39pm
CAD USER: Jkane
FILE NAME: HAE_D1-5
PATH: J:\Morgan Hill-51-1701-Hale Avenue Extension\CAD\Sheets\



PLAN



DRAINAGE SYSTEM PROFILE

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: BF	DESIGN: BF	SCALE HOR. 1"=40'	
CHECKED: JK	DATE: 09/25/2020	SCALE VERT. 1"=8'	
APPROVED:	DATE: 9/25/2020	JOB NO. SJ-17101	

SCOTT C. CREER RCE 56879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

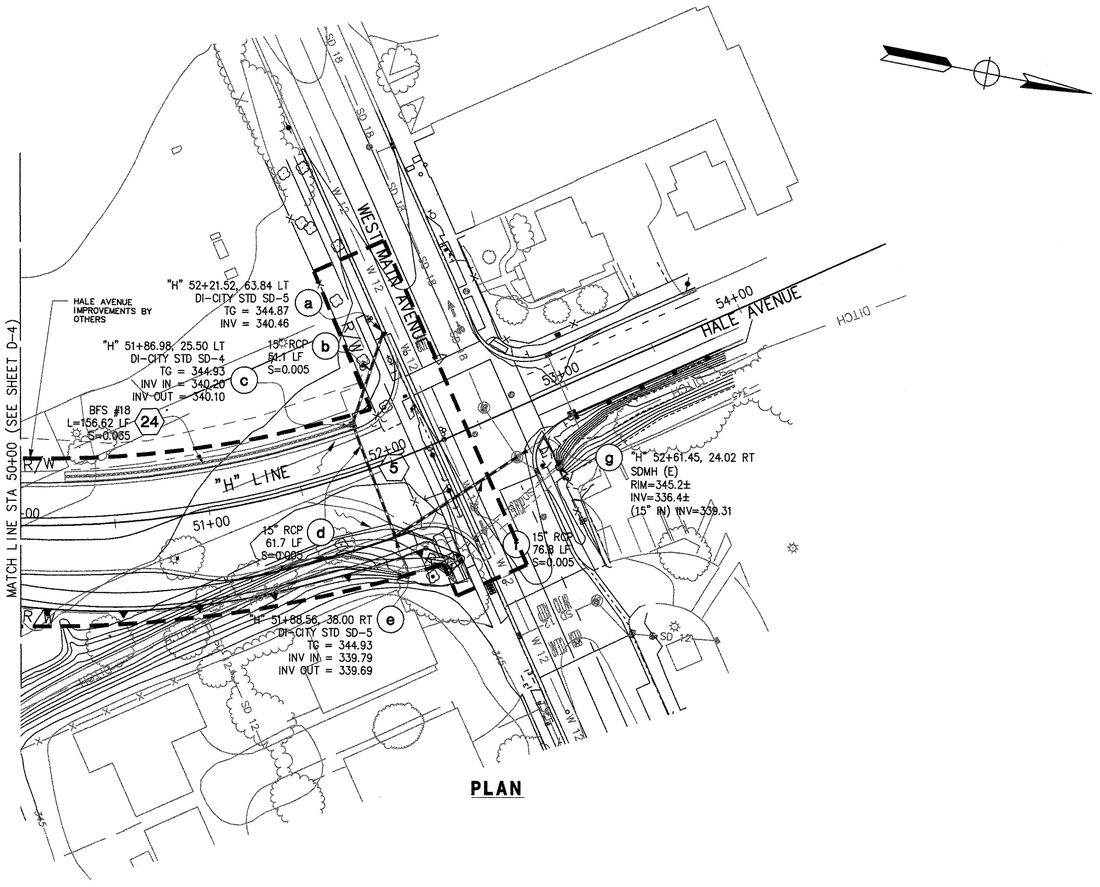
MICHAEL K. COOPER 29072 3/31/2021 CIVIL STATE OF CALIFORNIA

Michael Cooper 09/25/2020
SIGNATURE DATE

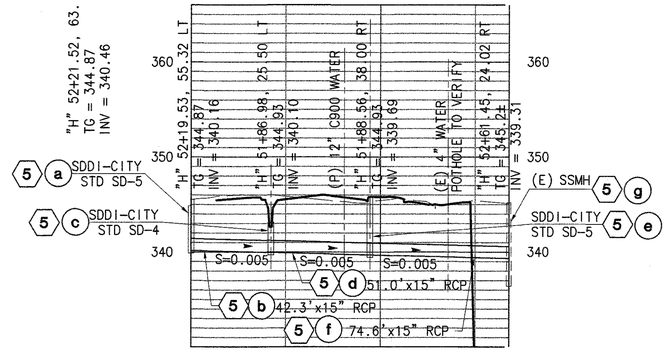
MARK THOMAS

DRAINAGE SYSTEM PLAN & PROFILE
STA 35+00 TO STA 50+00
IMPROVEMENT PLANS FOR
HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **D-4**
44 OF 120



PLAN



DRAINAGE SYSTEM PROFILE

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=40'	
CHECKED: KY	DATE: 09/25/2020	SCALE VERT.	
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SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

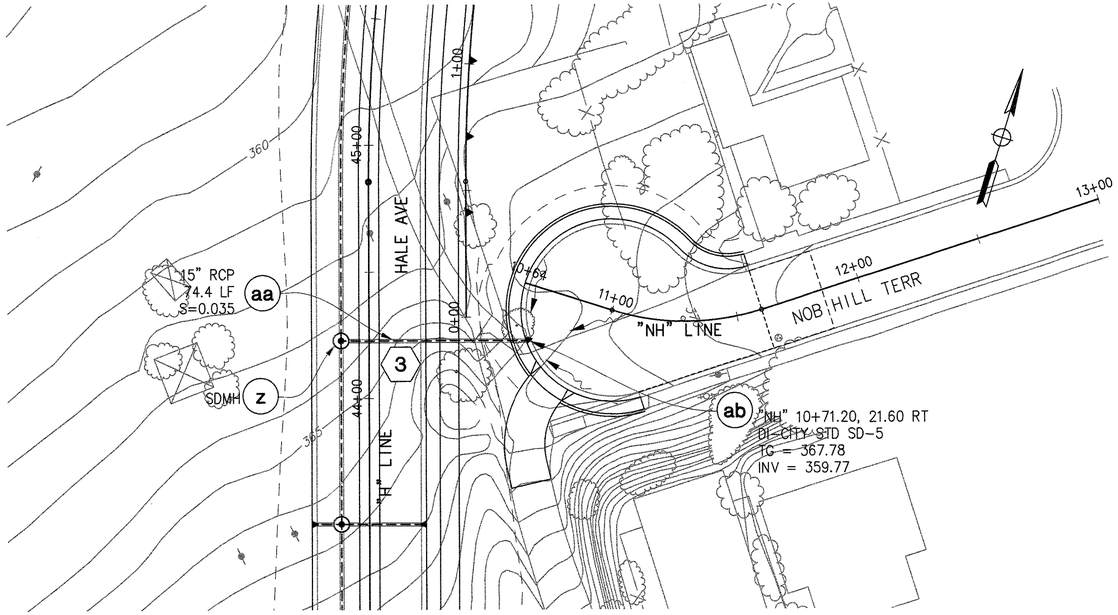
SUPERVISED BY: MICHAEL K. COOPER REGISTERED CIVIL ENGINEER RCE 29072 EXP. DATE 3-31-21
09/25/2020
SIGNATURE DATE

MARK THOMAS

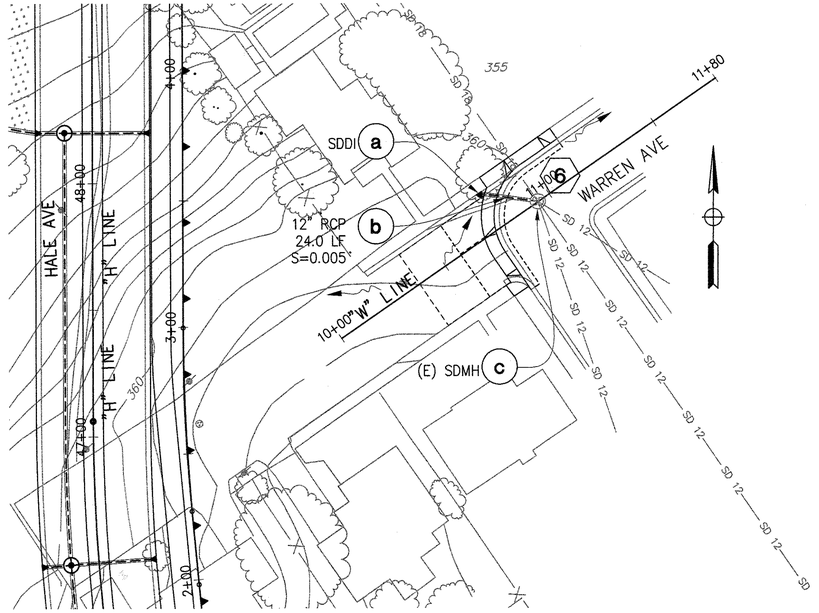
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MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **D-5**
45 OF 120

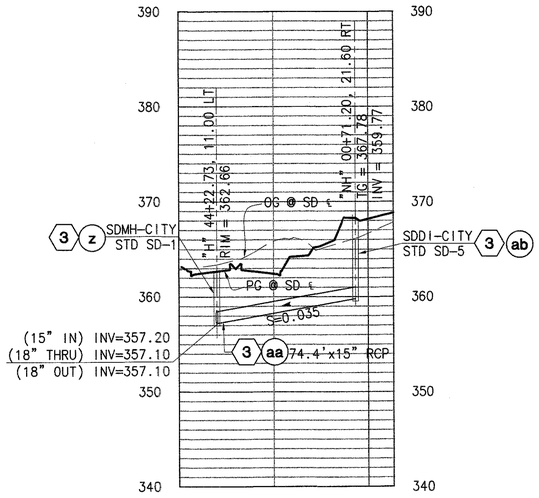
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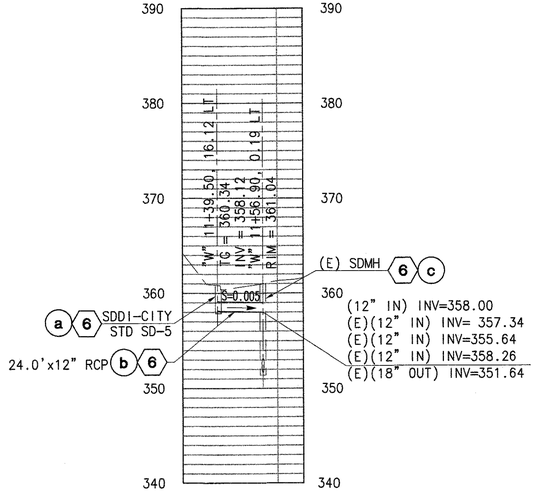
PLAN



PLAN



DRAINAGE SYSTEM PROFILE



DRAINAGE SYSTEM PROFILE

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: BF	DESIGN: BF	SCALE HOR. 1"=40'	
CHECKED: JK	DATE: 09/25/2020	SCALE VERT. 1"=8'	
APPROVED:	DATE: 9/25/2020	JOB NO. SJ-17101	

SCOTT C. CREER RCE 58579 — DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

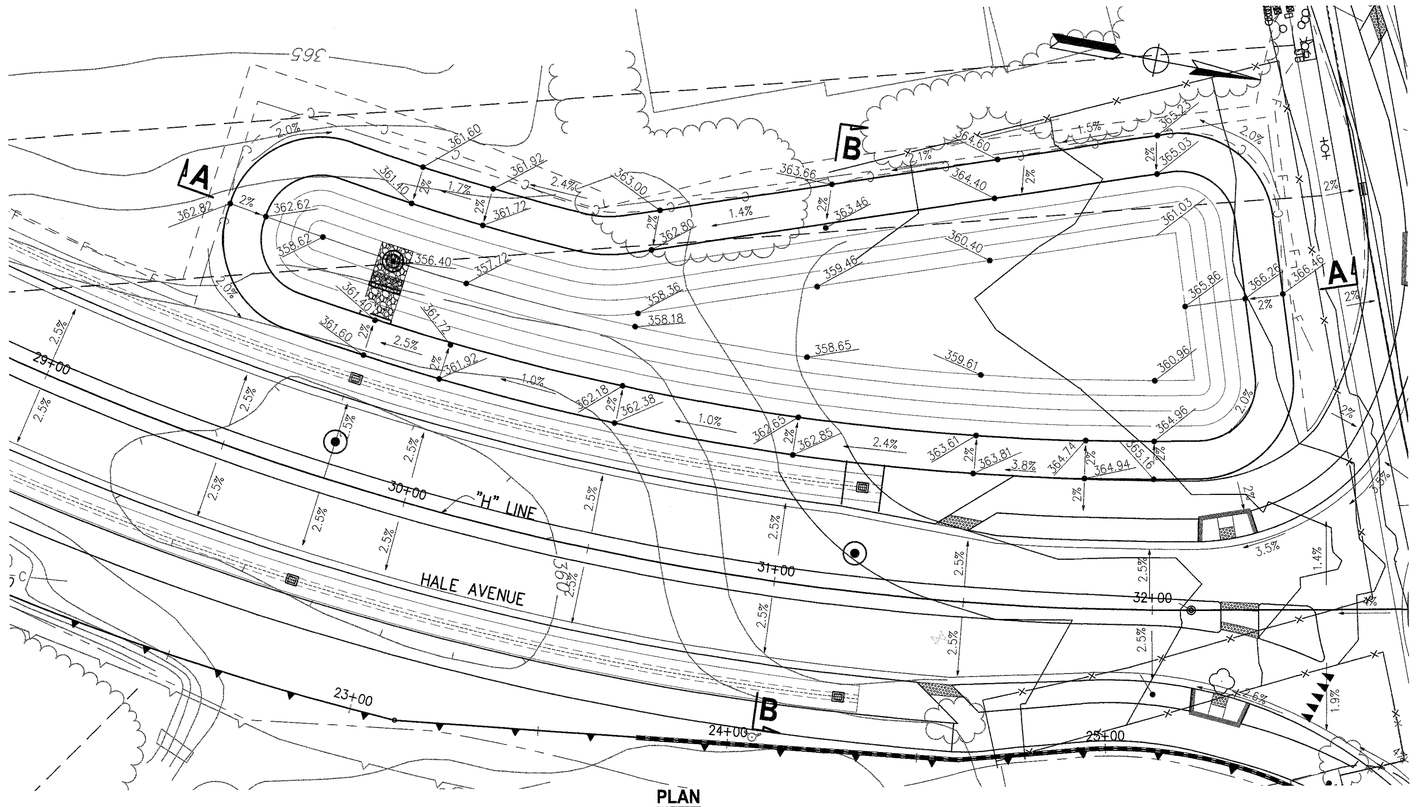
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MARK THOMAS

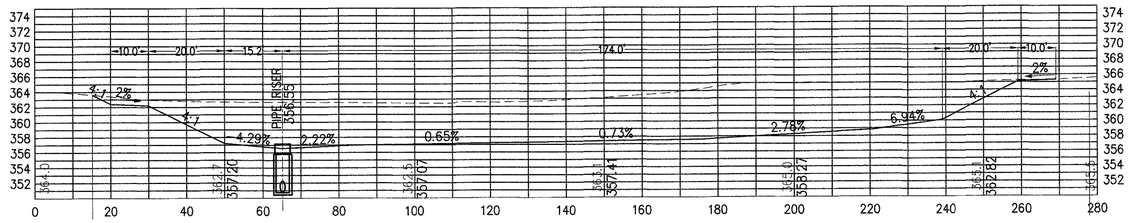
DRAINAGE SYSTEM PLAN & PROFILE
NOB HILL TERRACE & WARREN AVENUE IMPROVEMENT PLANS FOR
MORGAN HILL **HALE AVE EXTENSION** CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **D-6**
46 OF 120

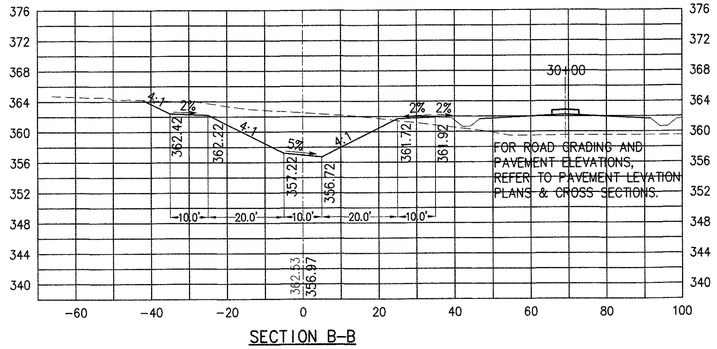
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PLAN



SECTION A–A



SECTION B–B

NOTE

FOR DRAINAGE SYSTEM INFORMATION
REFER TO DRAINAGE PLAN Sheet D–3

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS–BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776–6480 FAX (408) 779–7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=20'
CHECKED: MC	DATE: 09/25/2020	SCALE VERT. 1"=2'
APPROVED: Scott C. Creer	DATE: 9/25/2020	JOB NO. SJ–17101

SCOTT C. CREER RCE 58579 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6–30–21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3–31–21

REGISTERED PROFESSIONAL ENGINEER MICHAEL K. COOPER 29072 3/31/2021 CIVIL STATE OF CALIFORNIA

SIGNATURE DATE

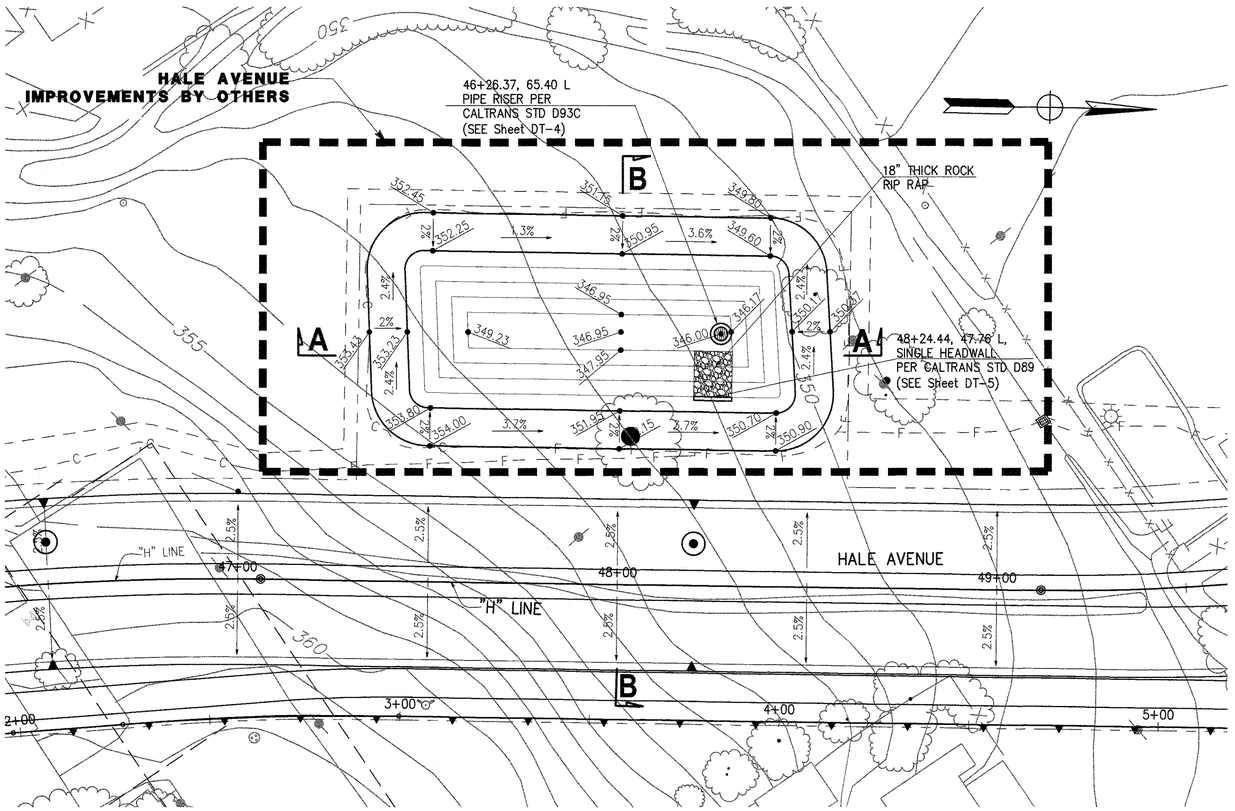
MARK THOMAS

DETENTION BASIN #1 GRADING & SECTIONS IMPROVEMENT PLANS FOR HALE AVE EXTENSION

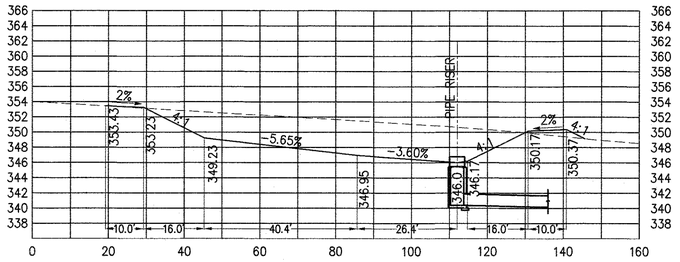
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: DB–1
47 OF 120

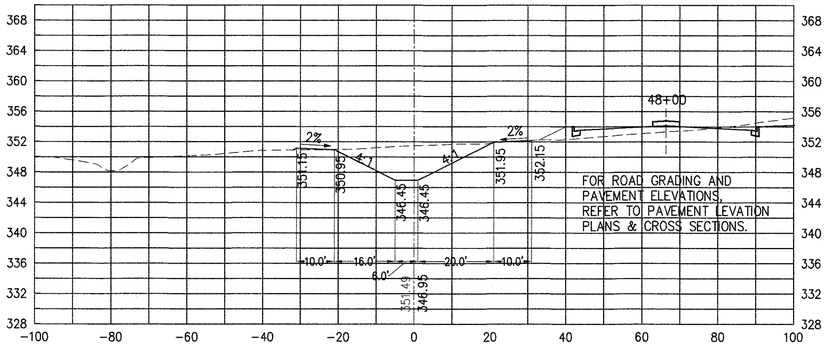
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PLAN



SECTION A-A



FOR ROAD GRADING AND PAVEMENT ELEVATIONS, REFER TO PAVEMENT LEVATION PLANS & CROSS SECTIONS.

SECTION B-B

NOTE

FOR DRAINAGE SYSTEM INFORMATION
REFER TO DRAINAGE PLAN Sheet D-5

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=20'	
CHECKED: MC	DATE: 09/25/2020	SCALE VERT. 1"=2'	
APPROVED: S.M.C.C.	DATE: 9/25/2020	JOB NO. SJ-17101	

SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

REGISTERED PROFESSIONAL ENGINEER MICHAEL K. COOPER No. 29072 3/31/2021 CIVIL STATE OF CALIFORNIA

SIGNATURE DATE

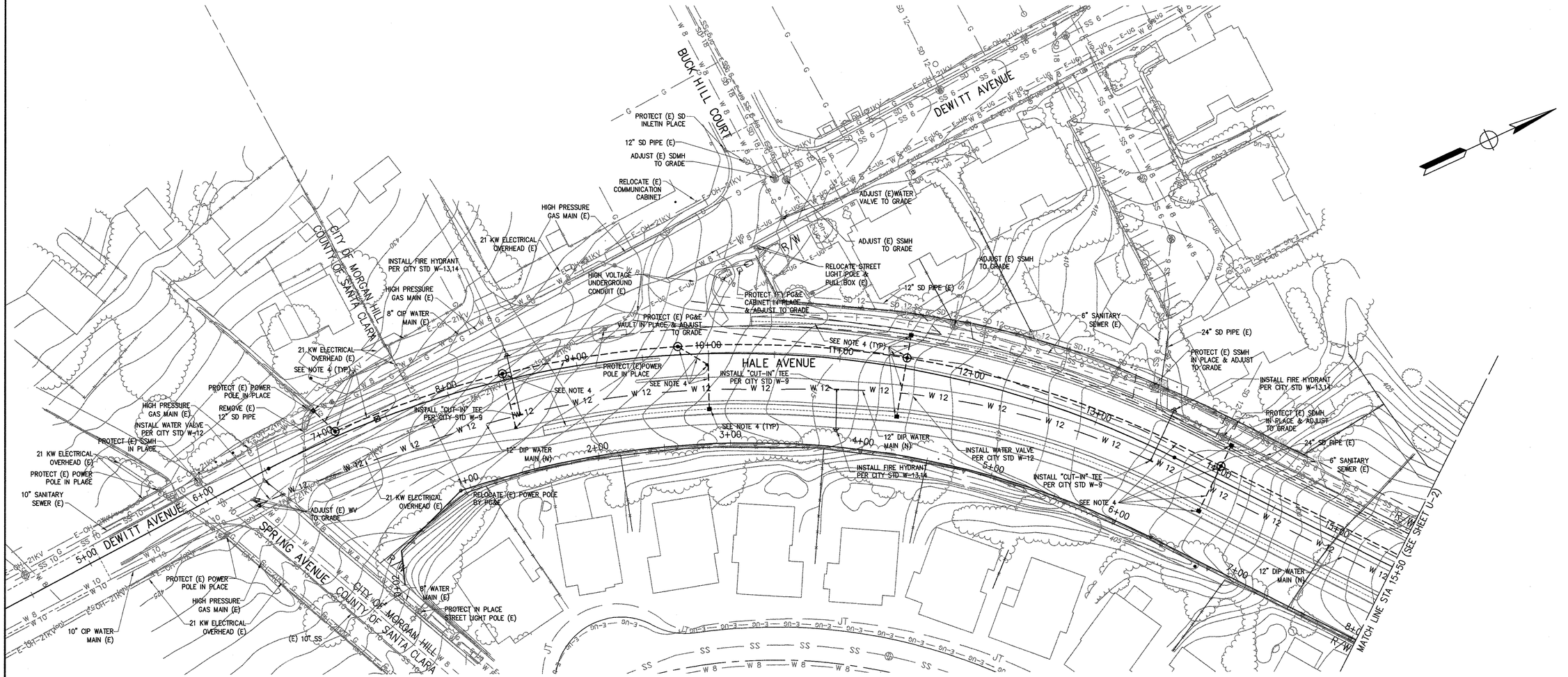
MARK THOMAS

DETENTION BASIN #2 GRADING & SECTIONS IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: DB-2
48 OF 120

CAD USER: jkohn
PLOT DATE: Sep 22, 2020-03:05:26pm
FILE NAME: HAL_DB1-2
PATH: J:\Morgan Hill\SJ-17191-Hale Avenue Extension\CAD\Sheets\



GENERAL NOTES:

1. LOCATIONS OF UTILITY FACILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
2. UTILITY OWNERSHIP ON THIS PROJECT:
   GAS – PACIFIC GAS & ELECTRIC COMPANY
   ELECTRIC – PACIFIC GAS & ELECTRIC COMPANY
   WATER – CITY OF MORGAN HILL
   STORM – CITY OF MORGAN HILL
   SANITARY SEWER – CITY OF MORGAN HILL
   TELECOMMUNICATION – AT&T CALIFORNIA
3. THIS PLAN ACCURATE FOR UTILITIES ONLY.
4. REFER TO DRAINAGE PLANS FOR NEW DRAINAGE FACILITIES.
5. REFER TO LANDSCAPE PLANS FOR NEW IRRIGATION FACILITIES.
6. REFER TO LIGHTING & SIGNAL PLANS FOR NEW ELECTRICAL FACILITIES.
7. ⊠ – POTHOLE TO VERIFY (E) UTILITY CROSSING.

CAUTION!!! ENERGIZED FACILITIES!!

CONTRACTOR TO EXERCISE EXTREME CAUTION WORKING NEAR AND UNDER HIGH VOLTAGE ELECTRICAL LINES.
CONTRACTOR TO EXERCISE EXTREME CAUTION TO AVOID DAMAGING EXISTING UNDERGROUND UTILITIES. OBSTRUCTIONS INDICATED ARE FOR INFORMATION ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION AND DEPTH WITH THE APPROPRIATE AGENCIES. NEITHER THE OWNER NOR THE DESIGNER ASSUME ANY RESPONSIBILITY THAT THE OBSTRUCTIONS INDICATED WILL ACTUALLY BE THE OBSTRUCTIONS ENCOUNTERED. POTHOLING IS REQUIRED. HAND EXCAVATE ONLY IN PRESENCE OF AN INSPECTOR.

CALL BEFORE YOU DIG USA 811 800-227-2600

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
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BY: DATE:

CITY OF MORGAN HILL
City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=40'
CHECKED: MC	DATE: 09/25/2020	SCALE VERT.
APPROVED: Scott C. Creer	DATE: 9/25/2020	JOB NO. SJ-17101

SCOTT C. CREER RCE 58679 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

MICHAEL K. COOPER No. 29072 3/31/2021 CIVIL STATE OF CALIFORNIA

SIGNATURE DATE

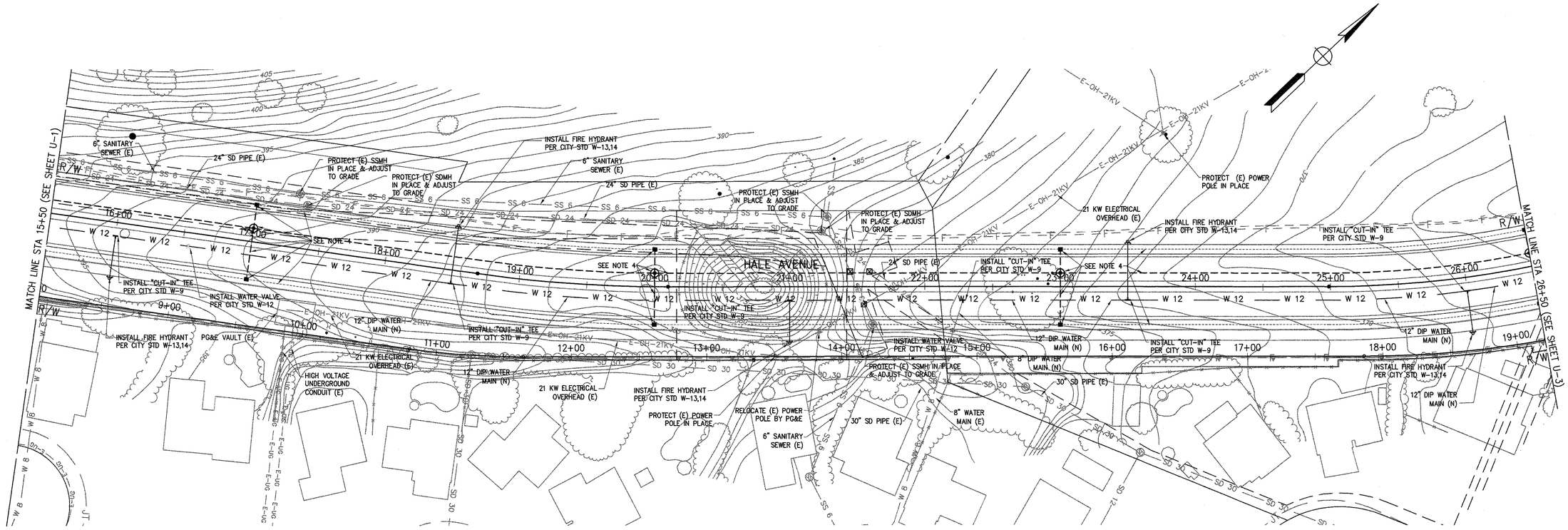
MARK THOMAS

UTILITY PLAN
STA 5+00 TO STA 15+50
IMPROVEMENT PLANS FOR
HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: U-1
49 OF 120

PLOT DATE: Sep 23, 2020-03:47:52pm CAD USER: jhelm
FILE NAME: HAE_U1-5
PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CADD\Sheet\



NOTE:

SEE SHEET U-1 FOR GENERAL NOTES.

CAUTION!!! ENERGIZED FACILITIES!!

CONTRACTOR TO EXERCISE EXTREME CAUTION WORKING NEAR AND UNDER HIGH VOLTAGE ELECTRICAL LINES.
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BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL
City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

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CHECKED: MC	DATE: 09/25/2020	SCALE VERT.
APPROVED: Scott C. Creer DATE: 9/25/2020		JOB NO. SJ-17101
SCOTT C. CREER RCE 58879	DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21	

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

MICHAEL K. COOPER No. 29072 3/31/2021 CIVIL STATE OF CALIFORNIA

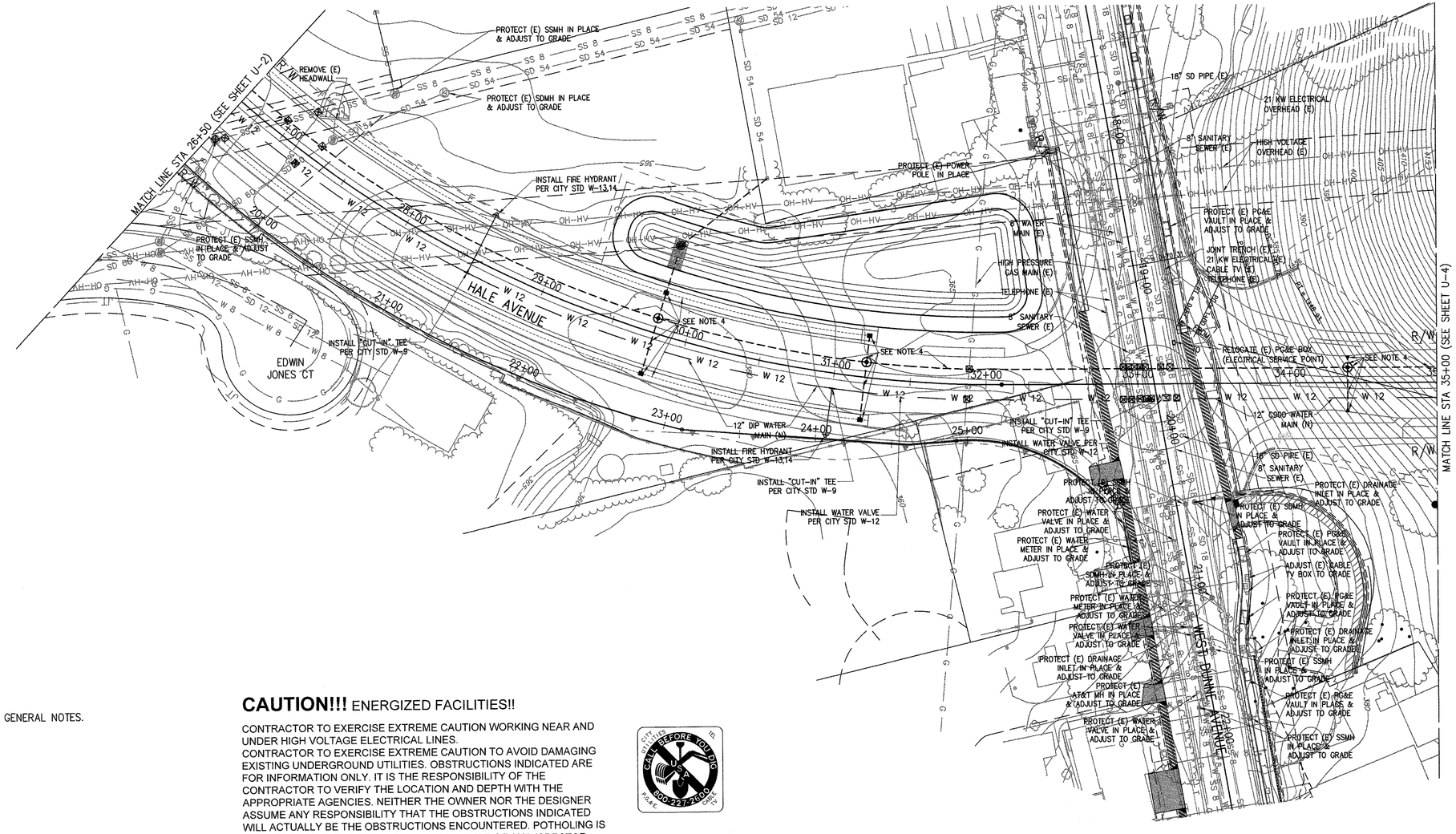
SIGNATURE DATE

MARK THOMAS

MORGAN HILL **UTILITY PLAN STA 15+50 TO STA 26+50 IMPROVEMENT PLANS FOR HALE AVE EXTENSION** CALIFORNIA

CITY FILE NO. 504E02
PLAN SET 09/25/2020
DRAWING: **U-2**
50 OF 120

CAD USER: jhoke
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NOTE:
SEE SHEET U-1 FOR GENERAL NOTES.

CAUTION!!! ENERGIZED FACILITIES!!

CONTRACTOR TO EXERCISE EXTREME CAUTION WORKING NEAR AND UNDER HIGH VOLTAGE ELECTRICAL LINES.
CONTRACTOR TO EXERCISE EXTREME CAUTION TO AVOID DAMAGING EXISTING UNDERGROUND UTILITIES. OBSTRUCTIONS INDICATED ARE FOR INFORMATION ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION AND DEPTH WITH THE APPROPRIATE AGENCIES. NEITHER THE OWNER NOR THE DESIGNER ASSUME ANY RESPONSIBILITY THAT THE OBSTRUCTIONS INDICATED WILL ACTUALLY BE THE OBSTRUCTIONS ENCOUNTERED. POTHOLING IS REQUIRED. HAND EXCAVATE ONLY IN PRESENCE OF AN INSPECTOR.

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WORK ACCEPTED: AS-BUILT CORRECTIONS — INSPECTOR: — BY: — DATE:

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=40'	
CHECKED: MC	DATE: 09/25/2020	SCALE VERT.	
APPROVED: Scott C. Creer	DATE: 9/30/2020	JOB NO. SJ-17101	

SCOTT C. CREER, RCE 58879 — DEPUTY DIRECTOR FOR ENGINEERING, EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

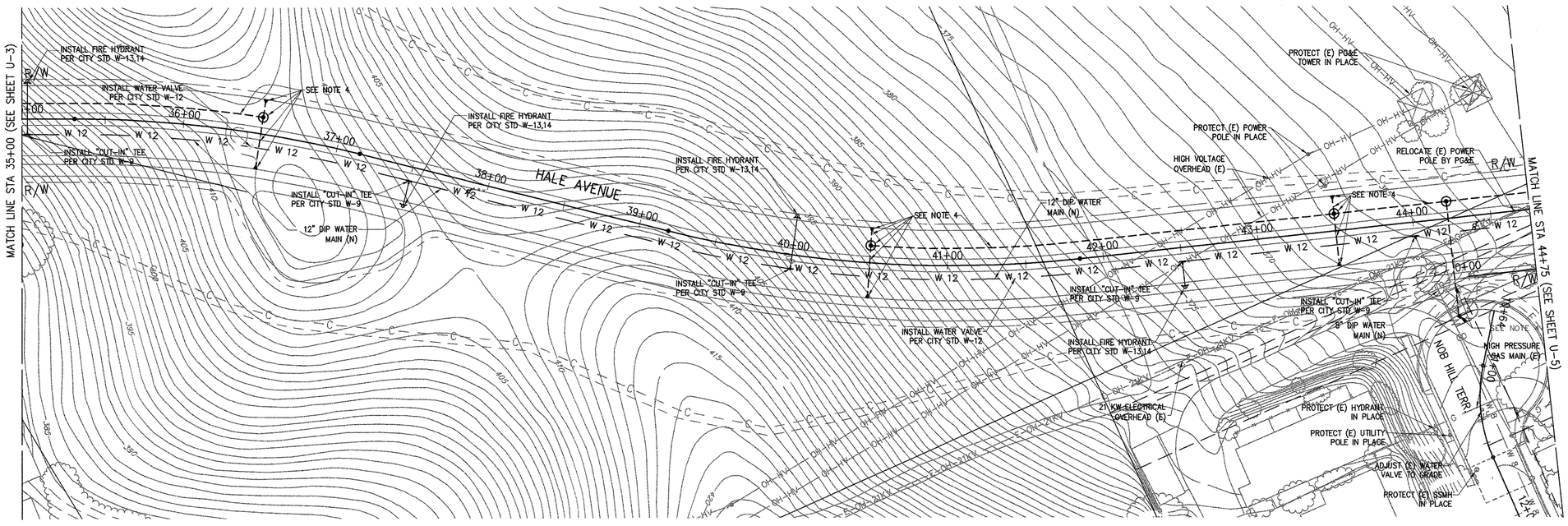
SIGNATURE — DATE

MARK THOMAS

UTILITY PLAN
STA 26+50 TO STA 35+00
IMPROVEMENT PLANS FOR
HALE AVE EXTENSION MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **U-3**
51 OF 120

PLOT DATE: Sep 24, 2020-09:35:34am CAD USER: jkeke
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NOTE :

SEE SHEET U-1 FOR GENERAL NOTES.

CAUTION!!! ENERGIZED FACILITIES!!

CONTRACTOR TO EXERCISE EXTREME CAUTION WORKING NEAR AND UNDER HIGH VOLTAGE ELECTRICAL LINES.
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AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=40'	
CHECKED: MC	DATE: 09/25/2020	SCALE VERT.	
APPROVED:	DATE: 9/25/2020	JOB NO. SJ-17101	

SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

REGISTERED PROFESSIONAL ENGINEER MICHAEL K. COOPER No. 29072 3/31/2021 CIVIL STATE OF CALIFORNIA

SIGNATURE DATE

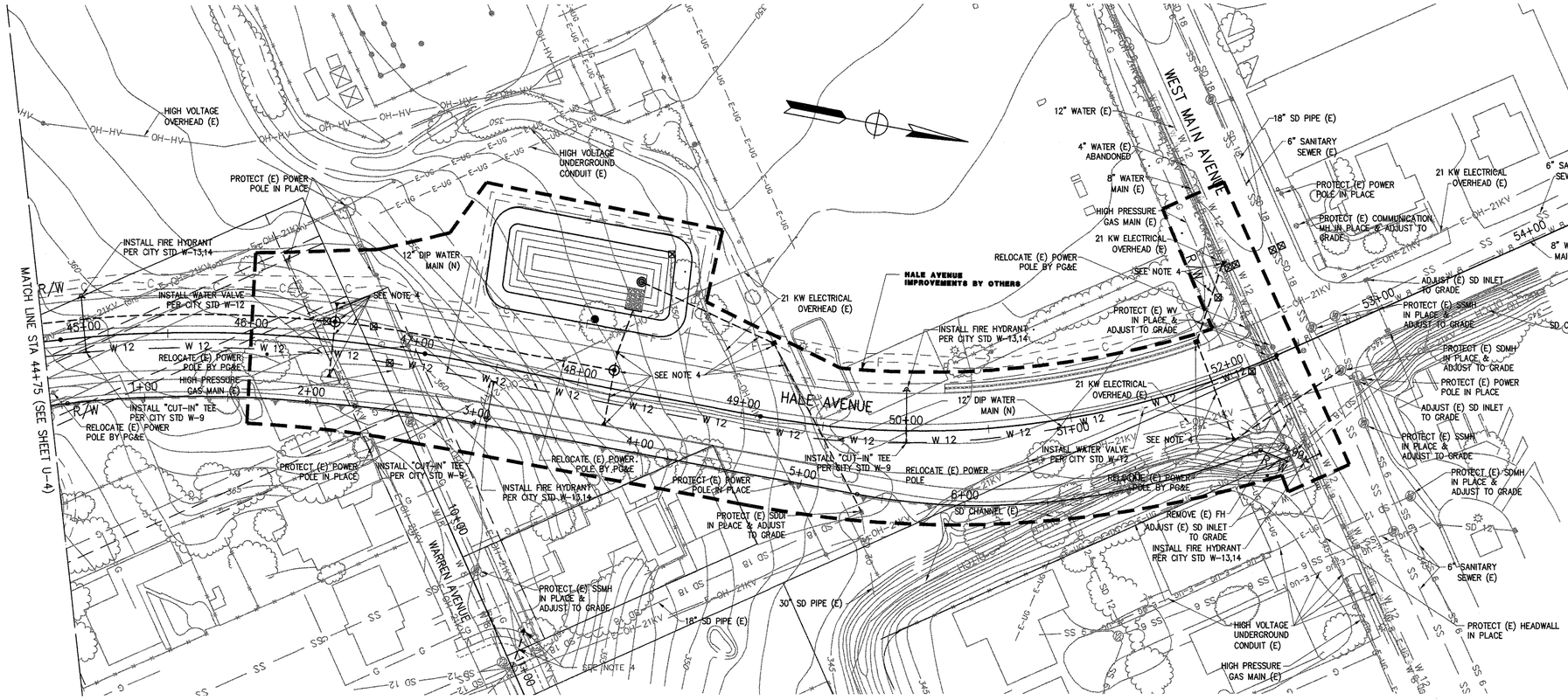
MARK THOMAS

UTILITY PLAN
STA 35+00 TO STA 44+75
IMPROVEMENT PLANS FOR
HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: U-4
52 OF 120

PLOT DATE: Sep 23, 2020-03:58:19pm CAD USER: Jache
FILE NAME: HAE_01-5
PATH: J:\Morgan Hill\-SJ-17101-Hale Avenue Extension\CADD\Sheets\



NOTE:

SEE SHEET U-1 FOR GENERAL NOTES.

CAUTION!!! ENERGIZED FACILITIES!!

CONTRACTOR TO EXERCISE EXTREME CAUTION WORKING NEAR AND UNDER HIGH VOLTAGE ELECTRICAL LINES.
CONTRACTOR TO EXERCISE EXTREME CAUTION TO AVOID DAMAGING EXISTING UNDERGROUND UTILITIES. OBSTRUCTIONS INDICATED ARE FOR INFORMATION ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION AND DEPTH WITH THE APPROPRIATE AGENCIES. NEITHER THE OWNER NOR THE DESIGNER ASSUME ANY RESPONSIBILITY THAT THE OBSTRUCTIONS INDICATED WILL ACTUALLY BE THE OBSTRUCTIONS ENCOUNTERED. POTHOLING IS REQUIRED. HAND EXCAVATE ONLY IN PRESENCE OF AN INSPECTOR.

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL DESIGN: SL SCALE HOR. 1"=40'
CHECKED: MC DATE: 09/25/2020 SCALE VERT.
APPROVED: DATE: 9/25/2020 JOB NO. SJ-17101
SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

REGISTERED PROFESSIONAL ENGINEER MICHAEL K. COOPER No. 29072 3/31/2021 CIVIL STATE OF CALIFORNIA

SIGNATURE DATE

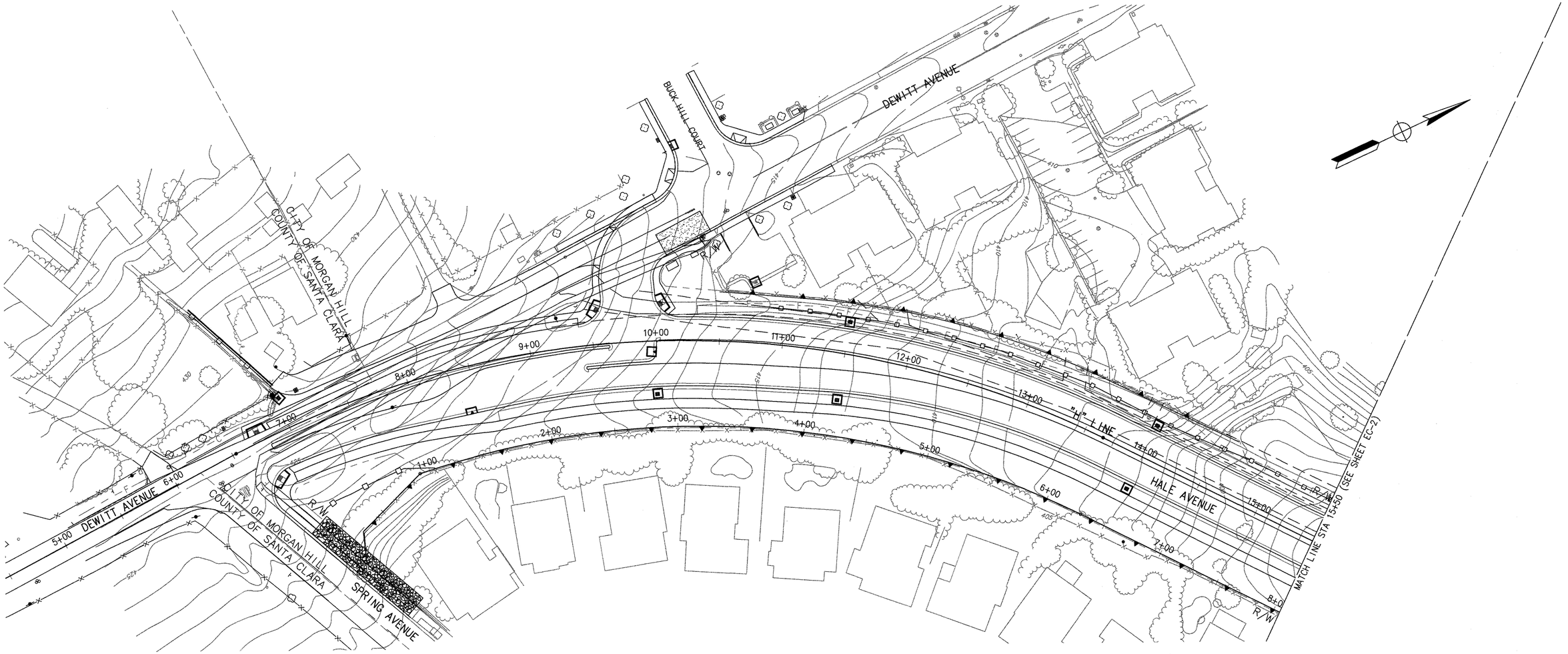
MARK THOMAS

UTILITY PLAN
STA 44+75 TO STA 55+00
IMPROVEMENT PLANS FOR
HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: U-5
53 OF 120

PLOT DATE: Sep 23, 2021-03:08:16pm CAD USER: jkohn
FILE NAME: HAE_U1-5
PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CADD\Sheets\

CAD USER: jkoche
PLOT DATE: Sep 23, 2020-03:09:37pm
FILE NAME: HAE_EC1-4



LEGEND:

TEMPORARY CONCRETE WASHOUT FACILITY

TEMPORARY CONSTRUCTION ENTRANCE

HYDROSEED (MULCH/TACKIFER) PER PROJECT SPECIFICATION

FIBER ROLL

TEMPORARY SILT FENCE

TEMPORARY DRAINAGE INLET PROTECTION

TEMPORARY CURB INLET PROTECTION

BID SUBMITTAL

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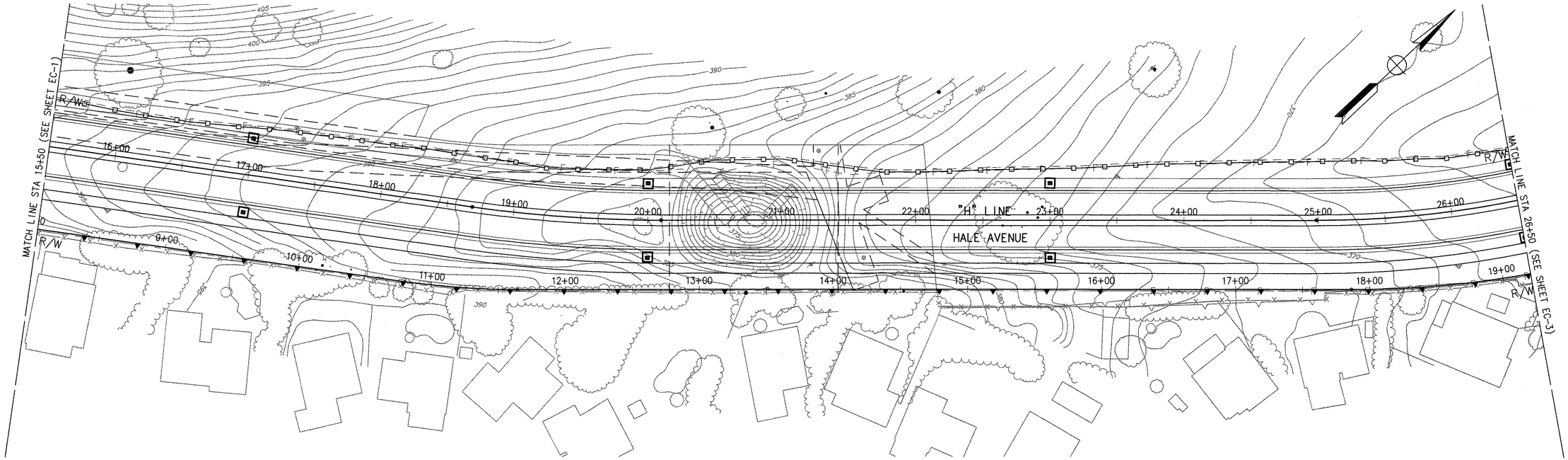
MARK THOMAS

EROSION CONTROL PLAN STA 5+00 TO STA 15+50 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: EC-1
54 OF 120

PATH: J:\Morgan Hill\SJ-17101-Hale Avenue Extension\CADD\Sheets\



GENERAL NOTES:

1. BEST MANAGEMENT PRACTICES (BmPs) FOR THIS PROJECT SHALL BE IN COMPLIANCE AT ALL TIMES WITH THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED FOR THE PROJECT IN ACCORDANCE WITH THE STATE WATER RESOURCE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT No. CAS000002. THIS PERMIT REQUIRES THAT THE SWPPP BE KEPT UP TO DATE TO REFLECT THE CHANGING SITE CONDITIONS AND THE SWPPP IS TO BE AVAILABLE ON SITE AT ALL TIMES FOR REVIEW BY STATE AND LOCAL INSPECTORS.

2. THE EROSION CONTROL MEASURES ARE TO BE OPERABLE DURING THE RAINY SEASON, OCTOBER 1 TO APRIL 15. BY OCTOBER 1, GRADING INSTALLATION OF STORM DRAINAGE AND EROSION CONTROL FACILITIES WILL NEED TO BE COMPLETED WITH EROSION CONTROL PLANTING ESTABLISHED BY THAT TIME. NO GRADING SHALL OCCUR BETWEEN OCTOBER 1 AND APRIL 15 UNLESS AUTHORIZED BY THE CITY OF MORGAN HILL.

3. STANDARD DROP INLET, UNDERGROUND DRAINAGE PIPE AND APPURTENANCES SHALL BE CONSTRUCTED PRIOR TO WINTERIZATION AND WILL REMAIN AS PERMANENT TRACT IMPROVEMENTS.

4. CHANGES TO THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE MADE TO MEET FIELD CONDITIONS ONLY WITH THE APPROVAL OF OR AT THE DIRECTION OF THE CITY OF MORGAN HILL.

5. DURING THE RAINY SEASON, ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL, AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT LADEN RUNOFF TO ANY STORM DRAINAGE SYSTEM.

6. THIS PLAN COVERS ONLY THE FIRST WINTER FOLLOWING GRADING. PLANS ARE TO BE RESUBMITTED FOR CITY APPROVAL PRIOR TO SEPTEMBER 1 OF EACH SUBSEQUENT YEAR UNTIL THE TRACT IMPROVEMENTS ARE ACCEPTED BY THE COUNTY.

7. SEED AND MULCH ARE TO BE PLACED ON ALL DISTURBED SLOPES STEEPER THAN 2% AND HIGHER THAN 3 FEET, ON ALL CUT AND FILL SLOPES WITHIN OR ADJACENT TO ALL PUBLIC RIGHTS OF WAY AND AS DIRECTED BY THE CITY. SEED PLACED BETWEEN MAY AND SEPTEMBER SHALL BE IRRIGATION AS NECESSARY TO ESTABLISH GROWTH BY OCTOBER 1.

8. STABILIZED ENTRANCE SHALL BE INSTALLED PER DETAIL (01 EC-6)
PRIOR TO GRADING ACTIVITIES.

9. DRAIN INLETS SHALL BE PROTECTED PER DETAILS (04 EC-6) (07 EC-6) (08 EC-6)
PRIOR TO GRADING ACTIVITIES OR AS SOON AS PRACTICAL.

10. SEDIMENT CONTROL BMPs SHALL BE INSTALLED PRIOR TO GRADING OR AS SOON AS PRACTICAL, AND MAINTAINED YEAR ROUND.

MAINTENANCE NOTES:

1. SILT FENCES.
SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED AFTER EACH SIGNIFICANT RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

2. IF THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSES OR BECOMES INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.

3. SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS REMOVED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE AND SEEDED.

4. TEMPORARY DIVERSION DIKE:
THIS MEASURE SHALL BE INSPECTED AFTER EACH SIGNIFICANT STORM AND REPAIRS SHOULD BE MADE TO THE DIKE, FLOW CHANNEL AND OUTLET AS NECESSARY.

5. APPROXIMATELY ONCE EVERY WEEK, WHETHER A STORM HAS OCCURRED OR NOT, DIKES SHOULD BE INSPECTED AND REPAIRED IF NEEDED. LOOK FOR BREACHES CAUSED BY VEHICLES CROSSING THE DIKE. DAMAGES CAUSED BY CONSTRUCTION TRAFFIC OR OTHER ACTIVITY SHALL BE REPAIRED BEFORE THE END OF EACH WORKING DAY.

6. CONTRACTOR SHALL MAINTAIN THE CLEANLINESS OF ALL EXISTING STREETS AND REMOVE ALL SEDIMENTS CARRIED INTO THEM BY EROSION OF GRADED AREAS DAILY OR AS REQUIRED. FOR TYPICAL EROSION CONTROL DETAILS, SEE SHEET EC-6.

7. STABILIZED ENTRANCE(S) SHALL BE PLACED AND MAINTAINED YEAR ROUND.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) MANUAL GENERAL NOTES:

1. PRIOR TO CONSTRUCTION/GRADING ACTIVITY, A SWPPP MANUAL SHALL BE PREPARED AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS.

2. A COPY OF THE CURRENT SWPPP MANUAL SHALL BE MADE AVAILABLE TO OPERATING PERSONNEL AND REMAIN ON SITE WHILE UNDER CONSTRUCTION DURING WORKING HOURS. COMMENCING WITH THE INITIAL CONSTRUCTION ACTIVITY AND ENDING WITH TERMINATION OF COVERAGE UNDER THE GENERAL PERMIT.

3. PER THE SWPPP MANUAL, ALL SWPPP MEASURES AND BEST MANAGEMENT PRACTICES (BmPs) SHALL BE IMPLEMENTED AND MAINTAINED THROUGHOUT THE COURSE OF CONSTRUCTION.

4. THE OWNER/DEVELOPER/CONTRATOR IS RESPONSIBLE FOR ENSURING THAT ALL PROJECT CONTRACTORS AND SUBCONTRACTORS IMPLEMENT ALL APPLICABLE SWPPP MEASURES.

5. UNDER SECTION 308(b) OF THE CLEAN WATER ACT (CWA), THE SWPPP IS A REPORT TO BE MADE AVAILABLE TO THE PUBLIC. THE SWPPP SHALL BE PROVIDED, UPON REQUEST, TO THE REGIONAL WATER QUALITY CONTROL BOARD (RWOCB) OR CITY PERSONNEL.

6. AS CONSTRUCTION ACTIVITY CHANGES SITE CONDITIONS, THE SWPPP MANUAL SHALL BE AMENDED TO REFLECT THE CURRENT SITE CONDITIONS. ALL SWPPP AMENDMENTS SHALL BE DILIGENTLY RECORDED AND IMPLEMENTED.

7. OFF AND ON SITE PLANS SHALL COORDINATE WITH THE SWPPP MANUAL. IN CASE OF A CONFLICT WITH SITE PLANS AND THE SWPPP MANUAL, THE MOST CONSERVATIVE CONDITION SHALL APPLY.

8. NPDES WASTE DISCHARGE IDENTIFICATION NUMBER (WDID#) _____

9. DEVELOPER/CONTRACTOR SHALL COORDINATE WITH SWPPP MANUAL FIGURE 1 AND THIS PLAN AREAS DESIGNATED FOR (IF APPLICABLE):
a. CONSTRUCTION MATERIAL LOADING AND UNLOADING
b. MATERIAL AND EQUIPMENT STORAGE AREA
c. CHEMICAL AND HAZARDOUS MATERIALS STORAGE AREA
d. SOLID WASTE STORAGE AREA
e. VEHICLE MAINTERNANCE/STORAGE AND SERVICE/FUELING AREA.
f. CONCRETE, STUCCO AND PAINT WASHOUT AREAS
g. STOCKPILES.

ALL ABOVE AREAS SHALL BE 50 FEET AWAY UPSTREAM OF PROPOSED AND EXISTING DRAIN INLETS.

THIS PLAN SHALL BE AMENDED TO REFLECT THE CURRENT SITE CONDITIONS.

THIRD PARTY NPDES SWPPP INSPECTION REQUIREMENTS:

SITE THIRD PARTY STORM WATER POLLUTION PREVENTION PLAN (SWPPP) INSPECTIONS AND COMPLIANCE AS REQUIRED BY CITY OF MORGAN HILL STORMWATER MANAGEMENT PLAN (SWMP).

FOR [HALE AVENUE EXTENSION] WDID NUMBER:_____
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
GENERAL PERMIT FOR STORM WATER DISCHARGES
ASSOCIATED WITH CONSTRUCTION AND LAND DISTURBANCE ACTIVITIES

A. PRIOR TO ANY GRADING ACTIVITY, CITY/CONTRACTOR SHALL OBTAIN THE SERVICE OF A QUALIFIED THIRD PARTY SWPPP INSPECTOR (TPSI).
1. PUBLIC WORKS ENGINEERING SHALL GO OVER THE REQUIREMENTS OF INSPECTIONS WITH THE TPSI INSPECTORS.

B. SITE SWPPP INSPECTIONS VIA THIRD PARTY SWPPP INSPECTOR.
1. PROJECT SHALL HAVE THE SITE INSPECTED BY A QUALIFIED* (R.C.E., CPESC, CESSWI, CISEC, ETC) THIRD PARTY SWPPP INSPECTOR (TPSI).
*NOTE: BY JULY 2011 THIRD PARTY SWPPP INSPECTORS MUST HOLD CERTIFICATION OF QUALIFIED SWPPP PRACTITIONER (QSP) OR A QUALIFIED SWPPP DEVELOPER (WSD) ISSUED BY THE STATE WATER RESOURCES CONTROL BOARD.
2. SWPPP INSPECTIONS SHALL OCCUR 48 HOURS PRIOR TO A FORECASTED RAIN EVENT.
3. SWPPP INSPECTIONS SHALL OCCUR WEEKLY DURING THE RAINY SEASON (SEPTEMBER 15TH–APRIL 15TH)
4. SWPPP INSPECTIONS SHALL OCCUR BI–WEEKLY DURING THE NON–RAINY SEASON.
5. PER EACH OF THE INSPECTION CONDITION 2. 3 OR 4, THE TPSI SHALL CERTIFY IN WRITING TO THE BUILDING AND PUBLIC WORKS DEPARTMENT IF THE SITE IS IN COMPLIANCE/NON–COMPLIANCE WITH THE NPDES GENERAL PERMIT FOR STORMWATER, SITE SWPPP MANUAL, AND WATER POLLUTION CONTROL DRAWINGS. NPDES SWPPP INSPECTORS SHALL FORWARD ONSITE AND OFF–SITE INFORMATION TO THE BUILDING (ONSITE, PRIVATE PROPERTY ISSUE) AND PUBLIC WORKS (OFF–SITE, PUBLIC RIGHT–OF–WAY ISSUES) INSPECTORS RESPECTIVELY.
6. PRIOR TO RAIN EVENTS, BmPs NOT IN COMPLIANCE WILL NEED TO BE CORRECTED IMMEDIATELY.
7. ILLICIT DISCHARGES PER THE NPDES GENERAL PERMIT, NON–COMPLIANCE OF TRACKING CONTROL, AND INLET PROTECTION SHALL BE ADDRESS IMMEDIATELY.
8. OTHER NON–COMPLIANCE ISSUES NEED TO BE ADDRESSED WITHIN A 24 PERIOD.
9. NON–COMPLIANCE ISSUES WHICH HAVE BEEN CORRECTED SHALL BE VERIFIED BY TPSI WITH A FOLLOW UP INSPECTION.

C. CITY OVERSIGHT OF INSPECTIONS
1. CITY INSPECTORS ENGINEERS SHALL RECEIVE SITE INSPECTION INFORMATION/CERTIFICATION FROM THE TPSI PER ITEMS B.2, B.3 AND/OR B4.
2. CITY INSPECTORS/ENGINEERS SHALL COORDINATE WITH TPSI TO ADDRESS ANY OUTSTANDING ITEMS WITHIN THE REQUIRED TIME FRAME.
3. SITES THAT ARE NOT ABLE TO ADDRESS NON–COMPLIANCE SHALL BE DENIED FURTHER BUILDING OR PUBLIC WORKS INSPECTIONS OR SHALL BE REQUIRED TO STOP WORK UNTIL NON–COMPLIANCE ISSUES HAVE BEEN CORRECTED.

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AS–BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

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APPROVED: S.C.C. | DATE: 9/25/2020 | JOB NO. SJ-17101
SCOTT C. CREER RCE 58879 — DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

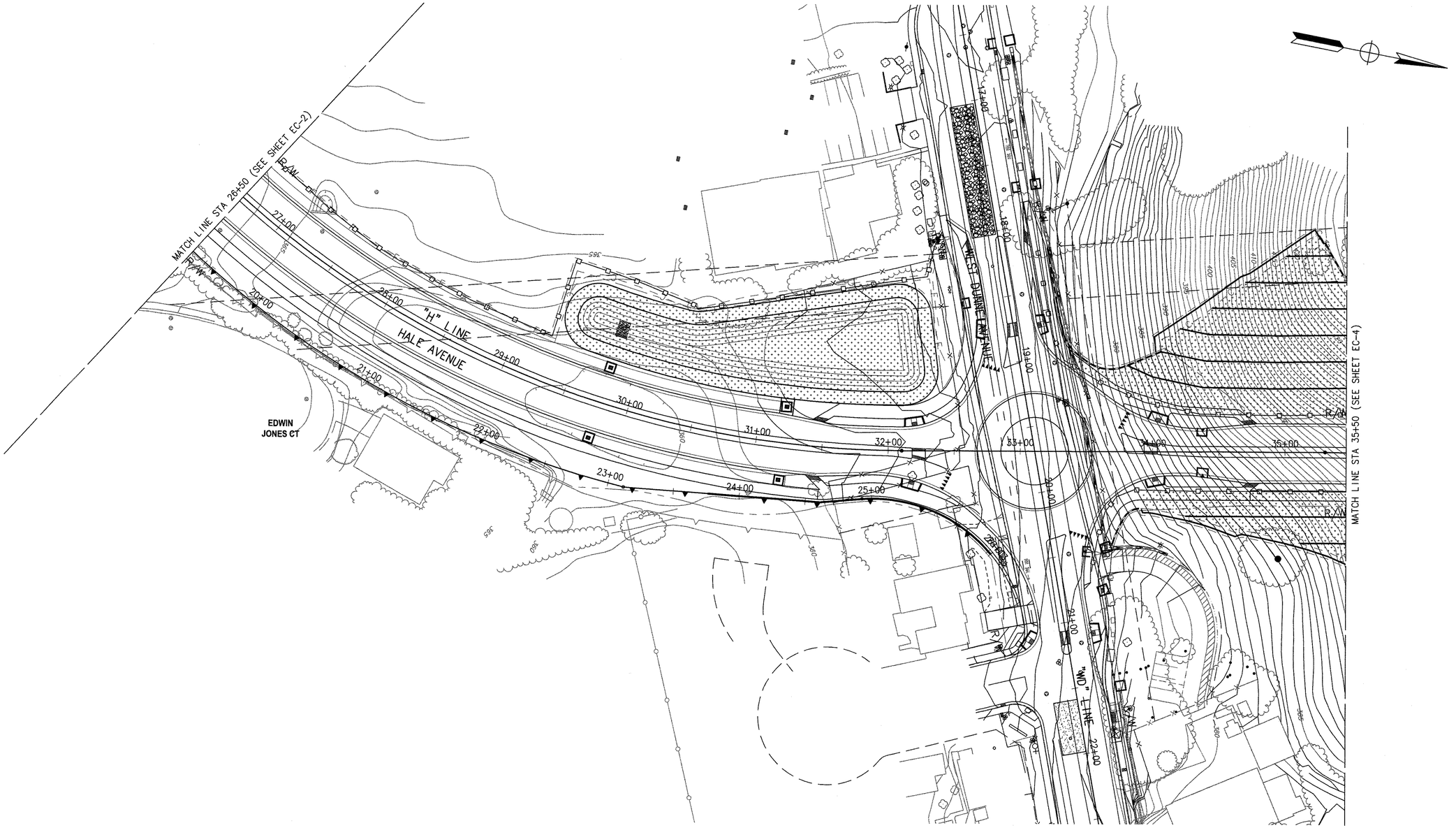
SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21
SIGNATURE DATE

MARK THOMAS

EROSION CONTROL PLAN
STA 15+50 TO STA 26+50
IMPROVEMENT PLANS FOR
HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **EC-2**
55 OF 120

CAD USER: jackie
PLOT DATE: Sep 23, 2020-03:09:47pm
FILE NAME: HAL_EC1-4
PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CADD\Sheets\



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AS-BUILT CORRECTIONS

BY: DATE:

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City of Morgan Hill
Public Works Department
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RCE 29072
EXP. DATE 3-31-21

REGISTERED PROFESSIONAL ENGINEER MICHAEL K COOPER 29072 3/31/2021 CIVIL STATE OF CALIFORNIA

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MARK THOMAS

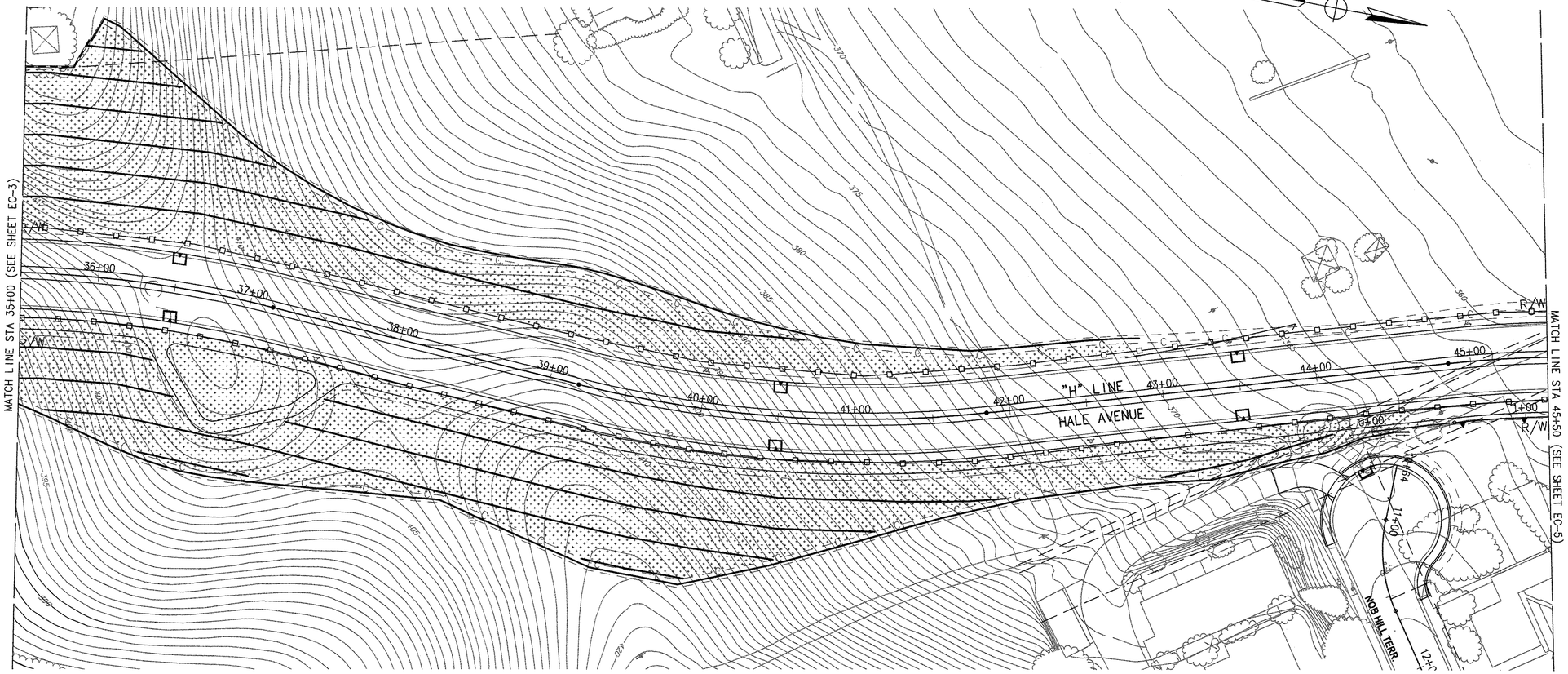
EROSION CONTROL PLAN STA 26+50 TO STA 35+50 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: EC-3
56 OF 120

CAD USER: jkoche
PLOT DATE: Sep 23, 2020-03:04:41pm
FILE NAME: HAE_EC1-6
PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CADD\Sheets\

PLOT DATE: Sep 23, 2020-03:09:47pm
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FILE NAME: HAE_EC1-6
PATH: J:\Morgan Hill\SJ-17101-Hale Avenue Extension\CADD\Sheets\



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APPROVED: Scott C. Creer 9/25/2020	DATE:	JOB NO. SJ-17101	

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EXP. DATE 3-31-21

MICHAEL K. COOPER No. 29072 3/31/2021 CIVIL STATE OF CALIFORNIA

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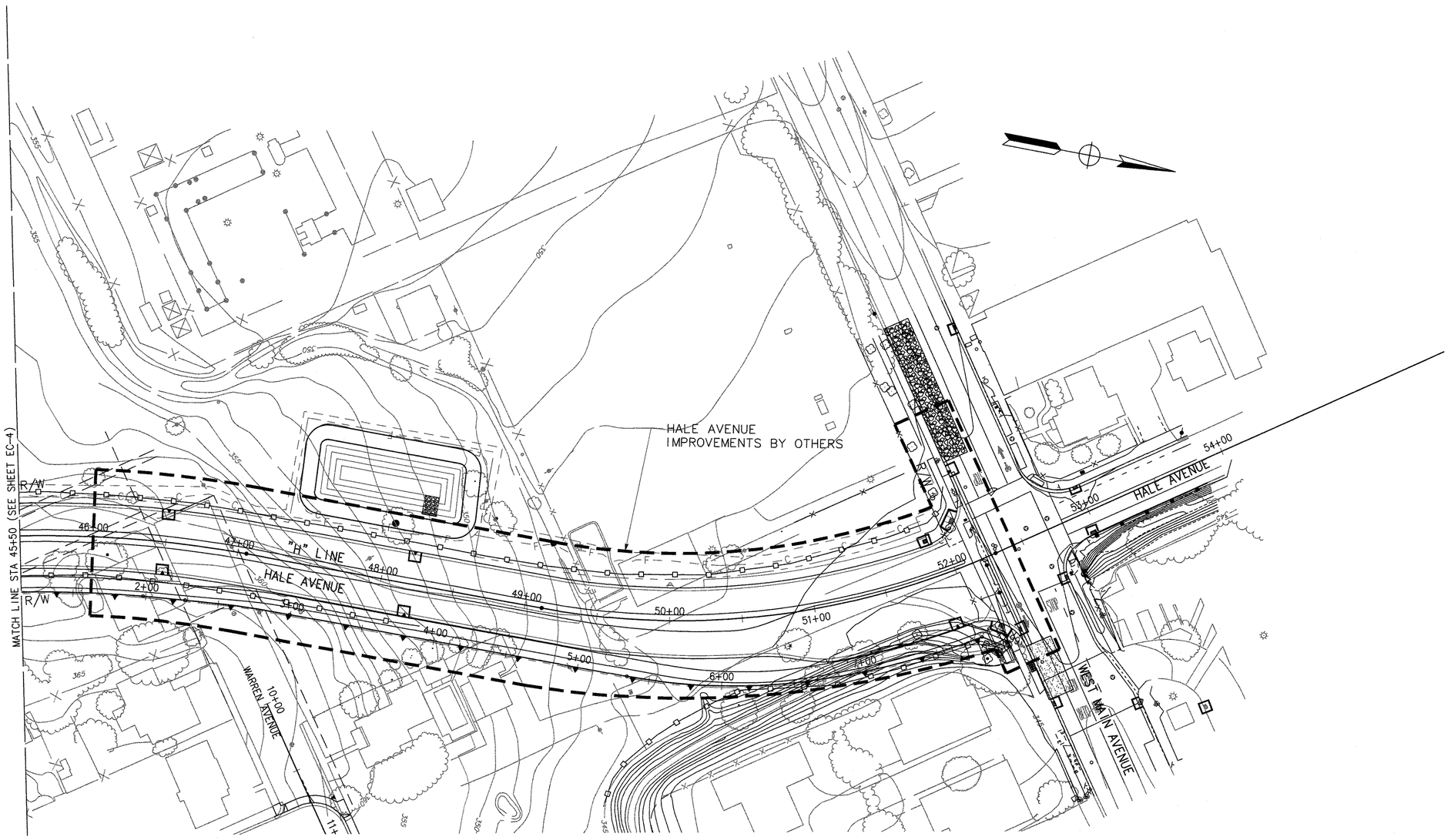
MARK THOMAS

EROSION CONTROL PLAN STA 35+00 TO STA 45+50 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **EC-4**
57 OF 120

PLOT DATE: Sep 21, 2020-03:05:5pm
CAD USER: jhehe
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APPROVED: DATE: 9/28/2020		JOB NO. SJ-17101	

SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

SIGNATURE DATE

MARK THOMAS

EROSION CONTROL PLAN
STA 45+50 TO STA 54+50
IMPROVEMENT PLANS FOR
HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
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MITIGATION MEASURES

AIR QUALITY

IN ADDITION, THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT (BAAQMD) HAS PREPARE A LIST OF FEASIBLE CONSTRUCTION DUST CONTROL MEASURES THAT CAN REDUCE CONSTRUCTION IMPACTS TO A LEVEL THAT IS LESS THAN SIGNIFICANT. THE FOLLOWING CONSTRUCTION PRACTICES WOULD BE IMPLEMENTED DURING CONSTRUCTION OF THE PROPOSED PROJECT:

WATER ALL ACTIVE CONSTRUCTION AREAS AT TWICE DAILY:

COVER ALL TRUCKS HAULING SOIL, SAND OR OTHER LOOSE MATERIALS OR REQUIRED ALL TRUCKS TO MAINTAIN AT LEAST TWO FEET OF FREEBOARD.

SWEEP STREETS DAILY (WITH WATER SWEEPERS) IF VISIBLE SOIL MATERIAL IS CARRIED ONTO ADJACENT PUBLIC STREETS.

USE DUST PROOF CHUTES FOR LOADING CONSTRUCTION DEBRIS ONTO TRUCKS.

ENCLOSE, COVER, WATER TWICE DAILY OR APPLY NON-TOXIC SOIL BINDERS TO EXPOSED STOCKPILES (DIRT, SAND, ECT.)

INSTALL GRAVEL BAGS, FIBER ROLLS, OR OTHER EFFECTIVE EROSION CONTROL MEASURE TO PREVENT SILT RUNOFF TO PUBLIC ROADWAYS.

CULTURE RESOURCES

IN THE UNLIKELY EVENT THAT HISTORIC OR PREHISTORIC RESOURCES ARE UNCOVERED DURING PROJECT CONSTRUCTION, THE FOLLOWING STANDARD MEASURES WOULD BE IMPLEMENTED:

ALL CONSTRUCTION WITHIN 50 FEET OF THE FIND SHALL BE HALTED. THE DIRECTOR OF THE COMMUNITY DEVELOPMENT DEPARTMENT WOULD BE NOTIFIED, AND AN ARCHAEOLOGIST SHALL BE RETAINED TO EXAMINE THE FIND TO MAKE APPROPRIATE RECOMMENDATIONS.

IF HUMAN REMAINS ARE DISCOVERED, THE SANTA CLARA COUNTY CORONER SHALL BE NOTIFIED. THE CORONER SHALL DETERMINE WHETHER OR NOT THE REMAINS ARE NATIVE AMERICAN. IF THE CORONER DETERMINES THAT THE REMAINS ARE NOT SUBJECT TO HIS AUTHORITY, HE SHALL NOTIFY THE NATIVE AMERICAN HERITAGE COMMISSION, WHO SHALL ATTEMPT TO IDENTIFY DESCENDANTS OF THE DECEASED NATIVE AMERICAN.

IF THE DIRECTOR OF THE COMMUNITY DEVELOPMENT DEPARTMENT FINDS THAT THE CULTURAL RESOURCE FIND IS NOT A SIGNIFICANT RESOURCE, WORK SHALL RESUME ONLY AFTER THE SUBMITTAL OF A PRELIMINARY REPORT AND AFTER PROVISIONS FOR REBURIAL AND/OR ONGOING MONITORING ARE ACCEPTED, PROVISIONS FOR IDENTIFYING DESCENDANTS OF A DECEASED NATIVE AMERICAN AND FOR REBURIAL SHALL FOLLOW THE PROTOCOL SET FORTH IN THE CEQA GUIDELINES.

HYDROLOGY AND WATER QUALITY

IN ACCORDANCE WITH THE CITY OF MORGAN HILL STANDARD CONDITIONS OF APPROVAL AND THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM STORM WATER PERMIT (NPDES) FOR CONSTRUCTION ACTIVITIES, THE PROJECT WOULD PREPARE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND AN EROSION CONTROL PLAN (ECP). THE PLANS WOULD BE SUBMITTED TO THE DIRECTOR OF PUBLIC WORKS FOR REVIEW AND APPROVAL, PRIOR TO FINAL MAP APPROVAL. THE ECP AND SWPPP WOULD DEMONSTRATE HOW THE PROJECT WOULD ELIMINATE OR REDUCE NON-STORM WATER DISCHARGES INTO THE STORM WATER SYSTEM, HOW DISCHARGES INTO THE STORM WATER SYSTEM WOULD BE MONITORED, AND WHAT BEST MANAGEMENT PRACTICES (BMP) WOULD BE IMPLEMENTED BY THE PROJECT TO AVOID WATER QUALITY IMPACTS DURING CONSTRUCTION (E.G. STREET, FIBER ROLLS, TEMPORARY COVER AND/OR PERMANENT COVER).

IN ACCORDANCE WITH THE CITY OF MORGAN HILL STANDARD CONDITIONS OF APPROVAL, STORM WATER RUNOFF FROM THE PROPOSED PROJECT WILL BE LIMITED TO EXISTING CONDITIONS. ALL STORM WATER RUNOFF FROM THE PROJECT SITE WOULD BE COLLECTED ONSITE AND DIVERTED DIRECTLY INTO THE NEW STORM WATER RETENTION BASINS LOCATED ON THE STORM WATER WOULD THEN SLOWLY PERCOLATE THROUGH THE SOIL AND INTO THE GROUNDWATER. PERCOLATION THROUGH THE SOIL WOULD FILTER POLLUTANTS FROM THE STORM WATER.

CONSTRUCTION NOSE

CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO THE HOURS BETWEEN 7:00 AM. AND 8:00 PM., MONDAY THROUGH FRIDAY, AND BETWEEN THE HOURS OF 9:00 A.M AND 6:00 P.M. ON SATURDAYS. NO CONSTRUCTION ACTIVITIES SHOULD OCCUR ON SUNDAYS OR FEDERAL HOLIDAYS (CONSISTENT WITH SECTION 8.28.049 OF THE MORGAN HILL MUNICIPAL CODE).

EQUIP ALL INTERNAL COMBUSTION ENGINE DRIVEN EQUIPMENT WITH INTAKE AND EXHAUST MUFFLERS THAT ARE IN GOOD CONDITION AND APPROPRIATE FOR THE EQUIPMENT.

LOCATE STATIONARY NOISE GENERATING EQUIPMENT AS FAR AS POSSIBLE FROM ADJACENT RESIDENTIAL RECEIVERS.

ACOUSTICALLY SHIELD STATIONARY EQUIPMENT LOCATED NEAR EXISTING RESIDENTIAL RECEIVERS.

UTILIZE "QUIET" AIR COMPRESSORS AND OTHER STATIONARY NOISE SOURCES WHERE TECHNOLOGY EXISTS.

THE CONTRACTOR SHALL PREPARE A CONSTRUCTION PLAN IDENTIFYING THE SCHEDULE FOR MAJOR NOISE-GENERATING CONSTRUCTION ACTIVITIES (E.G., SITE GRADING). THE CONSTRUCTION PLAN SHALL IDENTIFY A PROCEDURE FOR COORDINATION WITH ADJACENT RESIDENTIAL LAND USES SO THAT CONSTRUCTION ACTIVITIES CAN BE SCHEDULED TO MINIMIZE NOISE DISTURBANCE.

A "NOISE DISTURBANCE COORDINATOR", RESPONSIBLE FOR RESPONDING TO ANY LOCAL COMPLAINTS ABOUT CONSTRUCTION NOISE, WILL BE DESIGNATED BY THE PROJECT APPLICANT. THE DISTURBANCE COORDINATOR WOULD DETERMINE THE CAUSE OF THE NOISE COMPLAINT (E.G., STARTING TOO EARLY, BAD MUFFLER, ETC.) AND WOULD REQUIRE THAT REASONABLE MEASURES WARRANTED TO CORRECT THE PROBLEM BE IMPLEMENTED. THE TELEPHONE NUMBER FOR THE DISTURBANCE COORDINATOR WILL BE CONSPICUOUSLY POSTED AT THE CONSTRUCTION SITE AND INCLUDED IN NOTICES SENT TO NEIGHBORS REGARDING THE CONSTRUCTION SCHEDULE.

PRIOR TO ISSUANCE OF A BUILDING PERMIT, THE OWNER SHALL SUBMIT TO THE COMMUNITY DEVELOPMENT DIRECTOR FOR HIS APPROVAL A MANAGEMENT PLAN DETAILING STRATEGIES FOR CONTROL OF NOISE, DUST AND VIBRATION, AND STORAGE OF HAZARDOUS MATERIALS DURING CONSTRUCTION OF THE PROJECT. THE INTENT OF THIS CONDITION IS TO MINIMIZE CONSTRUCTION RELATED DISTURBANCE OF RESIDENTS OF THE NEARBY OR ADJACENT PROPERTIES.

GRAVEL FILLED BAG NOTES:

1. BAG MATERIAL:
BAGS SHOULD BE WOVEN POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE FABRIC OR BURLAP, MINIMUM UNIT WEIGHT OF 4 OUNCES/YDS SQUARED, MULLEN BURST STRENGTH EXCEEDING 300 LB/INCHES SQUARED IN CONFORMANCE WITH THE REQUIREMENTS IN ASTM DESIGNATION D4355.

2. BAG SIZE:
EACH GRAVEL-FILLED BAG SHOULD HAVE A LENGTH OF 18 IN., WIDTH OF 12 IN., THICKNESS OF 3 IN., AND MASS OF APPROXIMATELY 33 LBS. BAG DIMENSIONS ARE NOMINAL, AND MAY VARY BASED ON LOCALLY AVAILABLE MATERIALS.

3. FILL MATERIAL:
FILL MATERIAL SHOULD BE 0.5 TO 1 IN. CLASS II AGGREGATE BASE, CLEAN AND FREE FROM CLAY, ORGANIC MATTER, AND OTHER DELETERIOUS MATERIAL, OR OTHER SUITABLE OPEN GRADED, NON-COHESIVE, POROUS GRAVEL.

4. BUTT ENDS OF BAGS TIGHTLY.

5. ON MULTIPLE ROW, OR MULTIPLE LAYER CONSTRUCTION, OVERLAP BUTT JOINTS OF ADJACENT ROW AND ROW BENEATH.
6. USE A PYRAMID APPROACH WHEN STACKING BAGS.

BMP-2A
GRAVEL BAGS-CURB INLET SEDIMENT BARRIER (PAVED STREETS)

1. GRAVEL BAG SEDIMENT BARRIER OR ITS EQUIVALENT (CINDER BLOCKS WITH FILTER FABRIC OR SILTSACKS WITH GRAVEL FILTER) SHALL BE PLACED AT ALL STORM DRAIN INLET LOCATIONS.

2. GRAVEL BAG SEDIMENT BARRIER (GRAVEL SIZE ½"-3/4") AROUND CURB INLET ON PAVED STREETS SHALL BE PLACED IN CURVED ROW OUT FROM THE CURB AND AWAY FROM THE INLET.

3. THE GRAVEL BAG BARRIER SHALL BE PLACED UP-GRADIENT FROM THE CURB INLET AND SHALL EXTEND INTO THE PAVED STREET TO A DISTANCE OF AT LEAST 3'.

4. TWO LAYERS OF OVERLAPPING GRAVEL BAGS SHALL BE PLACED TIGHTLY TOGETHER TO MINIMIZE THE SPACE BETWEEN THE BAGS.

5. A GAP OF ONE BAG IN THE MIDDLE OF THE TOP ROW SHALL BE LEFT OPEN TO SERVE AS A SPILLWAY FOR THE SEDIMENT FREE RUNOFF.

6. AFTER EVERY STORM EVENT, SEDIMENT ACCUMULATED BEHIND GRAVEL BAGS SHALL BE REMOVED AND GRAVEL BAGS INSPECTED FOR MAINTENANCE.

BMP-3
STABILIZED ENTRANCEWAY

1. AS A LINING FOR STABILIZED ENTRANCEWAY, USE GRAVEL. THE SIZE OF THE COARSE AGGREGATE SHALL BE 3", PRESSED INTO THE SOIL IN A LAYER OF AT LEAST 8" THICKNESS.

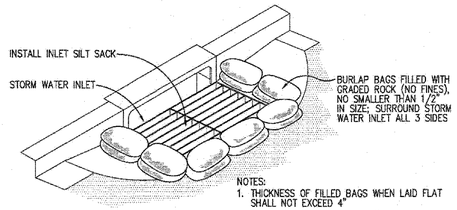
2. THE GRAVEL ENTRANCEWAY SHALL EXTEND AT LEAST 100' INTO THE UNPAVED STREET.

3. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FOLLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS WAY REQUIRES PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND MAINTENANCE OF ANY MEASURES TO TRAP SEDIMENT.

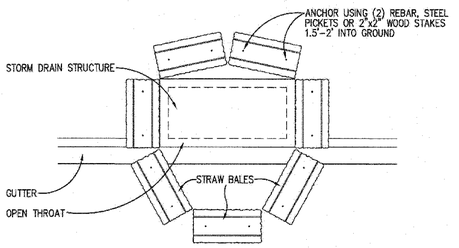
4. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY SHALL BE REMOVED IMMEDIATELY.

5. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO SEDIMENT TRAP.

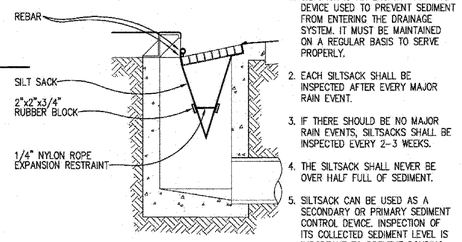
6. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE THROUGH USE OF SAND BAGS, GRAVEL, STRAW BALES, OR OTHER APPROVED METHODS.



08 BURLAP SACK SEDIMENT FILTER
INLET SEDIMENT CONTROL FOR PAVED STREETS — SCALE: NONE

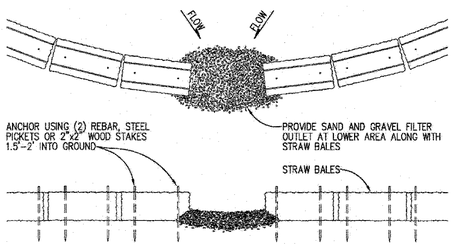


04 STRAW BALE SEDIMENT FILTER
USE AT INCOMPLETE STORM DRAINAGE STRUCTURES — SCALE: NONE

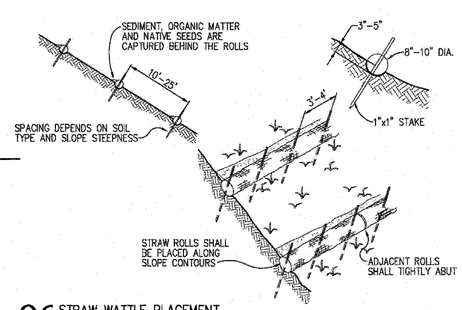


NOTES: (BMP-2B)
1. SILTSACK IS AN EROSION CONTROL DEVICE USED TO PREVENT SEDIMENT FROM ENTERING THE DRAINAGE SYSTEM. IT MUST BE MAINTAINED ON A REGULAR BASIS TO SERVE PROPERLY.
2. EACH SILTSACK SHALL BE INSPECTED AFTER EVERY MAJOR RAIN EVENT.
3. IF THERE SHOULD BE NO MAJOR RAIN EVENTS, SILTSACKS SHALL BE INSPECTED EVERY 2-3 WEEKS.
4. THE SILTSACK SHALL NEVER BE OVER HALF FULL OF SEDIMENT.
5. SILTSACK CAN BE USED AS A SECONDARY OR PRIMARY SEDIMENT CONTROL DEVICE. INSPECTION OF ITS COLLECTED SEDIMENT LEVEL IS IMPORTANT TO PREVENT PONDING OVER THE STORM INLET.

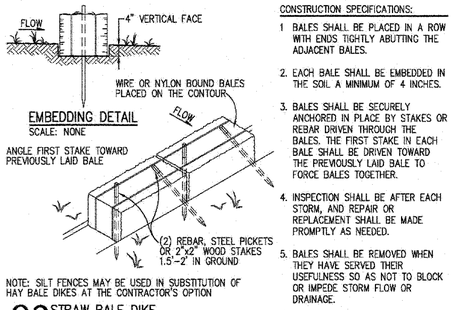
07 INLET SILT SACK
INLET SEDIMENT CONTROL FOR PAVED STREETS — SCALE: 1"=2'-0"



03 STRAW BALE DIKE SPILLWAY
SCALE: NONE



06 STRAW WATTLE PLACEMENT
FIBER ROLL — SCALE: NONE

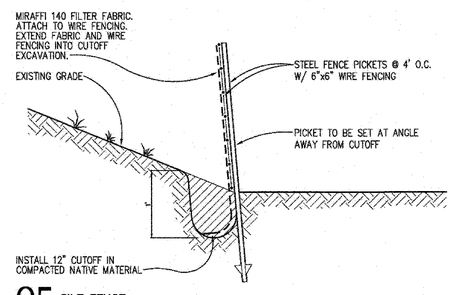


EMBEDDING DETAIL
SCALE: NONE

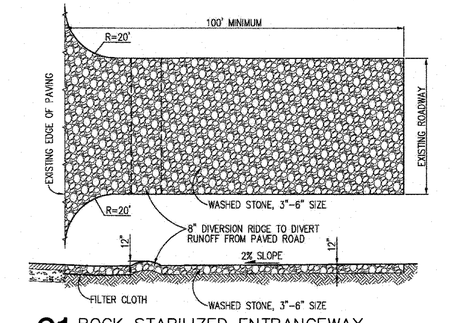
NOTE: SILT FENCES MAY BE USED IN SUBSTITUTION OF HAY BALE DIKES AT THE CONTRACTOR'S OPTION

CONSTRUCTION SPECIFICATIONS:
1. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4 INCHES.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR REBAR DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
4. INSPECTION SHALL BE AFTER EACH STORM, AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

02 STRAW BALE DIKE
SCALE: NONE



05 SILT FENCE



01 ROCK STABILIZED ENTRANCEWAY

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: KY | DESIGN: KY | SCALE HOR. N.T.S.
CHECKED: MC | DATE: 09/25/2020 | SCALE VERT.
APPROVED: Scott C. Creer 9/25/2020 | JOB NO. SJ-17101
SCOTT C. CREER, RCE 58879 — DEPUTY DIRECTOR FOR ENGINEERING, EXP. DATE 6-30-21

SUPERVISED BY: MICHAEL K. COOPER, REGISTERED CIVIL ENGINEER, RCE 29072, EXP. DATE 3-31-21
SIGNATURE DATE

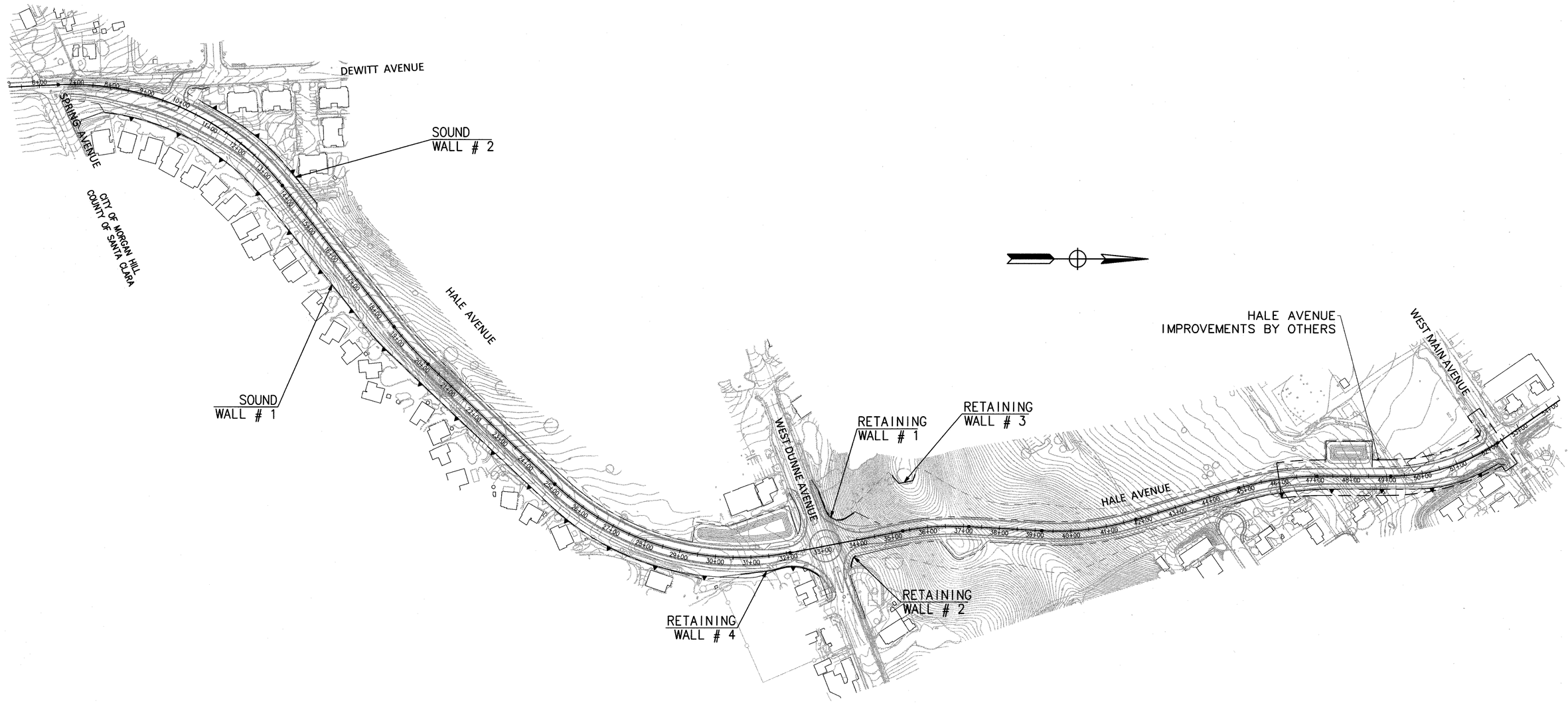
MARK THOMAS

EROSION CONTROL DETAILS

IMPROVEMENT PLANS FOR HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **EC-6**
59 OF 120

CAD USER: jkeine
PLOT DATE: Sep 23, 2020-03:45:57pm
FILE NAME: HALE_EC1-4
PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CADD\Sheets\



BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

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CHECKED: KY	DATE: 09/25/2020	SCALE VERT.
APPROVED:	DATE: 9/25/2020	JOB NO. SJ-17101

SCOTT C. CREER RCE 58679 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

MICHAEL K. COOPER 29072 3/31/2021 CIVIL STATE OF CALIFORNIA

SIGNATURE DATE

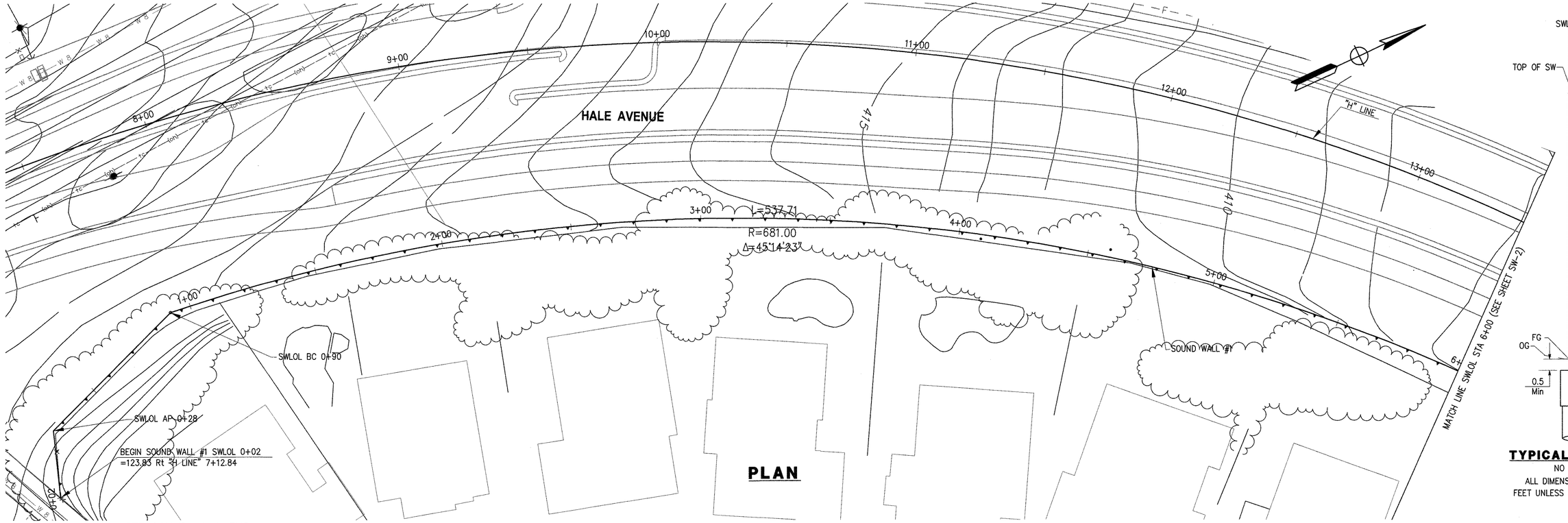
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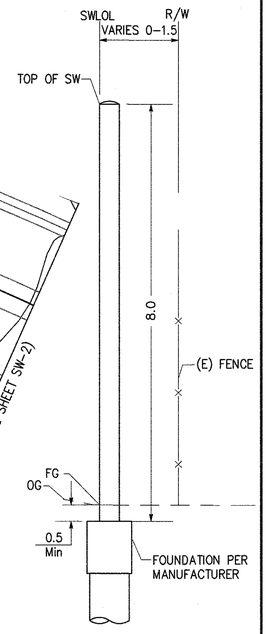
SOUND WALL & RETAINING WALL KEY MAP
IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: WM-1
60 OF 120

PLOT DATE: Sep 24, 2020 - 9:59:16pm
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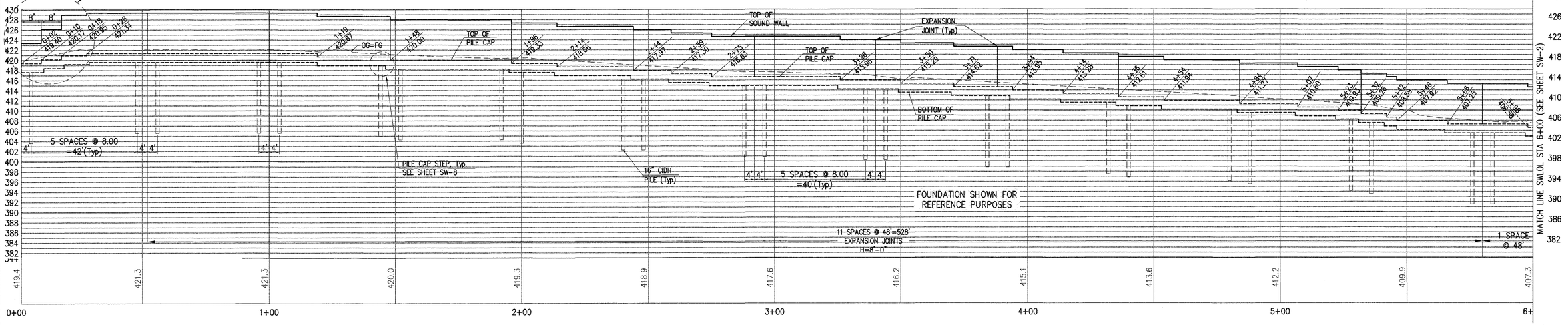




TYPICAL SECTION

NO SCALE

ALL DIMENSIONS ARE IN FEET UNLESS OTHEWISE SHOWN



ELEVATION

NOTES:

1. FOR ADDITIONAL NOTES, ABBREVIATIONS, AND LEGEND SEE SHEET TS-1.
2. SOUND WALL TO BE OLDCASTLE-PRECAST SIERRAWALL-GRAPESTAKE.
3. ADJUST PILE SPACING AT EXISTING UTILITY CROSSINGS TO AVOID UTILITY CONFLICT.

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=20'
CHECKED: MC	DATE: 09/25/2020	SCALE VERT. 1"=2'
APPROVED: DATE: 9/25/2020		JOB NO. SJ-17101

SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

MICHAEL K. COOPER No. 29072 3/31/2021 CIVIL STATE OF CALIFORNIA

Michael Cooper 09/25/2020
SIGNATURE DATE

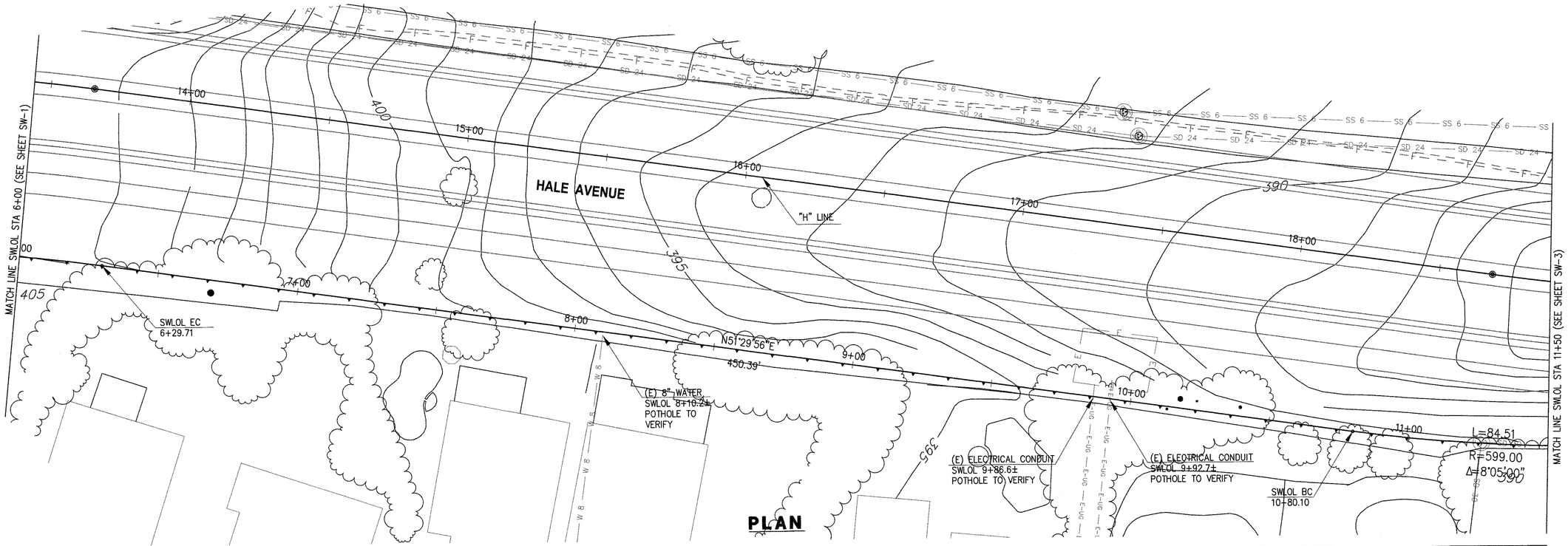
MARK THOMAS

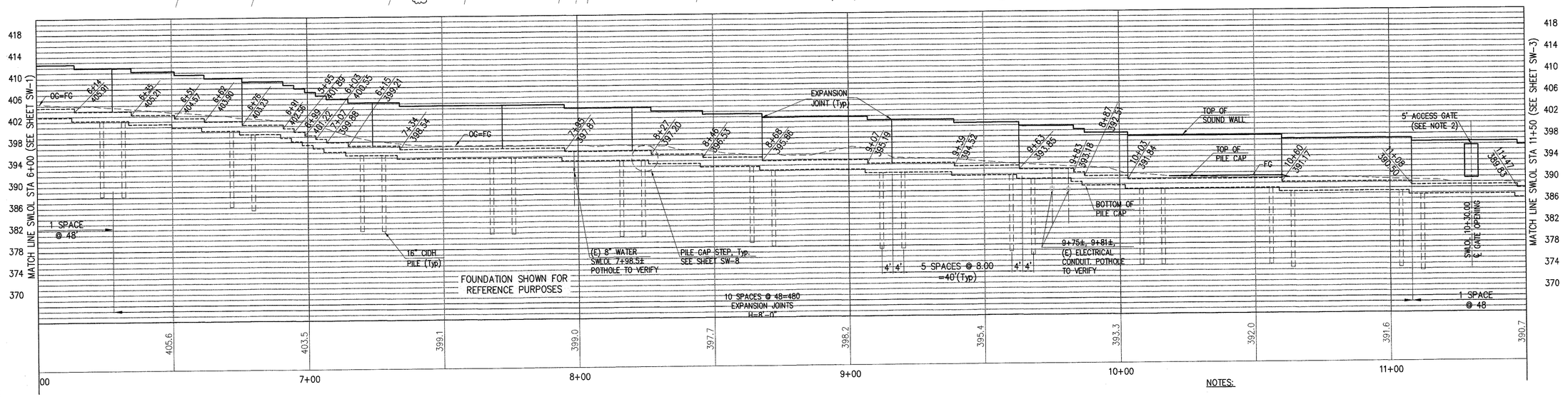
SOUND WALL #1 - PLAN & ELEVATION
SWLOL STA 0+00 TO 5+00
IMPROVEMENT PLANS FOR
HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **SW-1**
61 OF 120

CAD USER: lee
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PLAN

ELEVATION

NOTES:

1. FOR ADDITIONAL NOTES, ABBREVIATIONS, AND LEGEND SEE SHEET SW-1.

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: AS-BUILT CORRECTIONS — INSPECTOR: — BY: — DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR.	1"=20'
CHECKED: MC	DATE: 09/25/2020	SCALE VERT.	1"=2'
APPROVED: Scott C. Creer	DATE: 9/25/2020	JOB NO.	SJ-17101

SCOTT C. CREER
RCE 58879
DEPUTY DIRECTOR FOR ENGINEERING
EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

MICHAEL K. COOPER 29072 REGISTERED PROFESSIONAL ENGINEER 3/31/2021 CIVIL STATE OF CALIFORNIA

Michael Cooper
SIGNATURE
09/25/2020
DATE

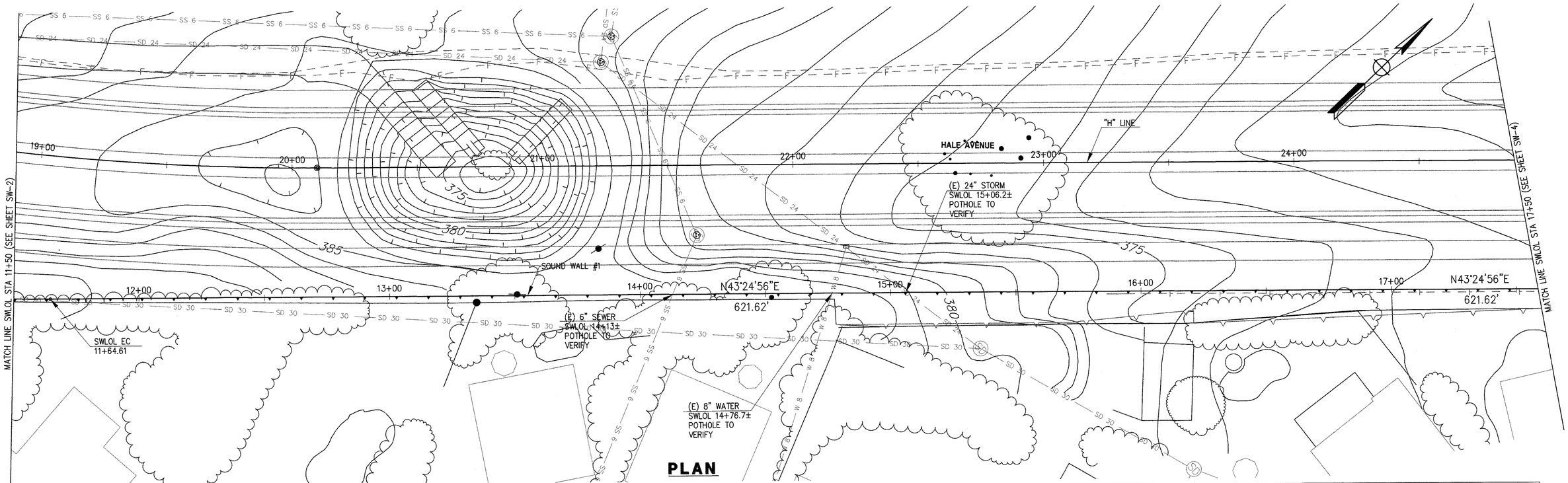
MARK THOMAS

SOUND WALL #1 - PLAN & ELEVATION SWLOL STA 5+00 TO 10+50 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

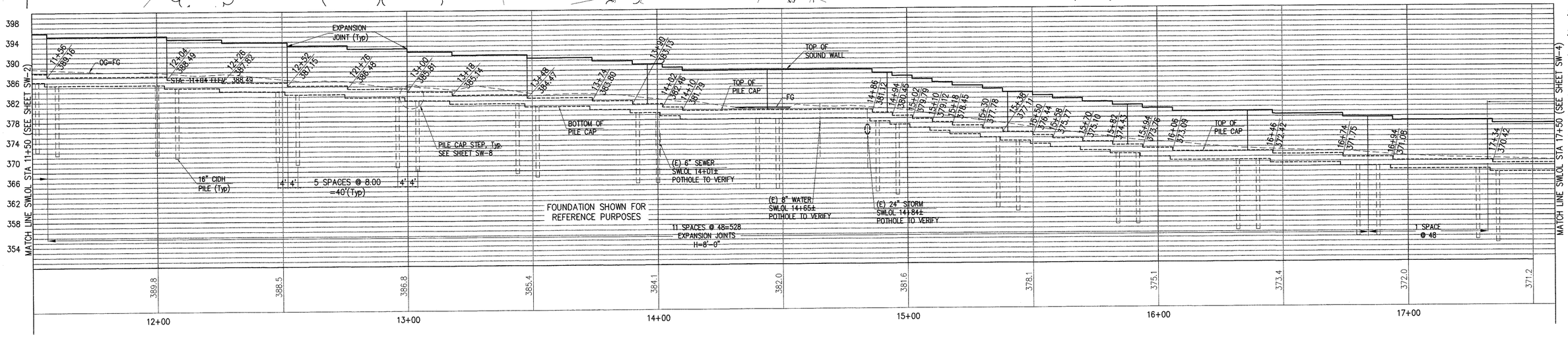
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: SW-2
62 OF 120

CAD USER: Jdee
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PLAN



ELEVATION

NOTES:

1. FOR ADDITIONAL NOTES, ABBREVIATIONS, AND LEGEND SEE SHEET SW-1.

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: AS-BUILT CORRECTIONS BY: DATE: INSPECTOR:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL | DESIGN: SL | SCALE HOR. 1"=20'
CHECKED: MC | DATE: 09/25/2020 | SCALE VERT. 1"=2'
APPROVED: | DATE: 9/25/2020 | JOB NO. SJ-17101
SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY: MICHAEL K. COOPER REGISTERED CIVIL ENGINEER RCE 29072 EXP. DATE 3-31-21
Michael Cooper 09/25/2020
SIGNATURE DATE

MARK THOMAS

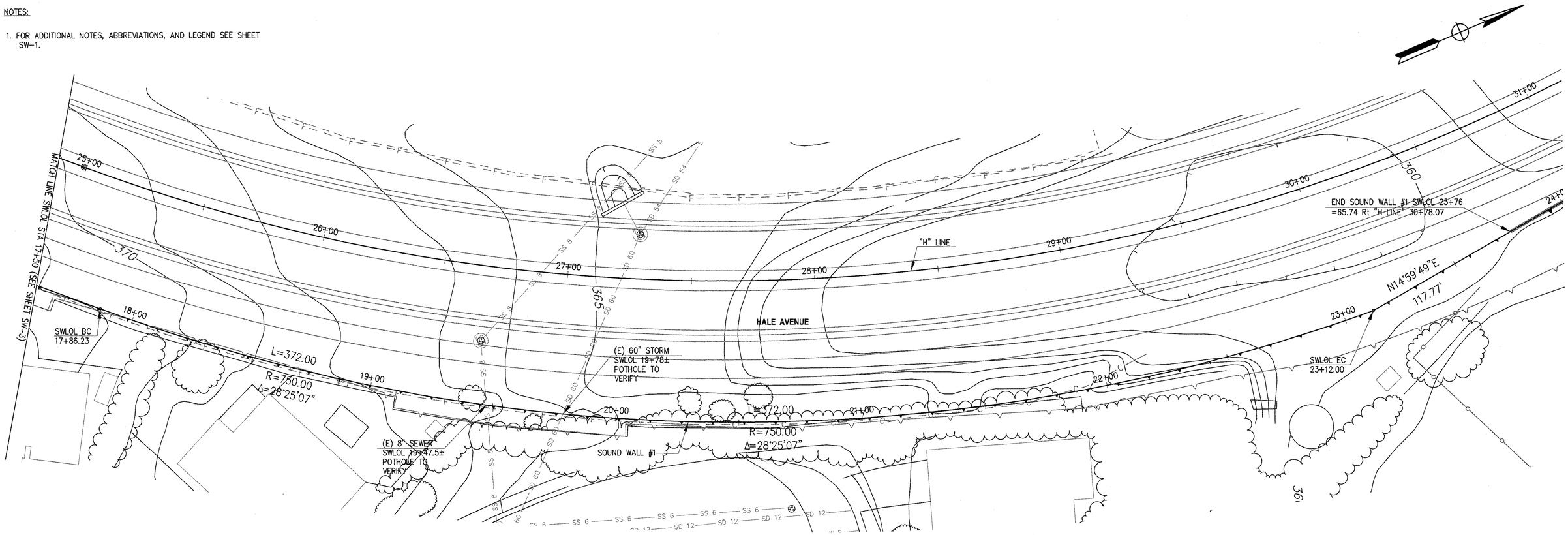
SOUND WALL #1 - PLAN & ELEVATION SWLOL STA 10+50 TO 16+00 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

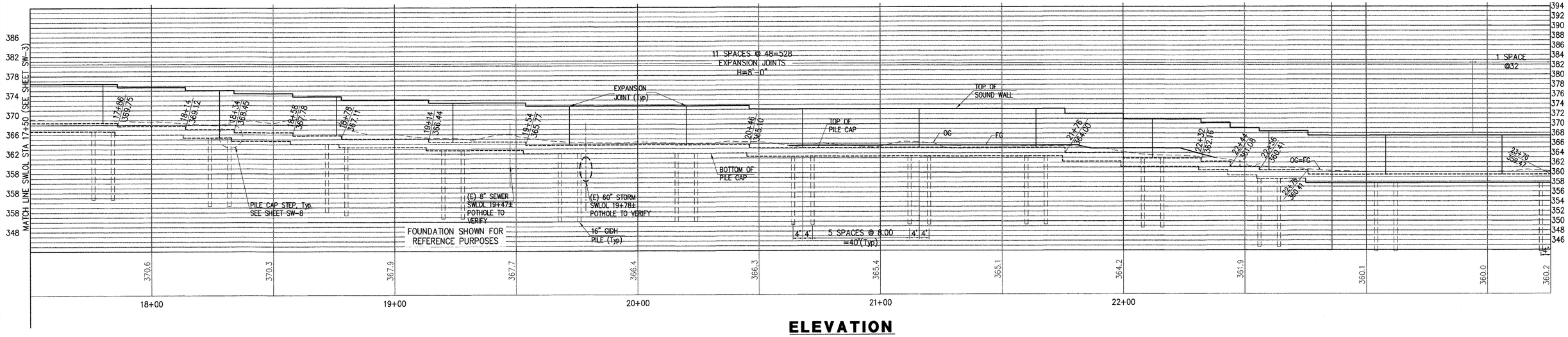
CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: SW-3
63 OF 120

NOTES:

1. FOR ADDITIONAL NOTES, ABBREVIATIONS, AND LEGEND SEE SHEET SW-1.



PLAN



ELEVATION

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=20'	
CHECKED: MC	DATE: 09/25/2020	SCALE VERT. 1"=2'	
APPROVED:	DATE: 9/25/2020	JOB NO. SJ-17101	

SCOTT C. GREER, RCE 58879, DEPUTY DIRECTOR FOR ENGINEERING, EXP. DATE 6-30-21

SUPERVISED BY: MICHAEL K. COOPER, REGISTERED CIVIL ENGINEER, RCE 29072, EXP. DATE 3-31-21

09/25/2020
SIGNATURE DATE

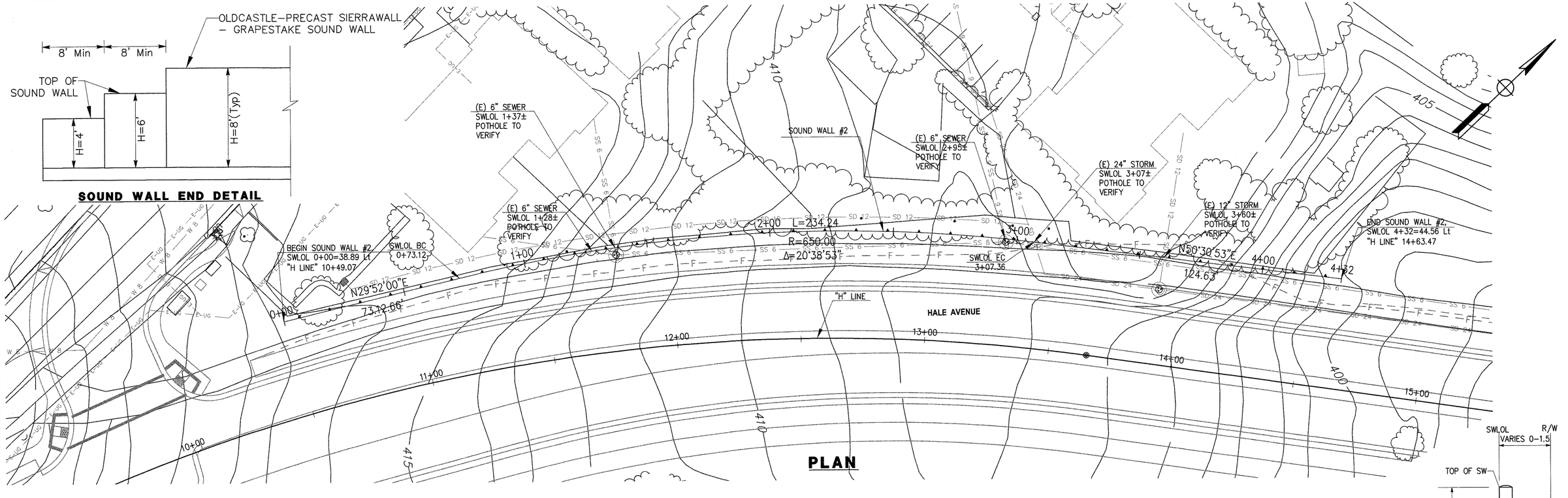
MARK THOMAS

SOUND WALL #1 - PLAN & ELEVATION
SWLOL STA 16+00 TO 21+76
IMPROVEMENT PLANS FOR
HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

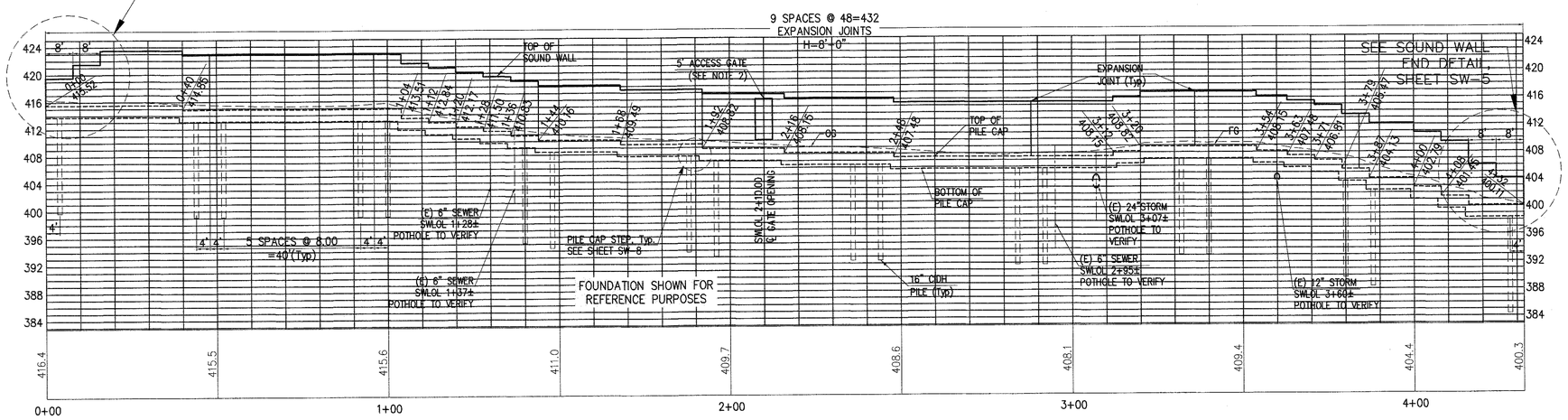
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PLAN SET: 09/25/2020
DRAWING: **SW-4**
64 OF 120

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FILE NAME: HAE_SW1-7
PLOT DATE: Sep 23, 2021-03:34:26pm
CAD USER: ilee

SOUND WALL END DETAIL



PLAN



ELEVATION

NOTES:

1. FOR ADDITIONAL NOTES, ABBREVIATIONS, AND LEGEND SEE SHEET SW–1.

TYPICAL SECTION

NO SCALE
ALL DIMENSIONS ARE IN
FEET UNLESS OTHEWISE SHOWN

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS–BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776–6480 FAX (408) 779–7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=20'	
CHECKED: MC	DATE: 09/25/2020	SCALE VERT. 1"=2'	
APPROVED:	DATE: 9/25/2020	JOB NO. SJ–17101	

SCOTT C. CREER
RCE 58879
DEPUTY DIRECTOR FOR ENGINEERING
EXP. DATE 6–30–21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3–31–21

MICHAEL K. COOPER 29072 CIVIL 3/31/2021 STATE OF CALIFORNIA

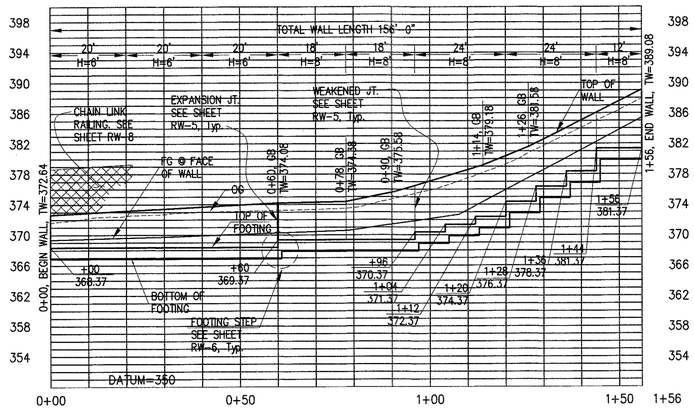
Michael Cooper 09/25/2020
SIGNATURE DATE

MARK THOMAS

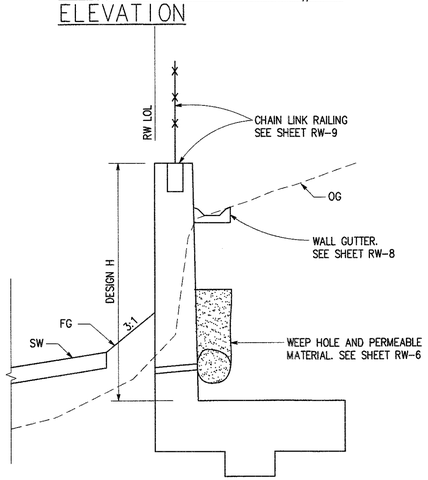
SOUND WALL #2 – PLAN & ELEVATION
SWLOL STA 0+00 TO 4+32
IMPROVEMENT PLANS FOR
HALE AVE EXTENSION CALIFORNIA
MORGAN HILL

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **SW–5**
65 OF 120

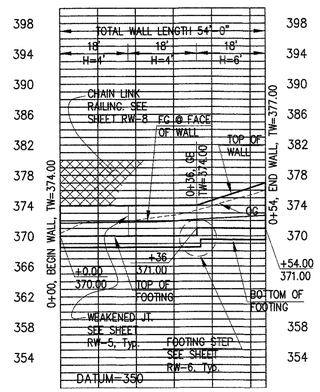
PLOT DATE: Sep 23, 2020–03:43:37pm
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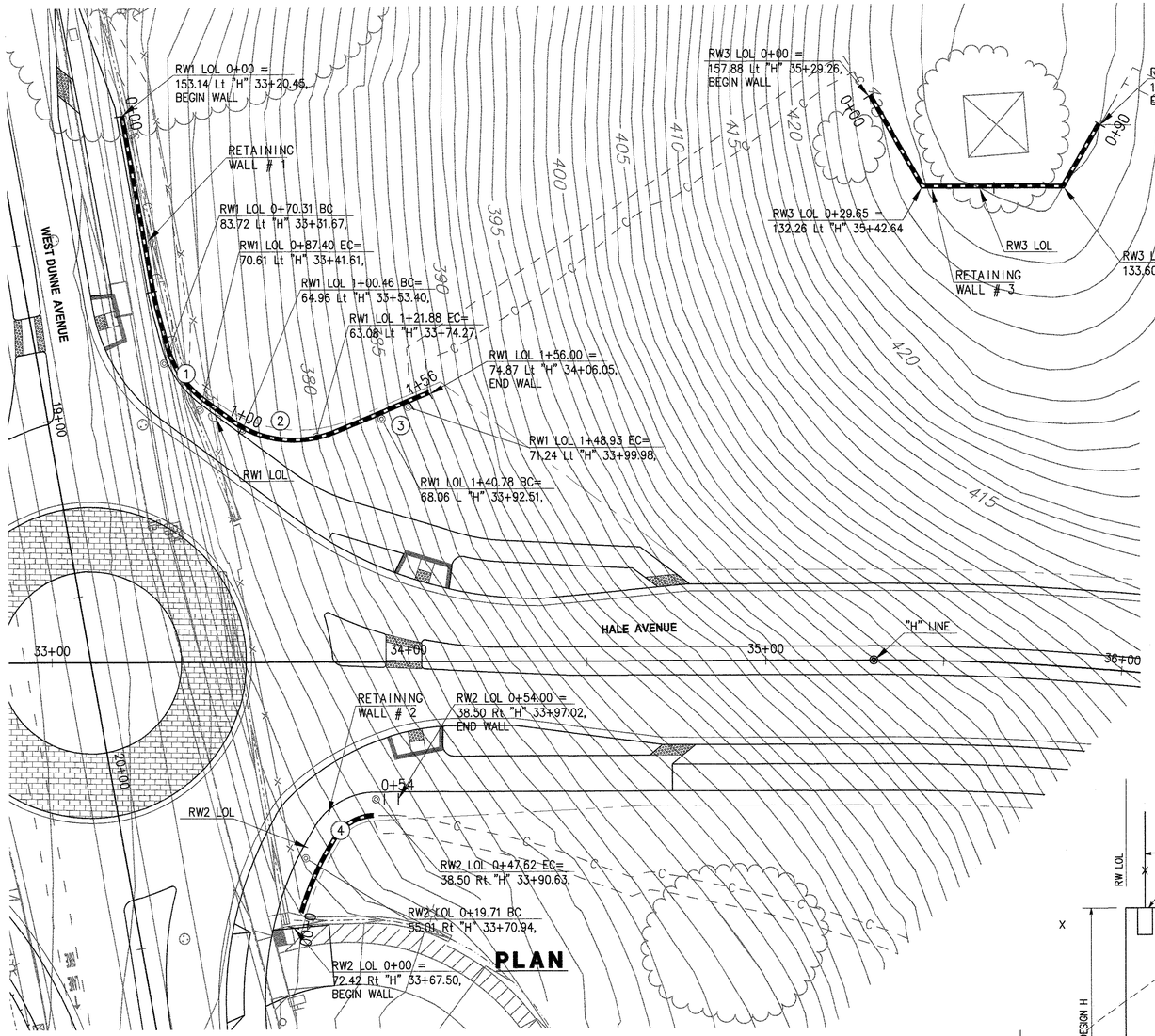
RETAINING WALL # 1 ELEVATION



RW #1 & #2
TYPICAL SECTION
NO SCALE



RETAINING WALL # 2 ELEVATION

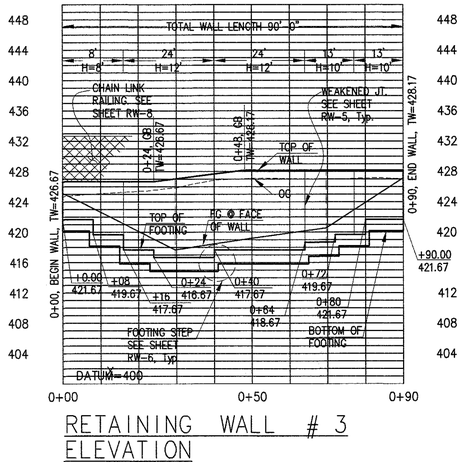


PLAN

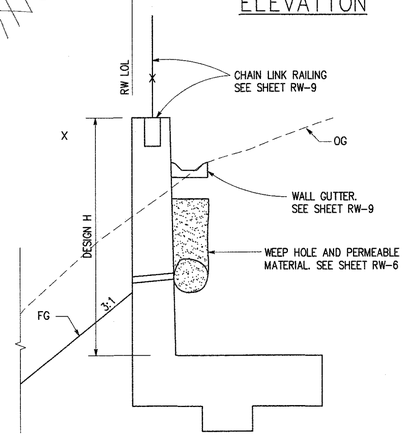
CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
1	17.09	18.00	54°23'20"
2	21.42	30.00	40°54'08"
3	8.15	30.00	15°34'25"
4	27.90	20.00	79°56'09"

NOTES:

1. INSTALL TYPE 5 (CASE 2) RETAINING WALLS #1, #2, AND #3 PER CALTRANS RSP B3-4B, DATED APRIL 20, 2012 (SEE SHEET RW-5).
2. FOR RETAINING WALL REINFORCEMENT AND DETAILS, SEE SHEETS RW-5, 6, 7, AND 8.
3. PROVIDE RETAINING WALL CHAIN LINK RAILING PER CALTRANS RSP B11-7, DATED MAY 20, 2011 (SEE SHEET RW-9).
4. PROVIDE RETAINING WALL UTILITY OPENING PER CALTRANS RSP B3-6, DATED APRIL 20, 2012 (SEE SHEET RW-8).



RETAINING WALL # 3 ELEVATION



RW #3
TYPICAL SECTION
NO SCALE

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: BF	DESIGN: BF	SCALE HOR.	1"=20'
CHECKED: JK	DATE: 09/25/2020	SCALE VERT.	1"=2'
APPROVED:	DATE: 9/25/2020	JOB NO.	SJ-17101

SCOTT C. CREER RCE 58879 — DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
SIGNATURE DATE

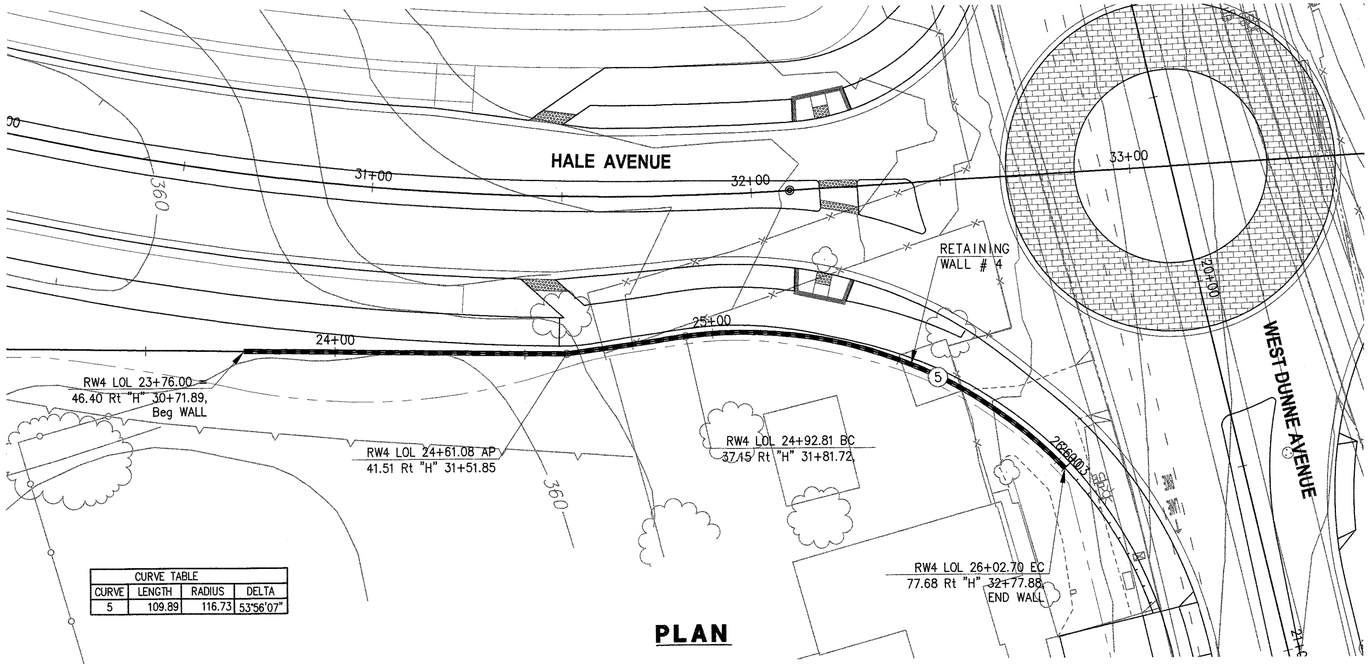
REGISTERED PROFESSIONAL ENGINEER — MONIL S. CHOKSI — 29072 — 3/31/2021 — CIVIL — STATE OF CALIFORNIA

MARK THOMAS

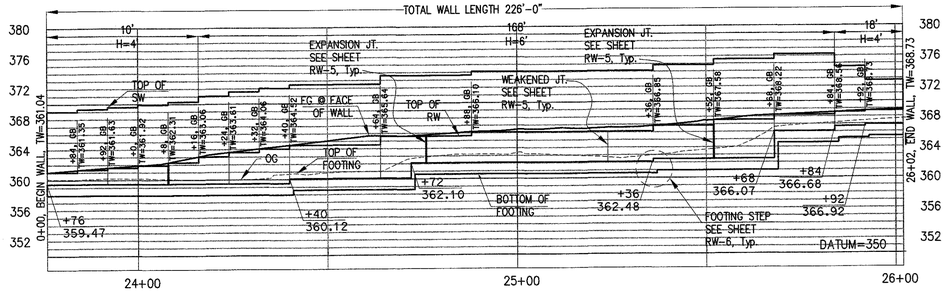
RETAINING WALL #1, #2 & #3
PLAN & ELEVATION
IMPROVEMENT PLANS FOR
MORGAN HILL **HALE AVE EXTENSION** CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **RW-1**
66 OF 120

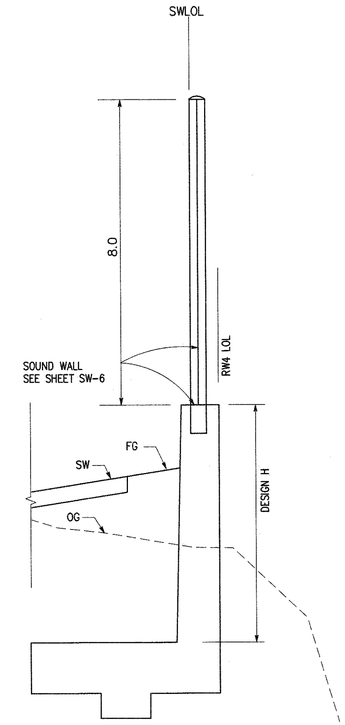
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PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CAD\01\Sheet1\



PLAN



RETAINING WALL # 4
ELEVATION



RW #4
TYPICAL SECTION
NO SCALE

NOTES:

1. INSTALL TYPE 5 (CASE 1) RETAINING WALLS #6 PER CALTRANS RSP B3-4A, DATED APRIL 20, 2012 (SEE SHEET RW-4).
2. FOR RETAINING WALL REINFORCEMENT AND DETAILS, SEE SHEETS RW-5, 6, 7, AND 8.
3. PROVIDE RETAINING WALL CHAIN LINK RAILING PER CALTRANS RSP B11-7, DATED MAY 20, 2011 (SEE SHEET RW-9).
4. PROVIDE RETAINING WALL UTILITY OPENING PER CALTRANS RSP B3-6, DATED APRIL 20, 2012 (SEE SHEET RW-8).
5. SOUND WALL TO BE OLDCASTLE-PRECAST SIERRAWALL-GRAPESTAKE.

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=20'	
CHECKED: MC	DATE: 09/25/2020	SCALE VERT. 1"=2'	
APPROVED:	DATE: 9/25/2020	JOB NO. SJ-17101	

SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

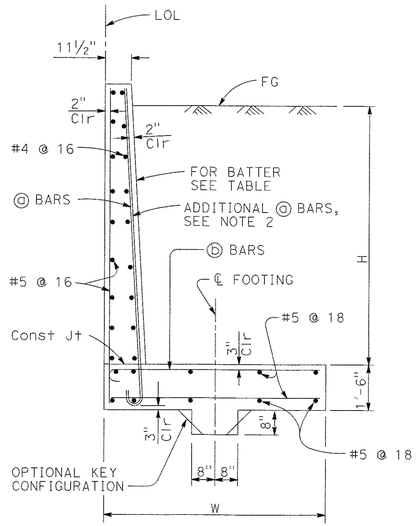
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MARK THOMAS

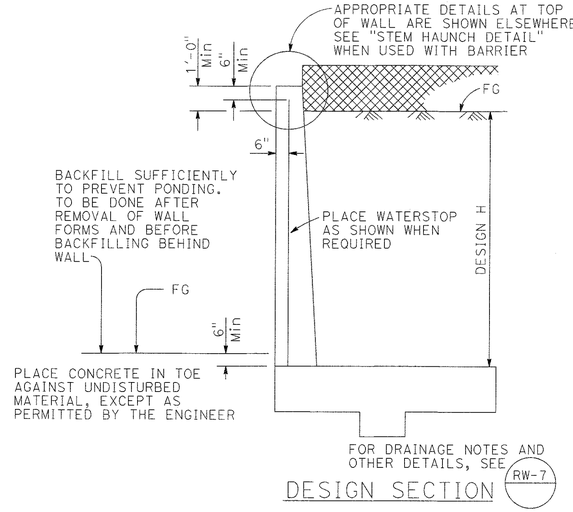
SOUND WALL #4 - PLAN & ELEVATION
SWLOL STA 0+00 TO 3+84
IMPROVEMENT PLANS FOR
HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **RW-2**
67 OF 120

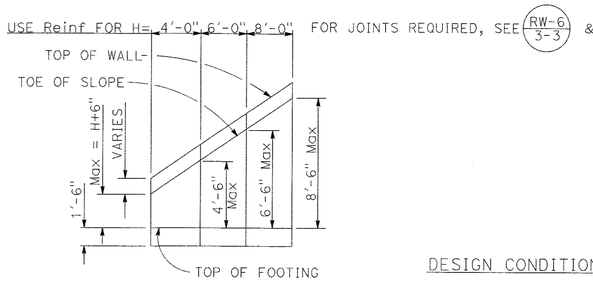
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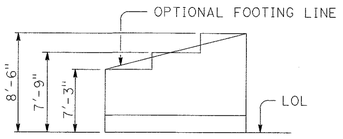


SPREAD FOOTING SECTION

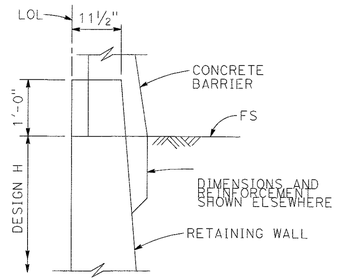


DESIGN SECTION

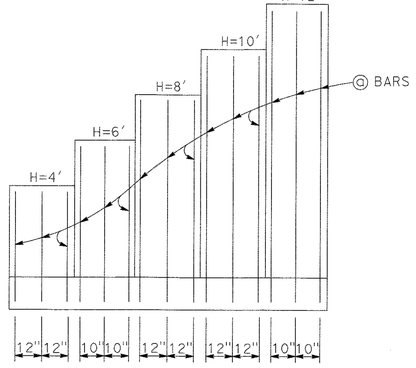




TYPICAL LAYOUT EXAMPLE



STEM HAUNCH DETAIL



ELEVATION

SYMBOLS:

Ser - service limit state I
Str - strength limit state I
Ext I - extreme event limit state I
Ext II - extreme event limit state II
B' - effective footing width (ft)
q'_o - net bearing stress (ksf), OG assumed to be FG at toe
q_o - gross uniform bearing stress (ksf)

TABLE OF REINFORCING STEEL, DIMENSIONS AND DATA					
DESIGN H	4'	6'	8'	10'	12'
W	7'-3"	7'-9"	8'-6"	9'-6"	10'-6"
BATTER	NONE	NONE	100 : 2	100 : 3	100 : 4
ⓐ BARS	#7 @ 12	#7 @ 10	#7 @ 12	#7 @ 12	#7 @ 10
ⓑ BARS	#7 @ 12	#7 @ 10	#8 @ 12	#9 @ 12	#10 @ 10
Ser: B', q'_o	6.2, 1.4	6.1, 1.8	6.4, 2.1	7.0, 2.5	7.7, 2.8
Str: B', q_o	6.2, 2.4	6.1, 2.9	5.3, 3.0	6.0, 3.5	6.6, 4.0
Ext I: B', q_o	4.4, 1.5	4.1, 2.2	4.0, 3.1	4.1, 3.9	4.2, 4.8
Ext II: B', q_o	2.5, 2.7	3.1, 3.0	3.8, 3.2	4.9, 3.3	5.8, 3.5

DESIGN CONDITIONS:

Design H may be exceeded by 6" before going to the next size. Special footing design is required where foundation material is incapable of supporting bearing stress listed in the table.

DESIGN NOTES:

DESIGN: AASHTO LRFD Bridge Design Specifications, 4th Edition with California Amendments

LS: Varied surcharge on level ground surface

DC: Stem Architectural Treatment of thickness up to 6" of concrete (75 psf) considered

CT: 54 kip transverse force applied at He = 32", distributed over 10 feet at the top of wall and 1 : 1 distribution down and outward. Distribution below footing taken no less than 40'.

SEISMIC: k_h = 0.2
k_v = 0.0

SOIL: ø = 34°
γ = 120 pcf

REINFORCED CONCRETE: f'c = 3,600 psi
fy = 60,000 psi

LOAD COMBINATIONS AND LIMIT STATES:

Service I	Q = 1.00DC+1.00EV+1.00EH+1.00LS
Strength I	Q = αDC+βEV+ηEH+1.75LS
Extreme I	Q = 1.00DC+1.00EV+1.00EH+1.00EQD+1.00EQE
Extreme II	Q = 1.00DC+1.00EV+1.00EH+1.00CT

Where:

Q:	Force Effects
α:	1.25 or 0.90, Whichever Controls Design
β:	1.35 or 1.00, Whichever Controls Design
η:	1.50 or 0.90, Whichever Controls Design
DC:	Dead Load of Structure Components
EH:	Horizontal Earth Fill Pressure
EV:	Vertical Earth Pressure from Earth Fill Weight
LS:	Live Load Surcharge
EQE:	Seismic Earth Pressure
EQD:	Soil and Structural and Nonstructural Components Inertia
CT:	Vehicular Collision Force

NOTES:

1. At ⓐ bars:
   H ≤ 6', no splices are allowed within 1'-8" above the top of footing.
   H > 6', no splices are allowed within H/4 above the top of footing.

2. Provide #6 @ 8" ⓐ bars in addition to tabulated ⓐ bars over a distance of 8'-0" measured from all expansion joints, begin wall and end wall locations.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

RETAINING WALL TYPE 5 (CASE 1)

NO SCALE
RSP B3-4A DATED SEPTEMBER 22, 2015 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2015.

REVISED STANDARD PLAN RSP B3-4A

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL
City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: KY | DESIGN: KY | SCALE HOR.
CHECKED: MC | DATE: 09/25/2020 | SCALE VERT.
APPROVED: Scott C. Creer | DATE: 9/25/2020 | JOB NO. SJ-17101
SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

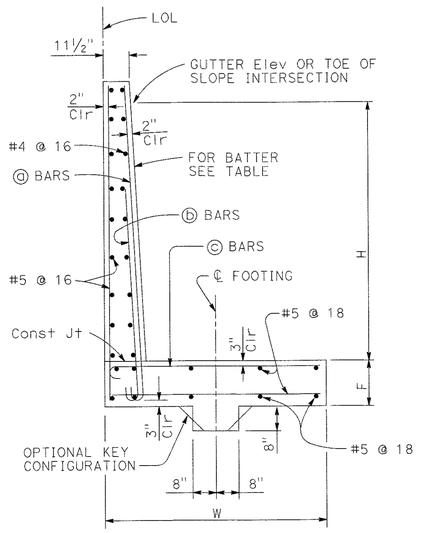
SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21
SIGNATURE DATE

MARK THOMAS

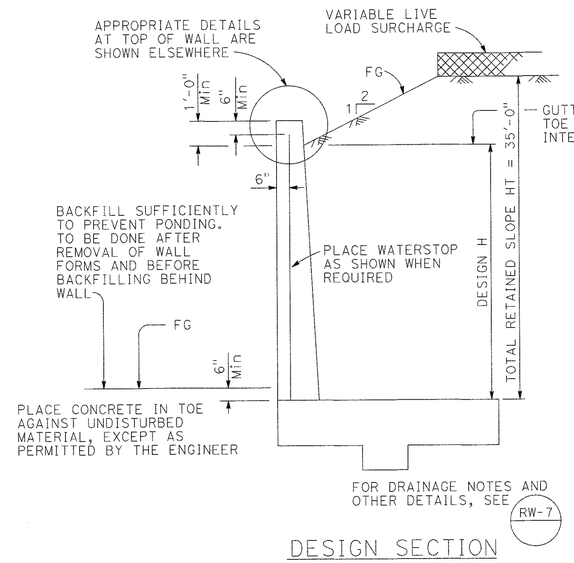
MORGAN HILL
RETAINING WALL DETAIL 1
IMPROVEMENT PLANS FOR HALE AVE EXTENSION
CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: RW-3
68 OF 120

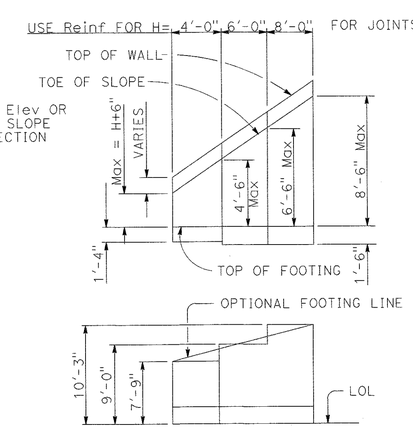
PLOT DATE: Sep 23, 2020-03:23:39pm CAD USER: jlaine
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SPREAD FOOTING SECTION



DESIGN SECTION



TYPICAL LAYOUT EXAMPLE

DESIGN CONDITIONS:

Design H may be exceeded by 6" before going to the next size. Special footing design is required where foundation material is incapable of supporting bearing stress listed in the table.

DESIGN NOTES:

DESIGN:	AASHTO LRFD Bridge Design Specifications, 4th Edition with California Amendments
LS:	Varied surcharge on level ground surface
DC:	Stem Architectural Treatment of thickness up to 6" of concrete (75 psf) considered
SEISMIC:	k_h = 0.2 k_v = 0.0
SOIL:	ø = 34° γ = 120 pcf
REINFORCED CONCRETE:	f'c = 3,600 psi fy = 60,000 psi

LOAD COMBINATIONS AND LIMIT STATES:

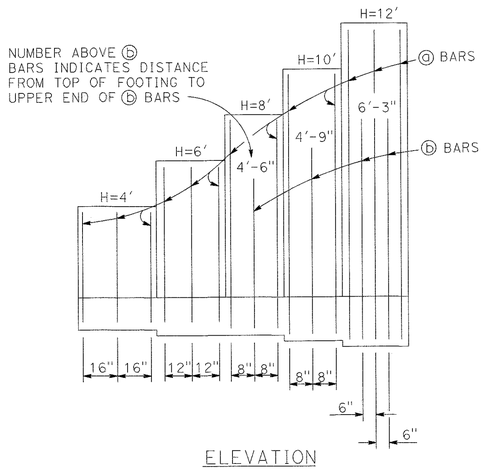
Service I	Q = 1.00DC+1.00EV+1.00EH+1.00LS
Strength I	Q = αDC+βEV+ηEH+1.75LS
Extreme I	Q = 1.00DC+1.00EV+1.00EH+1.00EQD+1.00EQE

Where:

Q:	Force Effects
α:	1.25 or 0.90, Whichever Controls Design
β:	1.35 or 1.00, Whichever Controls Design
η:	1.50 or 0.90, Whichever Controls Design
DC:	Dead Load of Structure Components
EH:	Horizontal Earth Fill Pressure
EV:	Vertical Earth Pressure from Earth Fill Weight
LS:	Live Load Surcharge
EQE:	Seismic Earth Pressure
EQD:	Soil and Structural and Nonstructural Components Inertia

NOTES:

1. At ⓒ and ⓑ bars:
   H ≤ 6', no splices are allowed within 1'-8" above the top of footing.
   H > 6', no splices are allowed within H/4 above the top of footing.



ELEVATION

SYMBOLS:

Ser - service limit state I
Str - strength limit state I
Ext - extreme event limit state I
B' - effective footing width (ft)
q'_o - net bearing stress (ksf), OG assumed to be FG at toe
q_o - gross uniform bearing stress (ksf)

TABLE OF REINFORCING STEEL, DIMENSIONS AND DATA

DESIGN H	4'	6'	8'	10'	12'
W	7'-9"	9'-0"	10'-3"	11'-6"	13'-3"
F SPREAD FOOTING	1'-4"	1'-6"	1'-6"	1'-6"	1'-10"
BATTER	NONE	NONE	NONE	100 : 3	100 : 5
ⓐ BARS	#5 @ 16	#5 @ 12	#5 @ 16	#6 @ 16	#5 @ 12
ⓑ BARS	NONE	NONE	#6 @ 16	#6 @ 16	#6 @ 12
ⓒ BARS	#7 @ 8	#7 @ 12	#8 @ 8	#9 @ 8	#10 @ 6
Ser: B', q'_o	5.2,1.3	6.0,1.8	9.1,1.8	10.0,2.3	11.4,2.7
Str: B', q_o	3.6,2.2	4.1,2.8	4.8,3.4	5.5,3.9	6.7,4.3
Ext: B', q_o	3.7,2.9	3.6,4.5	3.7,5.9	3.9,7.2	4.4,8.4

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

RETAINING WALL TYPE 5 (CASE 2)

NO SCALE
RSP B3-4A DATED SEPTEMBER 22, 2015 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2015.

REVISED STANDARD PLAN RSP B3-4B

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: | INSPECTOR:
AS-BUILT CORRECTIONS
BY: | DATE:

CITY OF MORGAN HILL
City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: KY | DESIGN: KY | SCALE HOR.
CHECKED: MC | DATE: 09/25/2020 | SCALE VERT.
APPROVED: Scott C. Creer 9/25/2020 | JOB NO. SJ-17101
SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

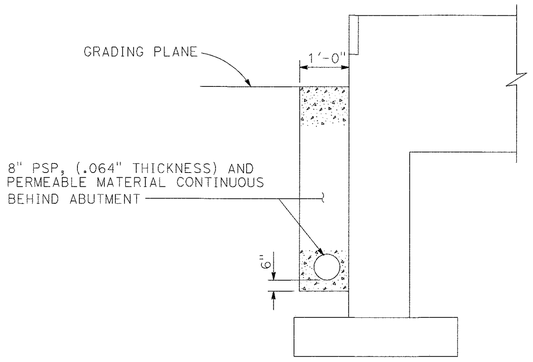
SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21
SIGNATURE DATE

MARK THOMAS

RETAINING WALL
DETAIL 2
IMPROVEMENT PLANS FOR
MORGAN HILL HALE AVE EXTENSION CALIFORNIA

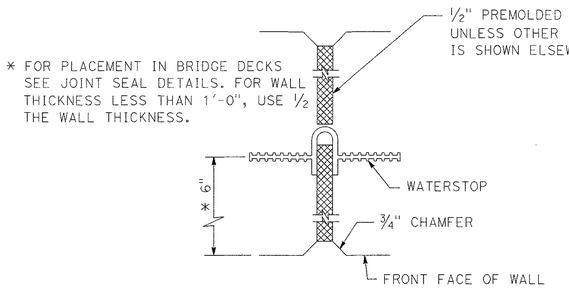
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PLAN SET: 09/25/2020
DRAWING: RW-4
69 OF 120

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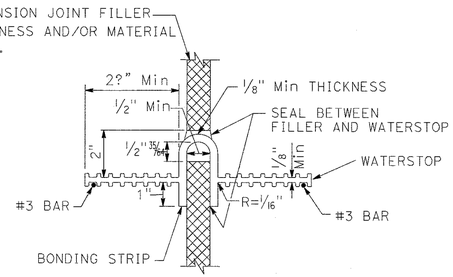
BRIDGE DETAIL 3-5

8" PSP AND PERMEABLE MATERIAL



BRIDGE DETAIL 3-4

WALL EXPANSION JOINT

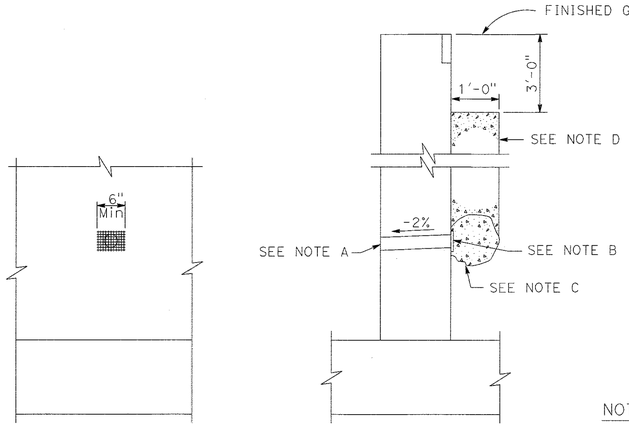


BRIDGE DETAIL 3-6

WATERSTOP

NOTES:

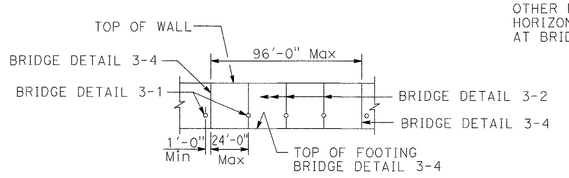
1. Holes will be permitted in the outer ½" of the web for wire, rings, etc. Tie web to #3 reinforcing bars @ 12 maximum intervals to support the waterstop in proper position during concrete placement. Alternative detail may be submitted for approval of the Engineer.
2. Waterstop to have 5 or more pairs of raised ribs to provide 0.1 square inch minimum rib cross-section area on each half of the waterstop.



ELEVATION SECTION

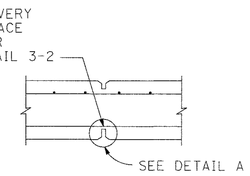
BRIDGE DETAIL 3-1

WEEP HOLE AND PERVIOUS BACKFILL

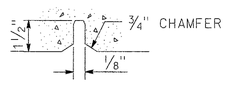


BRIDGE DETAIL 3-3

WALL EXPANSION JOINTS
AND WEAKENED PLANES



SECTION



DETAIL A

BRIDGE DETAIL 3-2

WEAKENED PLANES

NOTES:

A. 4" ø Drains @ 25'-0" maximum center to center, 9'-0" center to center for Type 3 and 9'-3" center to center for Type 4 retaining walls. For walls adjacent to sidewalks or curbs, provide 4" plastic pipe under the sidewalk to discharge thru curb face. Exposed wall drains shall be located 3" 35/64 above finished grade.

B. 6" square aluminum or galvanized steel wire ¼" mesh hardware cloth, minimum wire diameter 0.025". Anchor firmly to backface.

C. One cubic foot pervious backfill material in a nonwoven filter fabric, securely tied.

D. Pervious backfill material continuous behind retaining wall or abutment.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

BRIDGE DETAILS

NO SCALE
RSP B3-4A DATED SEPTEMBER 22, 2015 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2015.

REVISED STANDARD PLAN RSP B0-3

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: KY	DESIGN: KY	SCALE HOR.	
CHECKED: MC	DATE: 09/25/2020	SCALE VERT.	
APPROVED: Scott C. Creer	DATE: 9/25/2020	JOB NO. SJ-17101	

SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

MICHAEL K. COOPER No. 29072 3/31/2021 CIVIL STATE OF CALIFORNIA

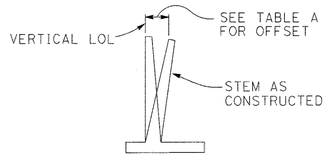
SIGNATURE DATE

MARK THOMAS

RETAINING WALL
DETAIL 3
IMPROVEMENT PLANS FOR
MORGAN HILL HALE AVE EXTENSION CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: RW-5
70 OF 120

FILE:BMHE_RW403_P001-9
PLOT DATE: Sep 22, 2020-03:24:34pm
CAD USER: jkothe
PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CADD\Sheets\

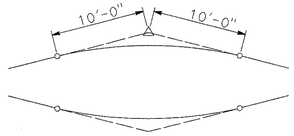


APPROXIMATE WALL OFFSET VALUES

Values for offseting forms to be determined by the Engineer.

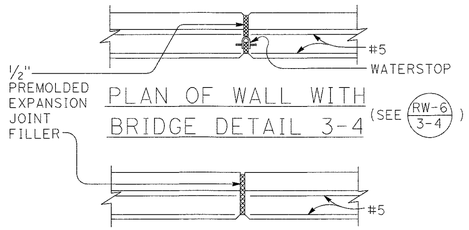
TABLE A

H	OFFSET
4'-12'	H/200
14'-16'	H/160
18'-20'	H/140
22'-24'	H/130
26'-36'	2½"



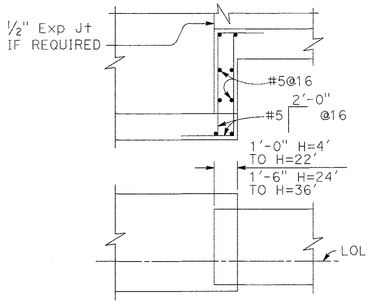
20'-0" VC AT TOP OF WALL SLOPE CHANGE

Where shown on the plans

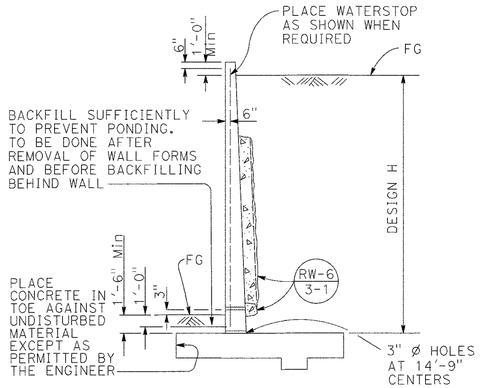


PLAN OF WALL WITH BRIDGE DETAIL 3-4 (SEE RW-6 3-4)

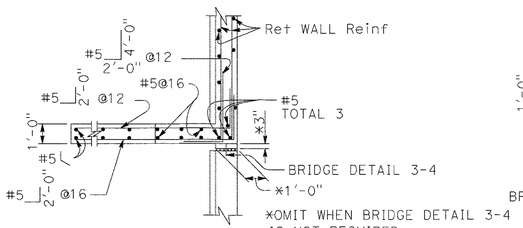
PLAN OF WALL WITH EXPANSION JOINT ONLY



FOOTING STEP



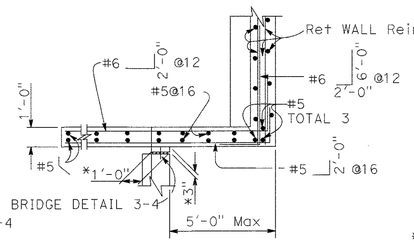
DESIGN AND DRAINAGE



*OMIT WHEN BRIDGE DETAIL 3-4 IS NOT REQUIRED.

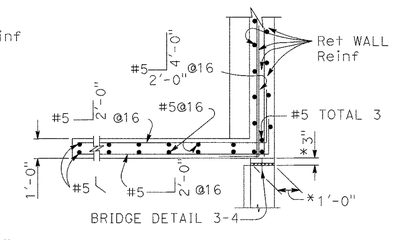
PLAN

(For return wall Type "A")



PLAN

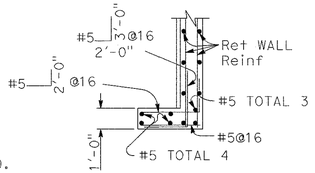
(For return wall Type "B")



*OMIT WHEN BRIDGE DETAIL 3-4 IS NOT REQUIRED.

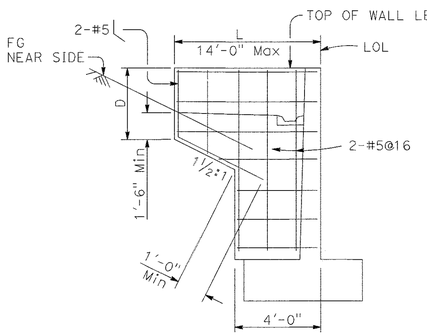
PLAN

(For return wall Type "C")



PLAN

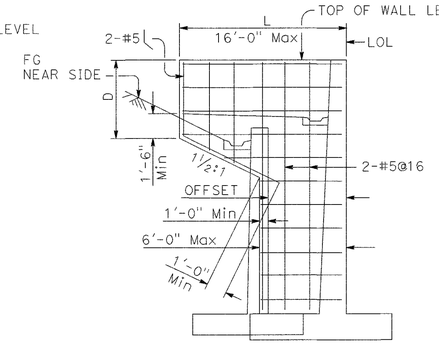
(For return wall Type "D")



ELEVATION

RETURN WALL TYPE "A"

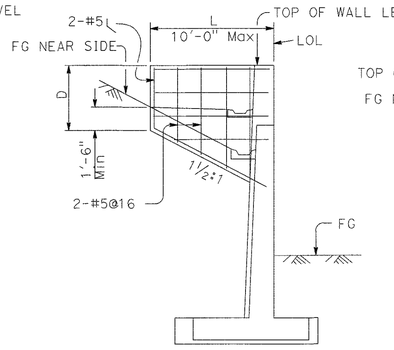
Use where H=8' or less



ELEVATION

RETURN WALL TYPE "B"

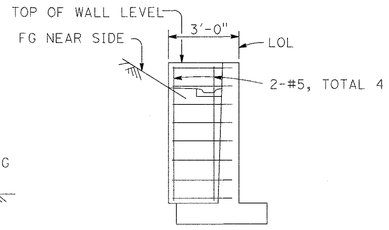
Use where H=10' or more on offset walls



ELEVATION

RETURN WALL TYPE "C"

Use where H=10' or more on straight walls



ELEVATION

RETURN WALL TYPE "D"

Use where H=6' or less

DESIGN CONDITIONS:

Design "H" may be exceeded by 6" before going to the next size. Special footing design is required where foundation material is incapable of supporting bearing stress listed in table

Return wall not required unless shown elsewhere

DESIGN NOTES:

DESIGN: AASHTO LRFD Bridge Design Specifications, 4th edition with California Amendments

LIVE LOAD: Surcharge on level ground surface

SOIL: $\phi \equiv 34°$, $\gamma = 120$ pcf

REINFORCED CONCRETE: fy = 60,000 psi, fc' = 3,600 psi

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

RETAINING WALL DETAILS No. 1

NO SCALE

RSP B3-4A DATED SEPTEMBER 22, 2015 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2015.

REVISED STANDARD PLAN RSP B3-5

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL
City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: KY DESIGN: KY SCALE HOR.
CHECKED: MC DATE: 09/25/2020 SCALE VERT.
APPROVED: DATE: 9/25/2020 JOB NO. SJ-17101
SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

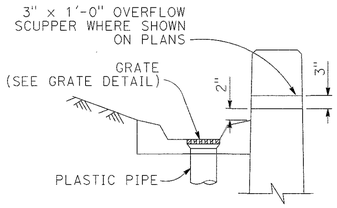
SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21
SIGNATURE DATE

MARK THOMAS

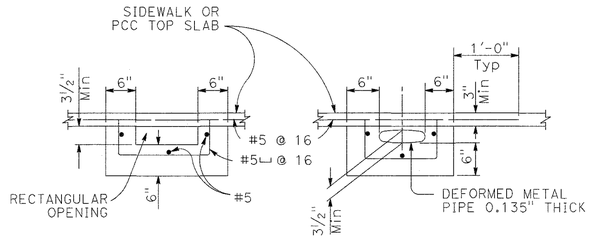
RETAINING WALL DETAIL 4
IMPROVEMENT PLANS FOR
HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: RW-6
71 OF 120

CAD USER: jkohe
PLOT DATE: Sep 23, 2020-03:26:36pm
FILENAME: RW43_RW4-9
PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CADD\Sheets\



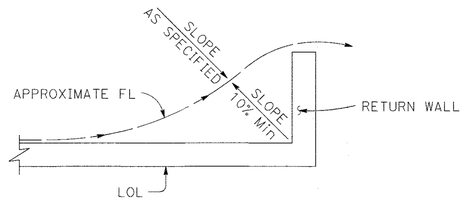
WALL DRAIN DETAIL



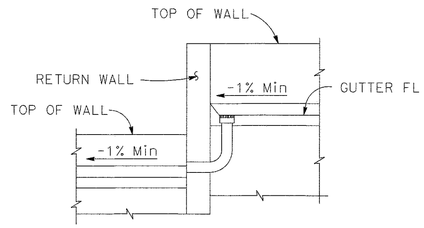
NOTES:

Area of opening to be not less than that of pipe from wall gutter. Make opening transition in wall. Edge opening in curb face to ¾" minimum radius.

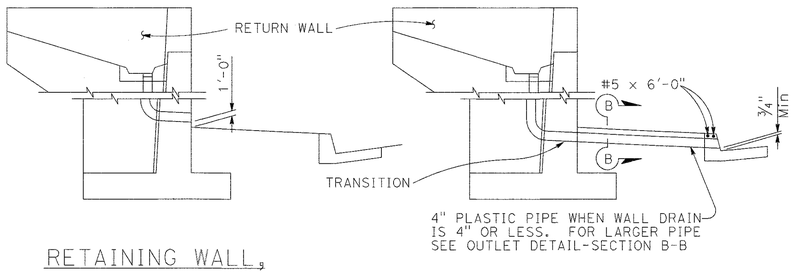
OUTLET DETAIL - SECTION B-B



WALL DRAINAGE
WHERE GUTTER NOT REQUIRED

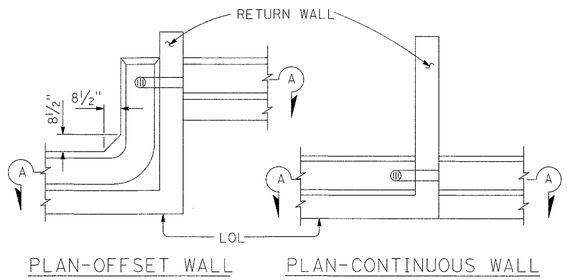


SECTION A-A



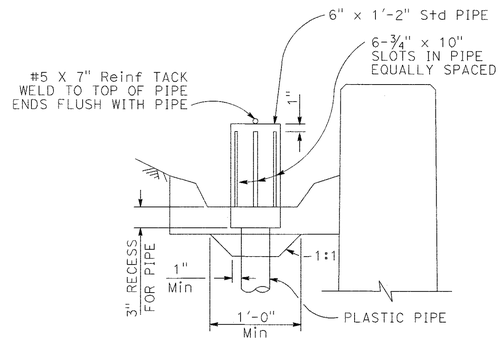
RETAINING WALL,
FACE OF WALL OUTLET

RETAINING WALL, GUTTER OUTLET

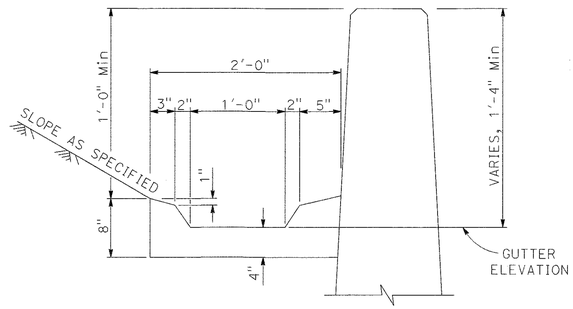


PLAN-OFFSET WALL PLAN-CONTINUOUS WALL

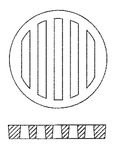
DRAIN THROUGH RETURN WALL



WALL DRAIN WITH PIPE DOME

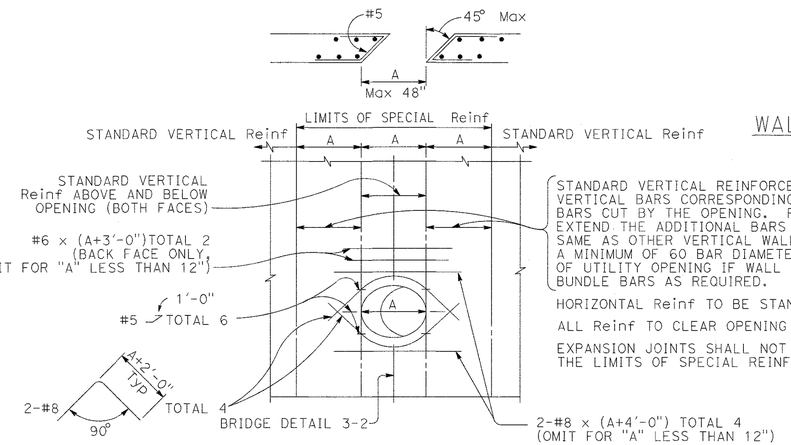


TYPICAL GUTTER DETAIL



GRATE DETAIL

Sizes to fit standard hubs



RETAINING WALL UTILITY OPENING

Max size of opening (A) = 48"
To be used in conjunction with sheet RW-7

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

RETAINING WALL DETAILS No. 2

NO SCALE
RSP B3-4A DATED SEPTEMBER 22, 2015 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2015.

REVISED STANDARD PLAN RSP B3-6

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: KY	DESIGN: KY	SCALE HOR.	
CHECKED: MC	DATE: 09/25/2020	SCALE VERT.	
APPROVED: S. C. C.	DATE: 9/25/2020	JOB NO. SJ-17101	

SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

MICHAEL K. COOPER No. 29072 CIVIL 3/31/2021 STATE OF CALIFORNIA

SIGNATURE: DATE:

MARK THOMAS

RETAINING WALL
DETAIL 5
IMPROVEMENT PLANS FOR
HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: RW-7
72 OF 120

PLOT DATE: Sep 23, 2020-03:26:38pm
CAD USER: jkehe
FILE NAME: ...RW423_RW4-9
PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CADD\Sheets\

ELECTRICAL INDEX:

E-1 TO E-5	STREET LIGHTING FIBER OPTIC SYSTEM
E-6	ELECTRICAL SYSTEM DETAILS

GENERAL NOTES:

1. ALL ELECTRICAL WORK SHALL CONFORM TO THE LATEST CITY OF MORGAN HILL DESIGN STANDARDS AND STANDARD DETAILS, THE 2010 STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND PLANS, AND THE SPECIAL PROVISIONS.
2. CONTRACTOR SHALL CALL 811 UNDERGROUND SERVICE ALERT (U.S.A.), 48 HOURS PRIOR TO ALL EXCAVATION.
3. ALL STREET LIGHTING PULL BOXES SHALL BE No. 3½, UNLESS OTHERWISE NOTED ON THE PLANS.
4. ALL ELECTRICAL EQUIPMENT INCLUDING CONDUITS AND PULL BOXES ARE SHOWN AT APPROXIMATE LOCATIONS ONLY. MINOR CHANGES MAY BE MADE AS DIRECTED BY THE ENGINEER.
5. NO PULL BOX SHALL BE INSTALLED WITHIN BIORETENTION SWALE AREA.
6. STREET LIGHTING CONDUIT AND FIBER OPTIC CONDUIT SHALL BE INSTALLED IN JOINT TRENCH WHERE FEASIBLE.

ABBREVIATIONS:

PG&E PACIFIC GAS AND ELECTRIC COMPANY

SYMBOLS:

EXISTING STREET LIGHT

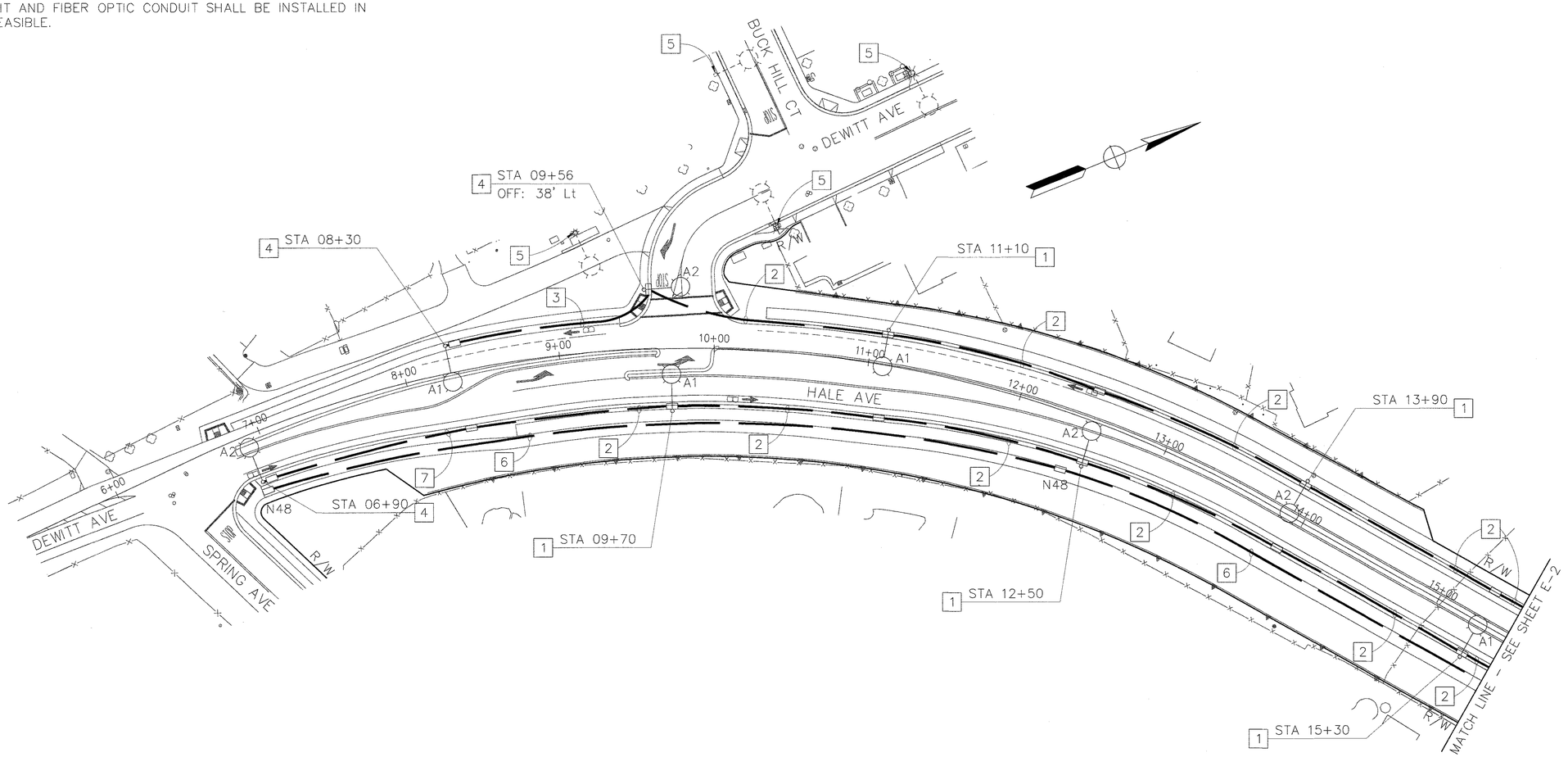
CITY STANDARD POLE WITH 8' LUMINAIRE MAST ARM AND CREE 139 W LED LUMINAIRE (MODEL No. STR-LWY-HT-08-E-UL-SV-525-40K-R-UTL) WITH EXTERNAL BACKLIGHT SHIELD (XA-XSLBLS90). SEE CITY STANDARD DRAWING E-11 FOR STREET LIGHT DETAILS.

STREET LIGHT CIRCUIT # (Typ.) — A1

N48 — 30"W X 48"L X 36"D COMPOSITE FIBER OPTIC VAULT WITH ANTI-THEFT BOLT DOWN LIDS

LEGEND:

1. SEE DETAIL A ON SHEET E-2 FOR POLE LOCATION AND FOUNDATION DETAILS.
2. 1½"C, 4#6 (240 V STREET LIGHTING, CIRCUITS A1 & A2).
3. 1½"C, 2#6 (240 V STREET LIGHTING, CIRCUIT A1).
4. SEE CITY STANDARD DRAWING E-11 FOR POLE LOCATION AND FOUNDATION DETAILS.
5. EXISTING STREET LIGHT TO REMAIN.
6. 2"C PT. MAINTAIN 36" MINIMUM BEND RADIUS FOR FUTURE FIBER OPTIC CABLE. INSTALL CONDUIT IN JOINT TRENCH WITH STREET LIGHTING.
7. 1½"C, 2#6 (240 V STREET LIGHTING, CIRCUIT A2).



BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1" = 40'
CHECKED: KC	DATE: 09/25/2020	SCALE VERT. N/A
APPROVED: Scott C. Green	DATE: 9/25/2020	JOB NO. SJ-17101

SCOTT C. GREEN RCE 58879 — DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
SIGNATURE
SPENCER LEE No. 80630 Exp. 3/31/21 CIVIL STATE OF CALIFORNIA PROFESSIONAL ENGINEER
09/25/2020 DATE

Y&C TRANSPORTATION CONSULTANTS, INC.
200 BROWN ROAD, SUITE 108
FREMONT, CA 94539
(510) 566-2755

STREET LIGHTING
FIBER OPTIC SYSTEM
IMPROVEMENT PLANS FOR
HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **E-1**
74 OF 120

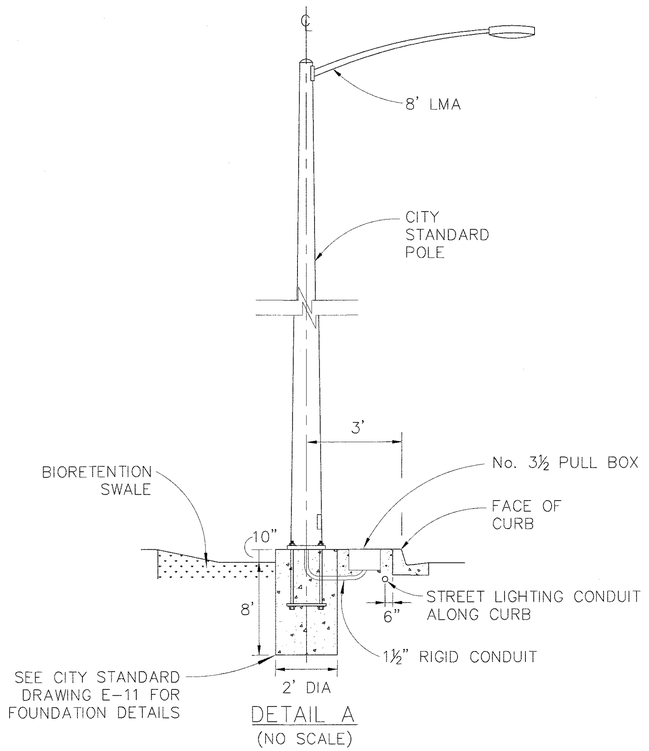
CAD USER: mtorri
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PATH: G:\Project\2017\N6017 Hale Ave Extension\

LEGEND:

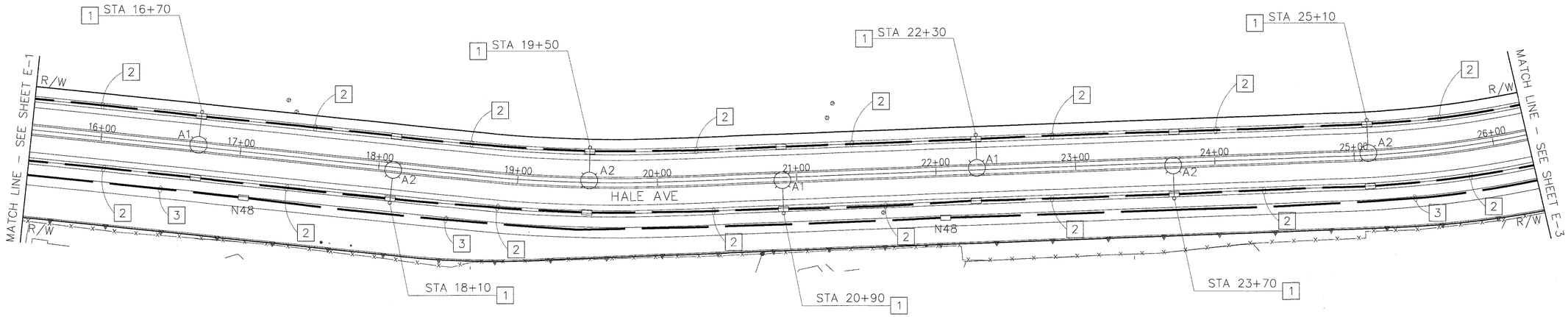
1 SEE DETAIL A ON THIS SHEET FOR POLE LOCATION AND FOUNDATION DETAILS.

2 1½"C, 4#6 (240 V STREET LIGHTING, CIRCUITS A1 & A2).

3 2"C PT. MAINTAIN 36" MINIMUM BEND RADIUS FOR FUTURE FIBER OPTIC CABLE. INSTALL CONDUIT IN JOINT TRENCH WITH STREET LIGHTING.



DETAIL A
(NO SCALE)



BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1" = 40'
CHECKED: KC	DATE: 09/25/2020	SCALE VERT. N/A
APPROVED: DATE: 9/25/2020		JOB NO. SJ-17101

SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
SIGNATURE 09/25/2020 DATE

PROFESSIONAL ENGINEER SPENCER LEE No. 80630 Exp. 3/31/21 CIVIL STATE OF CALIFORNIA

Y&C TRANSPORTATION CONSULTANTS, INC.
200 BROWN ROAD, SUITE 108
FREMONT, CA 94539
(510) 566-2755

STREET LIGHTING
FIBER OPTIC SYSTEM
IMPROVEMENT PLANS FOR
HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **E-2**
75 OF 120

CAD USER: ahenri
PLOT DATE: Sep 23, 2020-03:15:58pm
FILE NAME: 965_E1E2E3E4E5E6(1).tif
PATH: O:\Project\2017\965\T Hale Ave Extension\

LEGEND:

1 SEE DETAIL A ON SHEET E-2 FOR POLE LOCATION AND FOUNDATION DETAILS.

2 1½"C, 4#6 (240 V STREET LIGHTING, CIRCUITS A1 & A2).

3 1½"C, 2#6 (240 V STREET LIGHTING, CIRCUIT A1).

4 3"C, PT. COORDINATE WITH PG&E FOR SERVICE CONNECTION.

5 EXISTING STREET LIGHT TO REMAIN.

6 FURNISH AND INSTALL TYPE III-AF SERVICE EQUIPMENT ENCLOSURE. FRONT DOOR SHALL FACE EAST. SEE WIRING DIAGRAM A ON SHEET E-6.

7 COORDINATE WITH PG&E FOR SERVICE DISCONNECT.

8 2"C, 3#14 (PEU), 4#6 (240 V STREET LIGHTING, CIRCUITS A1 & A2), 2#10 (120 V IRRIGATION).

9 1½"C, 2#6 (240 V STREET LIGHTING, CIRCUIT A2).

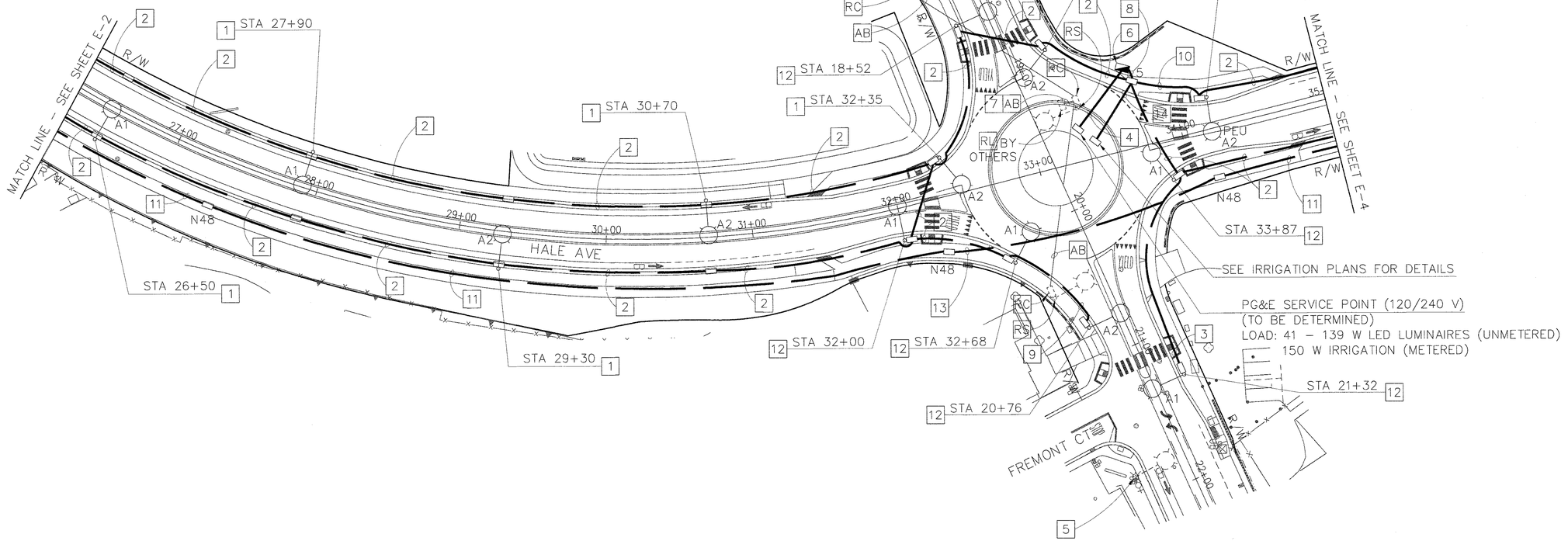
10 1½"C, 3#14 (PEU), 4#6 (240 V STREET LIGHTING, CIRCUITS A1 & A2).

11 2"C PT. MAINTAIN 36" MINIMUM BEND RADIUS FOR FUTURE FIBER OPTIC CABLE. INSTALL CONDUIT IN JOINT TRENCH WITH STREET LIGHTING.

12 SEE CITY STANDARD DRAWING E-11 FOR POLE LOCATION AND FOUNDATION DETAILS.

13 2"C PT. MAINTAIN 36" MINIMUM BEND RADIUS FOR FUTURE FIBER OPTIC CABLE.

14 1½"C, 2#10 (120 V IRRIGATION).



BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

City of Morgan Hill
Public Works Department
CITY OF MORGAN HILL
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR: 1" = 40'
CHECKED: KC	DATE: 09/25/2020	SCALE VERT: N/A
APPROVED:	DATE: 9/25/2020	JOB NO. SJ-17101

SCOTT C. CREER RCE 58879 — DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
SIGNATURE
REGISTERED PROFESSIONAL ENGINEER SPENCER LEE No. 80630 Exp. 3/31/21 CIVIL STATE OF CALIFORNIA
09/25/2020
DATE

Y&C TRANSPORTATION CONSULTANTS, INC.
200 BROWN ROAD, SUITE 108
FREMONT, CA 94539
(510) 566-2755

STREET LIGHTING
FIBER OPTIC SYSTEM
IMPROVEMENT PLANS FOR
HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **E-3**
76 OF 120

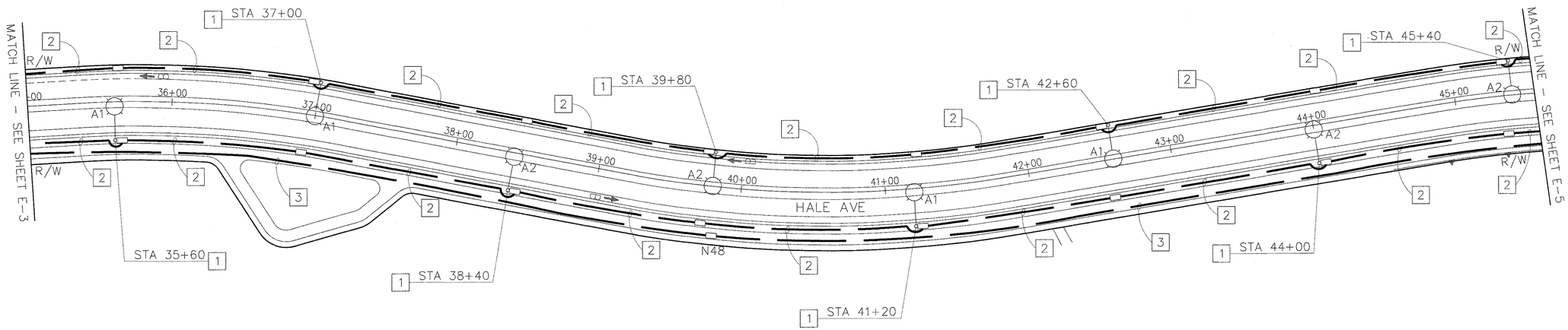
CAD USER: intern
PLOT DATE: Sep 23, 2020-03:59pm
FILE NAME: W5_E1E2E3E4,E5,E6(4)
PATH: O:\Drwgs\12017\W5\17 Hale Ave Extension\

LEGEND:

1 SEE CITY STANDARD DRAWING E-11 FOR POLE LOCATION AND FOUNDATION DETAILS.

2 1½"C, 4#6 (240 V STREET LIGHTING, CIRCUITS A1 & A2).

3 2"C PT. MAINTAIN 36" MINIMUM BEND RADIUS FOR FUTURE FIBER OPTIC CABLE. INSTALL CONDUIT IN JOINT TRENCH WITH STREET LIGHTING.



BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1" = 40'	
CHECKED: KC	DATE: 09/25/2020	SCALE VERT. N/A	
APPROVED: DATE: 9/25/2020		JOB NO. SJ-17101	

SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
SIGNATURE 09/25/2020 DATE

STEPHEN LEE SPENCER No. 80630 Exp. 3/31/21 CIVIL REGISTERED PROFESSIONAL ENGINEER STATE OF CALIFORNIA

Y&C TRANSPORTATION CONSULTANTS, INC.
200 BROWN ROAD, SUITE 108
FREMONT, CA 94539
(510) 566-2755

STREET LIGHTING
FIBER OPTIC SYSTEM
IMPROVEMENT PLANS FOR
HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **E-4**
77 OF 120

FILE NAME: 935_E1E2E3E4E5E6AL.dgn PLOT DATE: Sep 23, 2020-03:26:19pm CAD USER: mtenri PATH: O:\Projects\2017\19657 Hale Ave Extension\

LEGEND:

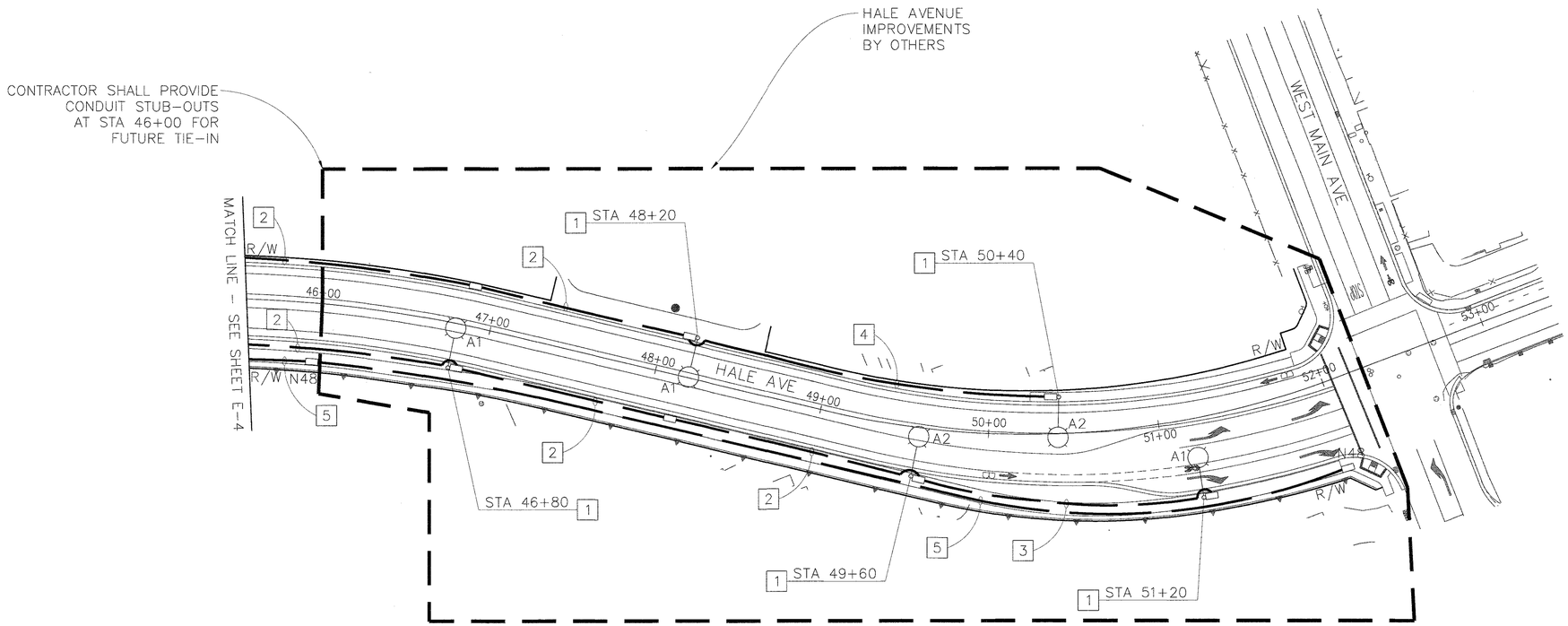
[1] SEE CITY STANDARD DRAWING E-11 FOR POLE LOCATION AND FOUNDATION DETAILS.

[2] 1½"C, 4#6 (240 V STREET LIGHTING, CIRCUITS A1 & A2).

[3] 1½"C, 2#6 (240 V STREET LIGHTING, CIRCUIT A1).

[4] 1½"C, 2#6 (240 V STREET LIGHTING, CIRCUIT A2).

[5] 2"C PT. MAINTAIN 36" MINIMUM BEND RADIUS FOR FUTURE FIBER OPTIC CABLE. INSTALL CONDUIT IN JOINT TRENCH WITH STREET LIGHTING.



BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:

AS-BUILT CORRECTIONS

BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1" = 40'
CHECKED: KC	DATE: 09/25/2020	SCALE VERT. N/A
APPROVED: Scott C. Creer 9/25/2020	DATE:	JOB NO. SJ-17101

SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:

SIGNATURE 09/25/2020 DATE

REGISTERED PROFESSIONAL ENGINEER SPENCER LEE No. 50530 Exp. 3/31/21 CIVIL STATE OF CALIFORNIA

Y&C TRANSPORTATION CONSULTANTS, INC.
200 BROWN ROAD, SUITE 108
FREMONT, CA 94539
(510) 566-2755

STREET LIGHTING
FIBER OPTIC SYSTEM
IMPROVEMENT PLANS FOR
HALE AVE EXTENSION

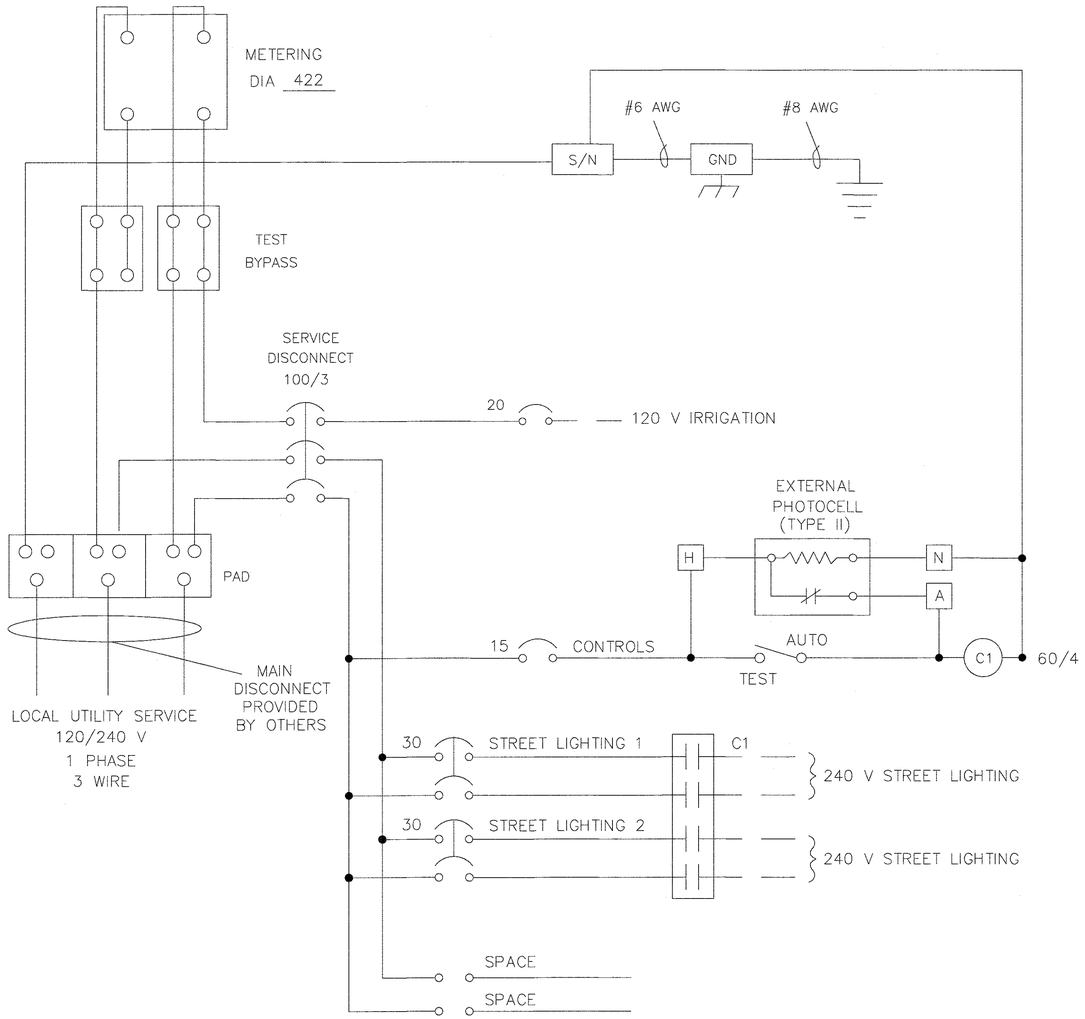
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **E-5**
78 OF 120

PLOT DATE: Sep 23, 2020-03:29:59pm CAD USER: rhenri

FILE NAME: 965_E1E2E3E4E5.dwg

PATH: G:\Project\2017\1501T Hale Ave Extension\



SERVICE WIRING DIAGRAM A

NO SCALE

(SEE STATE STANDARD PLAN ES-2D AND ES-2C FOR OTHER DETAILS)

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:

AS-BUILT CORRECTIONS

BY: DATE:

City of Morgan Hill
Public Works Department
CITY OF MORGAN HILL
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. N/A	
CHECKED: KC	DATE: 09/25/2020	SCALE VERT. N/A	
APPROVED: S.C.C.	DATE: 9/25/2020	JOB NO. SJ-17101	

SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:

SIGNATURE

REGISTERED PROFESSIONAL ENGINEER SPENCER LEE No. 80630 Exp. 3/31/21 CIVIL STATE OF CALIFORNIA

09/25/2020 DATE

Y&C TRANSPORTATION CONSULTANTS, INC.
200 BROWN ROAD, SUITE 108
FREMONT, CA 94539
(510) 566-2755

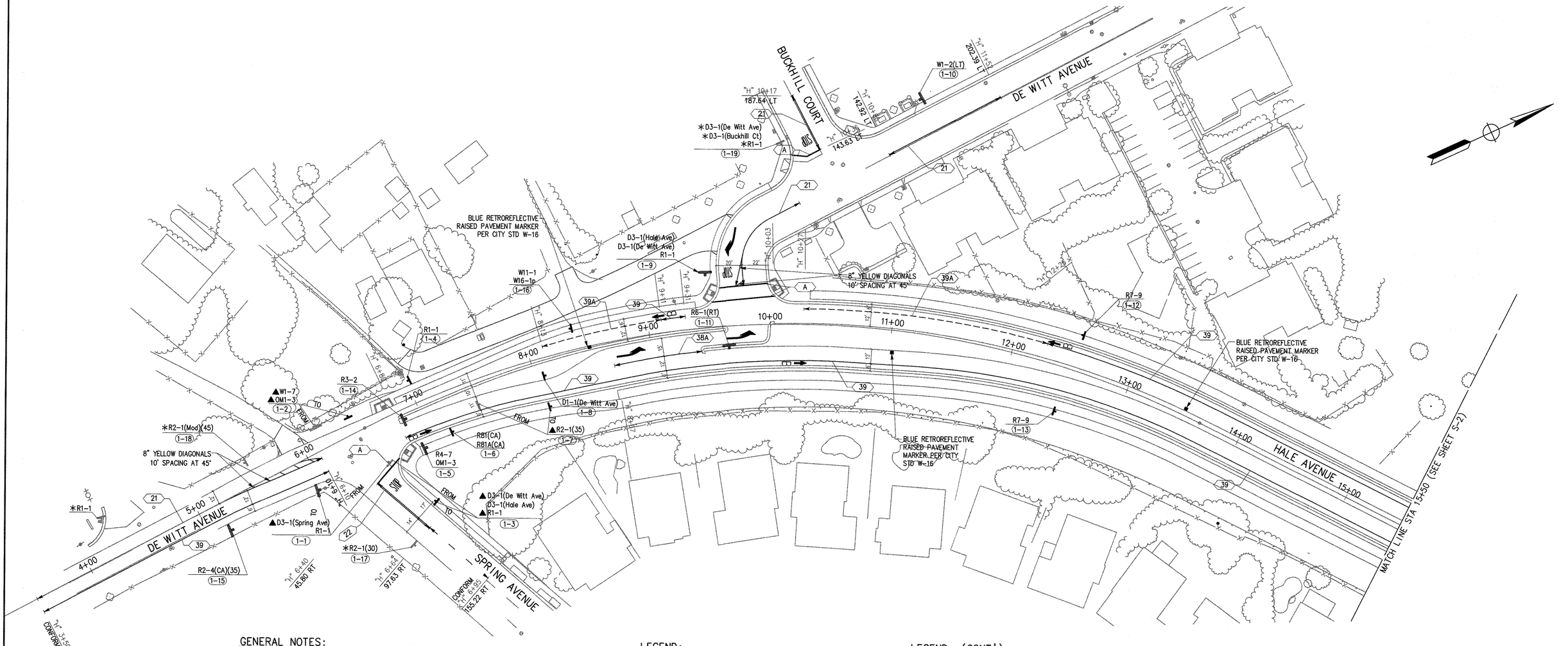
ELECTRICAL SYSTEM DETAILS

IMPROVEMENT PLANS FOR
HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

CITY FILE NO.	504E02
PLAN SET:	09/25/2020
DRAWING:	**E-6**
	79 OF 120

PLOT DATE: Sep 23, 2020-03:30:38pm CAD USER: mtenri
FILE NAME: N:\S_FILE\ES\ES-6(ELEV).dgn
PATH: D:\Project\2017\19037 Hale Ave Extension\

FILE NAME: HAE_S1-5 PLOT DATE: Sep 24, 2020 - 09:39:38am CAD USER: jkoche



GENERAL NOTES:

1. REMOVE CONFLICTING EXISTING STRIPING AS SHOWN OR AS DIRECTED BY THE ENGINEER.
2. TYPE 1 ARROW SHALL BE 10' UNLESS OTHERWISE SHOWN.
3. ALL STRIPING AND PAVEMENT MARKINGS SHALL BE THERMOPLASTIC UNLESS OTHERWISE NOTED.
4. EXACT LOCATION AND POSITION OF ROADSIDE SIGNS SHALL BE DETERMINED BY THE ENGINEER.
5. POST LENGTHS GIVEN ARE APPROXIMATE. EXACT LENGTHS TO BE DETERMINED BY THE ENGINEER.
6. CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING MATERIAL.
7. CONTRACTOR SHALL COORDINATE STRIPING AND SIGNING PLANS WITH LANDSCAPE PLANS.

LEGEND:

- No. — PAVEMENT DELINEATION DETAIL
- A — 12" THERMOPLASTIC STRIPE (WHITE)
- CHANGE OF PAVEMENT DELINEATION DETAIL
- "BIKE LANE SYMBOL" PAVEMENT MARKING WITH ARROW
- "SHARED ROADWAY BICYCLE" PAVEMENT MARKING
- STOP — "STOP" PAVEMENT MARKING
- YIELD — "YIELD" PAVEMENT MARKING
- "KEEP CLEAR" PAVEMENT MARKING
- TYPE III (L/R) ARROW
- TYPE IV (L) ARROW
- XW — 24" WIDE CROSSWALK STRIPING

LEGEND: (CONT')

- * — EXISTING SIGN TO REMAIN
- ■ — REMOVE ROADSIDE SIGN
- ▲ — RELOCATE ROADSIDE SIGN
- No. — ROADSIDE SIGN NUMBER
- EXISTING ROADSIDE SIGN
- EXISTING ROADSIDE SIGN MOUNTED TO ELECTROLIER
- ROADSIDE SIGN (ONE POST)
- ROADSIDE SIGN (TWO POST)
- ROADSIDE SIGN MOUNTED TO ELECTROLIER (STRAP AND SADDLE BRACKET METHOD)

CALTRANS STANDARD PLANS 2015 EDITION:

A20A – A20D	PAVEMENT MARKERS AND TRAFFIC LINES – TYPICAL DETAILS
A24A	PAVEMENT MARKINGS – ARROWS
A24B	PAVEMENT MARKINGS – ARROWS AND SYMBOLS
A24C	PAVEMENT MARKINGS – SYMBOLS AND NUMERALS
A24D	PAVEMENT MARKINGS – WORDS
A24E	PAVEMENT MARKINGS – WORDS, LIMIT AND YIELD LINES
A24F	PAVEMENT MARKINGS – CROSSWALKS

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL
City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL | DESIGN: SL | SCALE HOR. 1"=40'
CHECKED: MC | DATE: 09/25/2020 | SCALE VERT.
APPROVED: DATE: 9/25/2020 | JOB NO. SJ-17101
SCOTT C. CREER RCE 56879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21
SIGNATURE DATE

MARK THOMAS

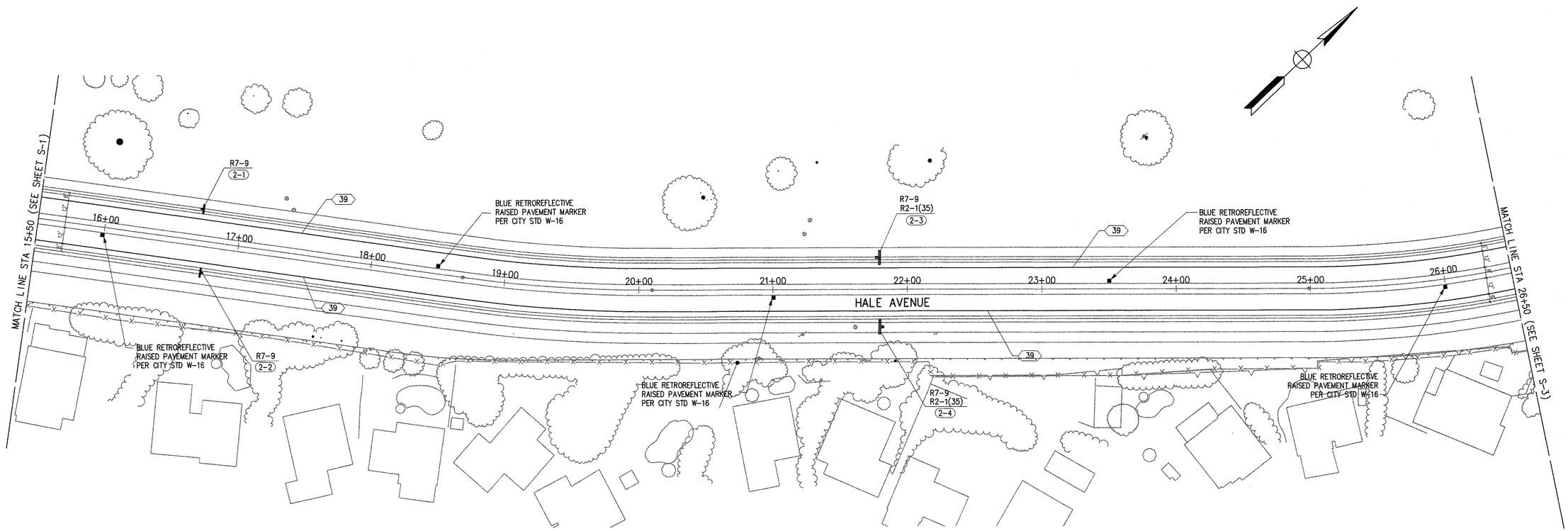
SIGNING & STRIPING PLAN STA 4+50 TO STA 15+50 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: S-1
80 OF 120

PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\Y\ADD\Sheet\

CAD USER: jsohn
PLOT DATE: Sep 23, 2020-03:16pm
FILE NAME: HAE_S1-5
PATH: J:\Morgan Hill\-SJ-17101-Hale Avenue Extension\VLADD\Sheet1\



BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:

AS-BUILT CORRECTIONS

BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=40'
CHECKED: MC	DATE: 09/25/2020	SCALE VERT.
APPROVED: DATE: 9/25/2020		JOB NO. SJ-17101

SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

MICHAEL K. COOPER 29072 3/31/2021 CIVIL STATE OF CALIFORNIA

SIGNATURE DATE

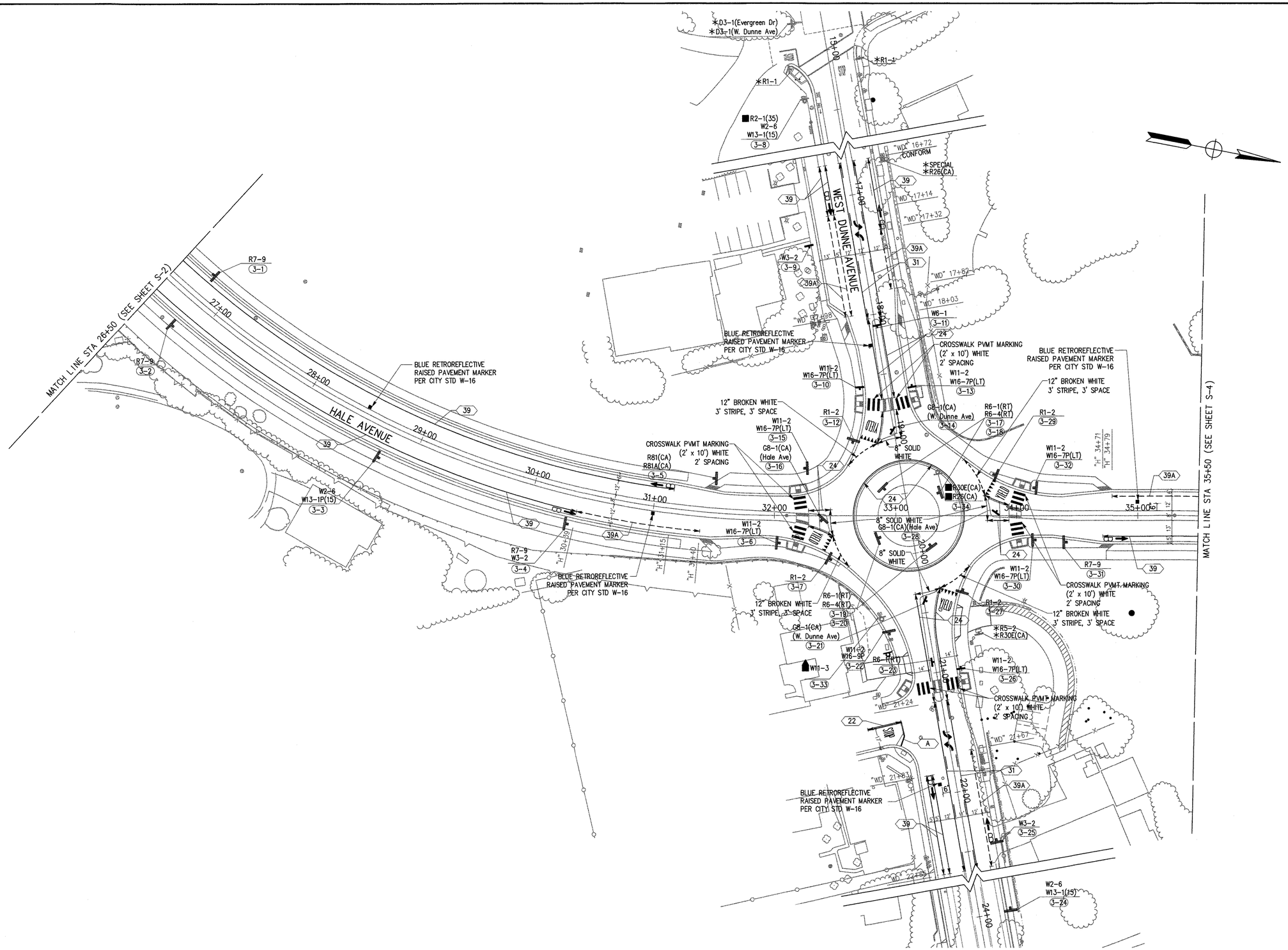
MARK THOMAS

SIGNING & STRIPING PLAN STA 15+50 TO STA 26+50 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **S-2**
81 OF 120

CAD USER: jkohe
PLOT DATE: Sep 23, 2020-03h12m2pm
FILE NAME: HAE_S1-5



BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=40'
CHECKED: MC	DATE: 09/25/2020	SCALE VERT.
APPROVED: DATE: 9/25/2020		JOB NO. SJ-17101

SCOTT C. CREER RCE 58879 — DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

SIGNATURE DATE

MARK THOMAS

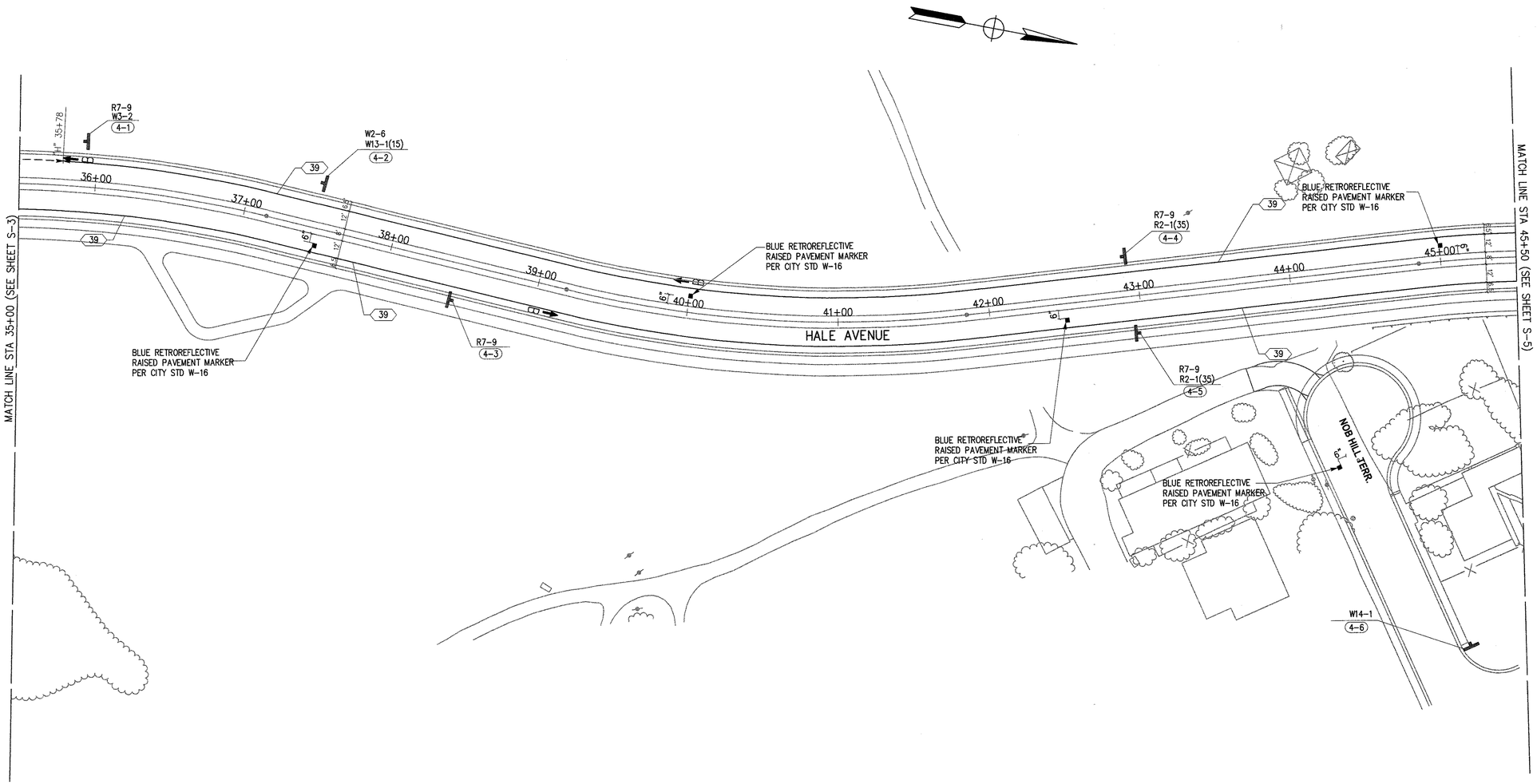
SIGNING & STRIPING PLAN STA 26+50 TO STA 35+50 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **S-3**
82 OF 120

PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CAD\Sheets\

CAD USER: jkohe
PLOT DATE: Sep 23, 2020 - 03:12pm
FILE NAME: HAE_S1-5
PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CADD\Sheet1\



BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=40'	
CHECKED: MC	DATE: 09/25/2020	SCALE VERT.	
APPROVED:	DATE: 9/20/2020	JOB NO. SJ-17101	

SCOTT C. CREER RCE 58679 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

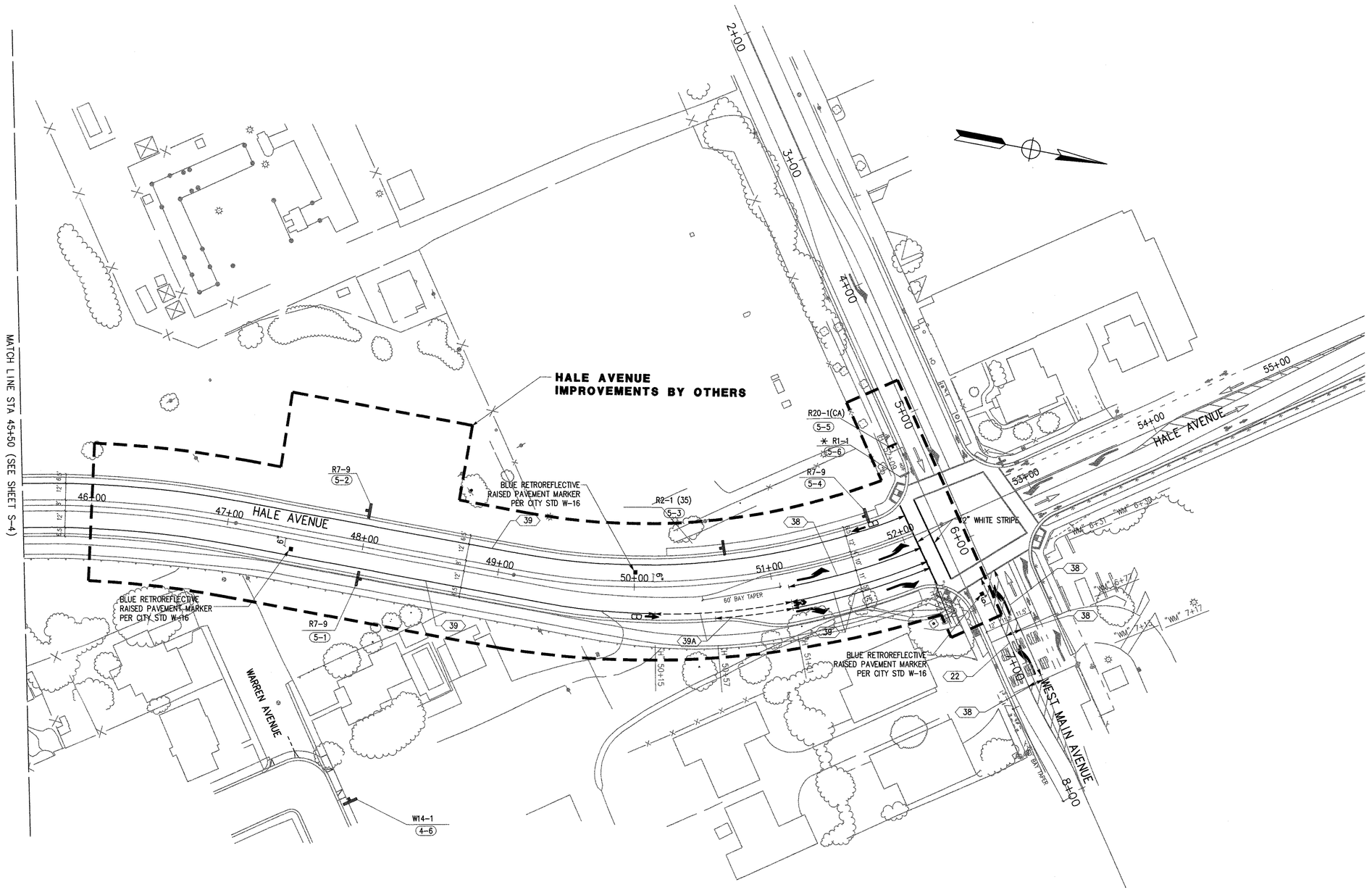
SIGNATURE DATE

MARK THOMAS

SIGNING & STRIPING PLAN STA 35+50 TO STA 45+50 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: S-4
83 OF 120



BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:

AS-BUILT CORRECTIONS

BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: SL	DESIGN: SL	SCALE HOR. 1"=40'
CHECKED: MC	DATE: 09/25/2020	SCALE VERT.
APPROVED: DATE: 9/25/2020		JOB NO. SJ-17101

SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

REGISTERED PROFESSIONAL ENGINEER MICHAEL K. COOPER 29072 5/31/2021 CIVIL STATE OF CALIFORNIA

SIGNATURE DATE

MARK THOMAS

SIGNING & STRIPING PLAN STA 45+50 TO STA 54+50 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: S-5
84 OF 120

PLOT DATE: Sep 23, 2021-03:12:29pm CAD USER: jackie
FILE NAME: HALE_S1-5
PATH: J:\Morgan Hill\SJ-17101-Hale Avenue Extension\CADD\Sheets\

PAVEMENT DELINEATION, MARKING, MARKER & OBJECT MARKER QUANTITIES

LEGEND:

"H" HALE AVENUE
"WD" WEST DUNNE AVENUE

STATION	LOCATION	THERMOPLASTIC TRAFFIC STRIPE DETAIL No.								PAVEMENT MARKER			OBJECT MARKER		THERMOPLASTIC PAVEMENT MARKING			
		21	24	27B	31	38A	39	39A		RETROREFLECTIVE			REFLECTIVE					
		DOUBLE 4" YELLOW	4" YELLOW	4" WHITE	4" DOUBLE YELLOW 12'-36' BROKEN	8" WHITE	6" WHITE	6" WHITE BROKEN 4'-8'	8" YELLOW DIAGONALS	BLUE RETROREFLECTICE RAISER	TYPE D	TYPE H	TYPE P	TYPE K-1	12" WHITE STRIPE	12" SOLID WHITE STOP BAR	ARROWS, SYMBOLS AND WORDS	12" YELLOW STRIPE
	UNIT	LF	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	SF			
"H" 4+57.30 TO "H" 6+02.63	Rt	512							102									
"H" 6+43.43, 51.51 Rt TO "H" 6+93.14, 153.86 Rt		445																
"H" 9+78.80, 32.43 Lt TO "H" 10+39.75, 111.83 Lt	Lt	240							233									
"H" 10+17.86, 183.92 Lt TO "H" 10+37.81, 140.19 Lt		185																
"H" 10+84.29, 143.34 Lt TO "H" 11+52.16, 202.79 Lt		410																
"H" 50+66.90, TO "H" 52+08.07	Lt								104									
"H" 52+66.51, 33.86 Lt TO "H" 52+58.92, 374.83 Lt		1,357		679														
"H" 52+64.62, 37.00 Rt TO "H" 52+56.95, 284.96 Rt		993		497														
"H" 52+74.85, TO "H" 54+91.73	Rt	790																
"H" 6+96.83 TO "H" 9+79.99	Rt		277															
"H" 9+81.42 TO "H" 32+09.89	Lt, Rt		4,415															
"H" 33+76.69 TO "H" 33+99.88	Lt, Rt		72															
"H" 34+10.88 TO "H" 52+08.21	Lt, Rt		3,591															
"H" 32+64.88 TO "H" 33+56.88	Lt, Rt		289															
"H" 32+21.88 TO "H" 32+47.01	Lt, Rt		89															
"WD" 18+07.02 TO "WD" 19+05.95	Lt, Rt		197															
"WD" 20+32.45 TO "WD" 21+30.65	Lt, Rt		199															
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"H" 8+75.76 TO "H' 9+81.42	Rt					201			77									
"H" 51+04.76 TO "H" 52+08.28	Rt					106												
"H" 52+82.58 TO "H" 53+56.91	Lt					75												
"H" 54+65.65 TO "H" 54+91.73	Lt, Rt					53												
"H" 52+66.51, 35.86' Lt TO "H" 52+35.80, 186.02' Lt	Lt					151												
"H" 52+64.62, 37.00 Rt TO "H" 52+49.91, 137.46 Rt	Rt					101												
"H" 6+93.27 TO "H" 32+09.89	Rt						2,508											
"H" 12+26.49 TO "H" 32+09.89	Lt						1,970											
"H" 34+11.88 TO "H" 50+40.30	Rt						1,630											
"H" 36+44.84 TO "H" 52+08.21	Lt						1,554											
"H" 8+49.78 TO "H" 9+29.95	Lt						82											
"WD" 16+72.38 TO "WD" 18+67.65	Lt, Rt				262		465											
"WD" 21+18.66 TO "WD" 22+46.26	Lt, Rt						371											
""H" 6+93.27 TO "H" 8+49.78	Lt							158										
"H" 10+27.36 TO "H" 12+26.49	Lt							203										
"H" 34+61.96 TO "H" 36+44.84	Lt							185										
"H" 4+57.30 TO 6+02.63	Rt															14	22	
"H' 6+46.28, 50.79 Rt TO 7+01.78, 149.40 Rt	Rt															40	22	
"H" 6+81.47 TO 9+81.42	Rt														124	11	234	
"H" 10+11.02, 21.53 Lt TO "H" 10+17.86, 183.92 Lt	Lt														112	25	86	
"H" 32+09.89 TO "H" 32+64.88	Lt, Rt														70		45	
"H" 33+56.88 TO "H" 34+10.88	Lt, Rt														81		51	
"H" 51+04.76 TO "H" 53+75.65	Lt, Rt																213	390
"H" 52+35.80, 186.04 Lt TO "H" 52+49.91, 137.46 Rt	Lt, Rt																210	
"WD" 16+72.38 TO "WD" 19+23.46	Lt, Rt														87		75	
"WD" 20+32.45 TO "WD" 22+46.26	Lt, Rt														83		72	
"H" 8+80.50	Rt									1								
"H" 10+17.24, 108.22 Lt	Lt									1								
"H" 12+00.01	Lt									1								
"H" 14+50	Rt									1								
"H" 17+00	Lt									1								
"H" 19+50	Rt									1								
"H" 22+00	Lt									1								
"H" 24+50	Rt									1								
"H" 27+00	Lt									1								
"H" 29+50	Rt									1								
"H" 35+00	Lt									1								
"H" 37+50	Rt									1								
"H" 40+00	Lt									1								
"H" 42+50	Rt									1								
"H" 45+00	Lt									1								
"H" 48+00	Rt									1								
"H" 50+00	Lt									1								
"WD" 18+26.09	Rt									1								
SUBTOTAL		4,932	9,079	1,176	492	794	8,580	546	516	18	–	–		–	557	96	1030	390
TOTAL		14,011		1,176	492	794	8,580	546	516	18					2,068			

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: BF	DESIGN: BF	SCALE HOR. NTS	
CHECKED: JK	DATE: 09/25/2020	SCALE VERT.	
APPROVED:	DATE: 9/29/2020	JOB NO. SJ-17101	

SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

REGISTERED PROFESSIONAL ENGINEER MICHAEL K. COOPER No. 29072 CIVIL STATE OF CALIFORNIA

SIGNATURE DATE

MARK THOMAS

PAVEMENT DELINEATION QUANTITIES

IMPROVEMENT PLANS FOR
MORGAN HILL **HALE AVE EXTENSION** CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **PDQ-1**
85 OF 120

CAD USER: jkiche
PLOT DATE: Sep 23, 2020 - 03:15pm
FILE NAME: HAE_PDQ-1.DGN-1
PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\1.A.00\Sheets\

ROADSIDE SIGN QUANTITIES

SIGN No. LETTER	SIGN CODE	SIGN SIZE L x D	POST TYPE, SIZE & LENGTH			SIGN AREA	ROADSIDE SIGN METHOD					REMARKS
			STEEL TUBE	WOOD POST 4"x4"	WOOD POST 4"x6"		METAL POST	WOOD POST ONE POST	WOOD POST TWO POST	SSBM	PEDESTRIAN BARRICADE TYPE I	
		in x in	LF			SF	EA					
1-1	R1-1	30 X 30	12			6.25	X					STOP
	D3-2	42 X 48	12			7	X					NO PEDESTRIAN CROSSING (SYMBOL)
1-2	W1-7											ADVANCE STREET NAME (2 LINES)
	CM1-3											
3	W2-4	30 X 30	12			6.25	X					
	R1-1	30 X 30	12			6.25						STOP
	D1-2	VARIES X 54	12			X						DESTINATION (2 LINES)
4	R4-7	24 X 30	12			5	X					KEEP RIGHT
5	R1-1	30 X 30	12			6.25	X					STOP
6	R81 (CA)	12 X 18	12			1.5	X					BIKE LANE
7	R7-9	12 X 18	12			1.5	X					NO PARKING BIKE LANE
8	R7-9	12 X 18	12			1.5	X					NO PARKING BIKE LANE
9	R3-2	24 X 24	12			4	X					MOVEMENT PROHIBITION
	R1-1	30 X 30	12			6.25						STOP
10	W1-2	30 X 30	12			6.25	X					HORIZONTAL ALIGNMENT
11	R6-1	36 X 12	12			3	X					ONE WAY
12	R81 (CA)	12 X 18	12			1.5	X					BIKE LANE
	R7-9	12 X 18	12			1.5						NO PARKING BIKE LANE
13	W11-2	30 X 30	12			6.25	X					PEDESTRIAN
	W16-7p	24 X 12	12			2						DOWNWARD DIAGONAL ARROW (PLAQUE)
14	W11-2	30 X 30	12			6.25	X					PEDESTRIAN
	W16-7p	24 X 12	12			2						DOWNWARD DIAGONAL ARROW (PLAQUE)
15	R1-2	30 X 36 X 36	12			7.5	X					YIELD
16	W3-2	30 X 30	12			6.25	X					ADVANCED TRAFFIC CONTROL
17	W6-1	36 X 36	12			9	X					DIVIDED HIGHWAY
18	W11-2	30 X 30	12			6.25	X					PEDESTRIAN
	W16-7p	24 X 12	12			2						DOWNWARD DIAGONAL ARROW (PLAQUE)
19	D1-1	VARIES X 18	12			X	X					STREET NAME AND ARROW
20	R6-1R	36 X 12	12			3	X					ONE WAY
	W1-8R	18 X 24	12			3						RIGHT CHEVRON ARROW WARNING
21	R6-1R	36 X 12	12			3	X					ONE WAY
	W1-8R	18 X 24	12			3						RIGHT CHEVRON ARROW WARNING
22	R1-2	30 X 36 X 36	12			7.5	X					YIELD
23	W11-2	30 X 30	12			6.25	X					PEDESTRIAN
	W16-7p	24 X 12	12			2						DOWNWARD DIAGONAL ARROW (PLAQUE)
24	W3-2	30 X 30	12			6.25	X					ADVANCED TRAFFIC CONTROL
	R7-9	12 X 18	12			1.5	X					NO PARKING BIKE LANE
25	D1-1	VARIES X 18	12			X	X					STREET NAME AND ARROW
26	W11-2	30 X 30	12			6.25	X					PEDESTRIAN
	W16-7p	24 X 12	12			2						DOWNWARD DIAGONAL ARROW (PLAQUE)
27	R1-2	30 X 36 X 36	12			7.5	X					YIELD
28	W11-2	30 X 30	12			6.25	X					PEDESTRIAN
	W16-7p	24 X 12	12			2						DOWNWARD DIAGONAL ARROW (PLAQUE)
29	W6-1	36 X 36	12			9	X					DIVIDED HIGHWAY
30	W3-2	30 X 30	12			6.25	X					ADVANCED TRAFFIC CONTROL
31	W11-2	30 X 30	12			6.25	X					PEDESTRIAN
	W16-7p	24 X 12	12			2						DOWNWARD DIAGONAL ARROW (PLAQUE)
32	D1-1	VARIES X 18	12			X	X					STREET NAME AND ARROW
33	R6-1R	36 X 12	12			3	X					ONE WAY
	W1-8R	18 X 24	12			3						RIGHT CHEVRON ARROW WARNING
34	R6-1R	36 X 12	12			3	X					ONE WAY
	W1-8R	18 X 24	12			3						RIGHT CHEVRON ARROW WARNING
35	R1-2	30 X 36 X 36	12			7.5	X					YIELD
36	R7-9	12 X 18	12			1.5	X					NO PARKING BIKE LANE
37	R7-9	12 X 18	12			1.5	X					NO PARKING BIKE LANE
38	R7-9	12 X 18	12			1.5	X					NO PARKING BIKE LANE
39	R7-9	12 X 18	12			1.5	X					NO PARKING BIKE LANE
40	R7-9	12 X 18	12			1.5	X					NO PARKING BIKE LANE
41	W11-2	30 X 30	12			6.25	X					PEDESTRIAN
	W16-7p	24 X 12	12			2	X					DOWNWARD DIAGONAL ARROW (PLAQUE)

ROADSIDE SIGN QUANTITIES

SIGN No. LETTER	SIGN CODE	SIGN SIZE L x D	POST TYPE, SIZE & LENGTH			SIGN AREA	ROADSIDE SIGN METHOD					REMARKS
			STEEL TUBE	WOOD POST 4"x4"	WOOD POST 4"x6"		METAL POST	WOOD POST ONE POST	WOOD POST TWO POST	SSBM	PEDESTRIAN BARRICADE TYPE I	
		in x in	LF			SF	EA					
42	D1-1	VARIES X 18	12			X	X					STREET NAME AND ARROW
43	R7-9	12 X 18	12			1.5	X					NO PARKING BIKE LANE
44	R6-1R	36 X 12	12			3	X					ONE WAY
45	D3-1	VARIES X 18	12			X	X					STREET NAME
	M6-2	30 X 21	12			4.4						DIRECTIONAL ARROW
46	R2-1	24 X 30	12			5	X					SPEED LIMIT 35 MPH
	R7-9	12 X 18	12			1.5						NO PARKING BIKE LANE
47	R2-1	24 X 30	12			5	X					SPEED LIMIT 35 MPH
	R7-9	12 X 18	12			1.5						NO PARKING BIKE LANE
48	R2-1	24 X 30	12			5	X					SPEED LIMIT 35 MPH
	R7-9	12 X 18	12			1.5						NO PARKING BIKE LANE
49	R2-1	24 X 30	12			5	X					SPEED LIMIT 35 MPH
	R7-9	12 X 18	12			1.5						NO PARKING BIKE LANE
50	R3-2	24 X 24	12			4	X					MOVEMENT PROHIBITION
51	R7-9	12 X 18	12			1.5	X					NO PARKING BIKE LANE
52	R7-9	12 X 18	12			1.5	X					NO PARKING BIKE LANE
53	R7-9	12 X 18	12			1.5	X					NO PARKING BIKE LANE
54	W2-6	30 X 30	12			6.25	X					CIRCULAR INTERSECTION
	W13-1(15)	18 X 18	12			2.25						SPEED LIMIT 15 MPH
55	W2-6					6.25	X					CIRCULAR INTERSECTION
	W13-1(15)	18 X 18	12			2.25						SPEED LIMIT 15 MPH
56	W2-6					6.25	X					CIRCULAR INTERSECTION
	W13-1(15)	18 X 18	12			2.25						SPEED LIMIT 15 MPH
57	W2-6					6.25	X					CIRCULAR INTERSECTION
	W13-1(15)	18 X 18	12			2.25						SPEED LIMIT 15 MPH
58	R2-1	24 X 30	12			5	X					SPEED LIMIT 35 MPH
TOTAL							60					

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: BF | DESIGN: BF | SCALE HOR.
CHECKED: JK | DATE: 09/25/2020 | SCALE VERT.
APPROVED: Scott C. Creer | DATE: 9/25/2020 | JOB NO. SJ-17101
SCOTT C. CREER RCE 58579 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

REGISTERED PROFESSIONAL ENGINEER MICHAEL K COOPER No. 29072 CIVIL STATE OF CALIFORNIA
SIGNATURE DATE

MARK THOMAS

MORGAN HILL

SIGN QUANTITIES

IMPROVEMENT PLANS FOR HALE AVE EXTENSION

CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: SQ-1
86 OF 120

CAD USER: jkohe
PLOT DATE: Sep 23, 2021-03:15:59pm
FILE NAME: HALE_PGM-1 SQ-1
PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CADD\Sheets\

PLOT DATE: Sep 22, 2020-03:48:19pm CAD USER: slee
FILE NAME: HAE-CS1
P:\Thr Jv\Morgan Hill\ 551-11701-Hale Avenue Extension\CAD\Sheets\



LEGEND:

- CONSTRUCTION AREA SIGN IDENTIFICATION
- SIGN (1 POST)
- SIGN (2 POSTS)

GENERAL NOTES:

1. LOCATIONS OF CONSTRUCTION AREA SIGNS SHOWN ARE APPROXIMATE. EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.
2. THE ROADWAY DESCRIPTION AND CLOSURE DATES SHALL BE APPROVED BY THE ENGINEER BEFORE INSTALLATION.
3. ADVANCE INFORMATION SIGNS SHALL BE INSTALLED 7 DAYS PRIOR TO ROAD CLOSURE.
4. MOUNTING WILL BE IN GROUND OR ON CONCRETE, AS REQUIRED. MOUNTING HEIGHT IS FROM GROUND TO BOTTOM OF SIGN.

96"

CITY OF MORGAN HILL
HALE AVENUE
EXTENSION PROJECT

CITY COUNCIL
* Mayor
* Vice Mayor

CITY OF MORGAN HILL

Civil Engineer*: Contractor*

* City Manager * Community Services Director * Public Works Director

48"

PROJECT IDENTIFICATION SIGN

* CITY TO PROVIDE NAME TO CONTRACTOR

CONSTRUCTION AREA SIGNS

SIGN	MUTCD CODE	PANEL SIZE (W" x H")	SIGN MESSAGE	No. OF POSTS AND SIZE	MOUNTING HEIGHT	No. OF SIGNS(N)
A	W20-1	36 x 36	ROAD WORK AHEAD	1-4" x 4"	7'	9
B	G20-2	36 x 18	END ROAD WORK	1-4" x 4"	7'	8
C	C40 (CA)	72 x 36	TRAFFIC FINES DOUBLED IN CONTRUCTION ZONES	2-4" x 6"	7'	9
D	SPECIAL	96 x 48	PROJECT IDENTIFICATION	2-6" x 8"	7'	2

(N) = NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: BF DESIGN: BF SCALE HOR. 1"=200'
CHECKED: JK DATE: 09/25/2020 SCALE VERT.
APPROVED: DATE: 9/25/2020 JOB NO. SJ-17101
SCOTT C. CREER RCE 58679 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

MICHAEL K. COOPER No. 29072 3/31/2021 CIVIL STATE OF CALIFORNIA

SIGNATURE DATE

MARK THOMAS

CONSTRUCTION AREA SIGNS

IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: CS-1
87 OF 120

CAD USER: steve
PLOT DATE: Sep 23, 2020-03:13:22pm
FILE NAME: HAE_SC1-3

GENERAL NOTES:

1. FOR DETAILS ON TRAFFIC HANDLING FOR STAGE CONSTRUCTION, SEE TRAFFIC HANDLING PLANS.
2. STAGE CONSTRUCTION PLANS DO NOT SHOW ALL WORK REQUIRED TO BE COMPLETED.
3. ALL UTILITIES SHALL BE CONSTRUCTED OR RELOCATED PRIOR TO COMMENCING WORK IN AREAS IMPACTED BY THE STAGE CONSTRUCTION WORK.
4. ALL PROPOSED AND RELOCATED UTILITIES ARE TO BE CONSTRUCTED AND IN SERVICE PRIOR TO REMOVAL OF EXISTING UTILITIES.
5. SEE TRAFFIC HANDLING PLANS FOR TEMPORARY STRIPING DETAILS.
6. SEE STRIPING AND SIGNING PLANS FOR PERMANENT STRIPING DETAILS.
7. SEE SIGNAL PLAN FOR SIGNAL INSTALLATION AT WEST MAIN AVENUE.

LEGEND:

- CONSTRUCT THIS STAGE
- GRIND & OVERLAY
- CONSTRUCT UTILITIES
- TRAVELED LANES IN THE DIRECTION OF TRAVEL

STAGE 1:

CONSTRUCTION:

PHASE A:

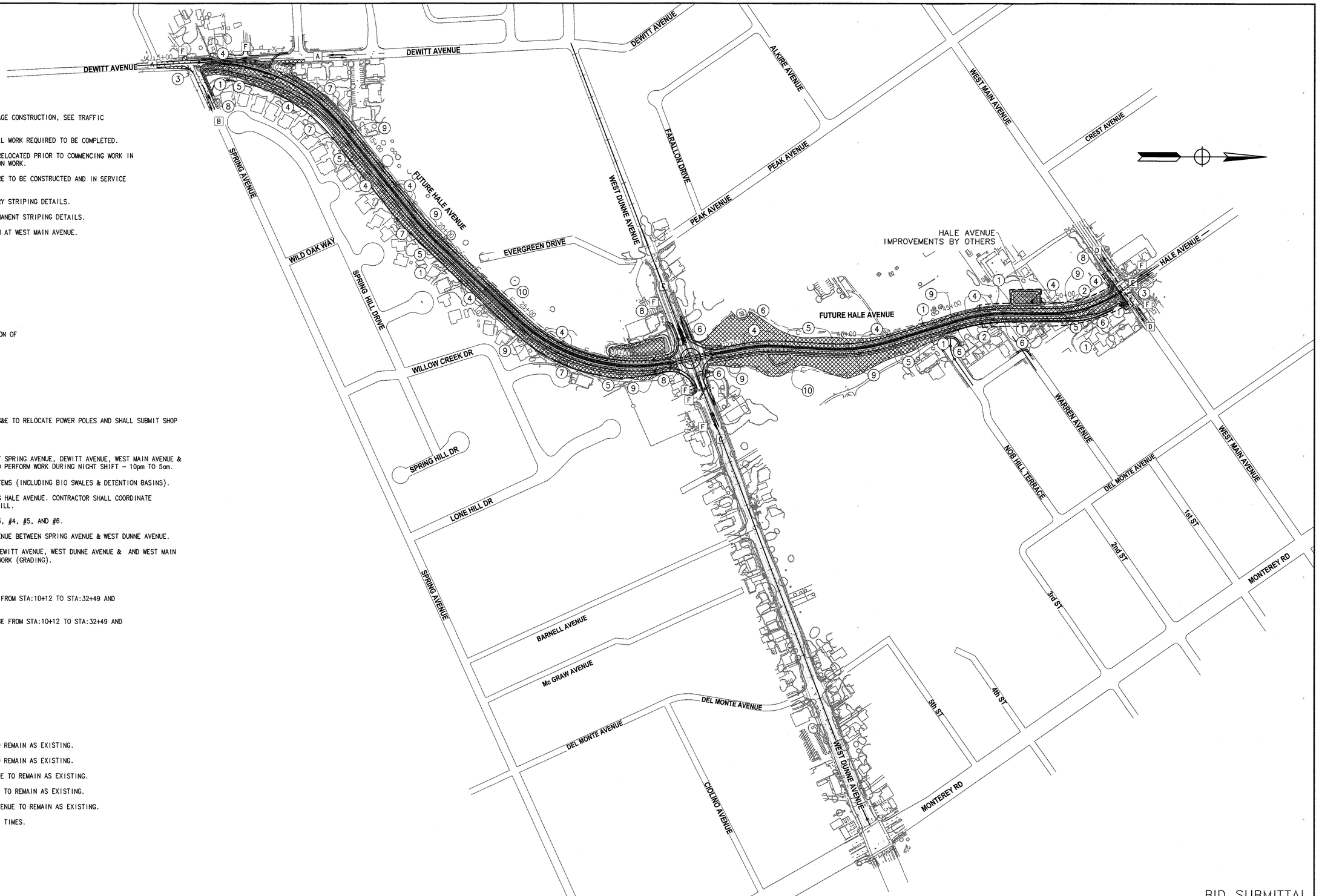
1. CONTRACTOR SHALL COORDINATE WITH PG&E TO RELOCATE POWER POLES AND SHALL SUBMIT SHOP DRAWINGS TO THE CITY ENGINEER.
2. DEMOLISH BLDG
3. GRIND & OVERLAY CONFORMING AREAS AT SPRING AVENUE, DEWITT AVENUE, WEST MAIN AVENUE & EXISTING HALE AVENUE. CONTRACTOR TO PERFORM WORK DURING NIGHT SHIFT – 10pm TO 5am.
4. CONSTRUCT PROPOSED STORM DRAIN SYSTEMS (INCLUDING BIO SWALES & DETENTION BASINS).
5. CONSTRUCT PROPOSED WATER MAIN ALONG HALE AVENUE. CONTRACTOR SHALL COORDINATE INSTALLATION WITH CITY OF MORGAN HILL.
6. CONSTRUCT RETAINING WALL #1, #2, #3, #4, #5, AND #6.
7. CONSTRUCT SOUND WALL ALONG HALE AVENUE BETWEEN SPRING AVENUE & WEST DUNNE AVENUE.
8. INSTALL CONSTRUCTION ENTRANCES AT DEWITT AVENUE, WEST DUNNE AVENUE & AND WEST MAIN AVENUE, AND PERFORM REQUIRED EARTHWORK (GRADING).

PHASE B:

9. CONSTRUCT MEDIAN ALONG HALE AVENUE FROM STA:10+12 TO STA:32+49 AND STA:33+79 TO STA:51+46
10. CONSTRUCT PVMT SECTION AT THIS STAGE FROM STA:10+12 TO STA:32+49 AND STA:33+79 TO STA:51+46

TRAFFIC:

- [A] TRAFFIC ALONG DEWITT AVENUE TO REMAIN AS EXISTING.
- [B] TRAFFIC ALONG SPRING AVENUE TO REMAIN AS EXISTING.
- [C] TRAFFIC ALONG WEST DUNNE AVENUE TO REMAIN AS EXISTING.
- [D] TRAFFIC ALONG WEST MAIN AVENUE TO REMAIN AS EXISTING.
- [E] TRAFFIC ALONG EXISTING HALE AVENUE TO REMAIN AS EXISTING.
- [F] DRIVEWAY TO REMAIN OPEN AT ALL TIMES.



BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: BF	DESIGN: BF	SCALE HOR. 1"=200'	
CHECKED: JK	DATE: 09/25/2020	SCALE VERT.	
APPROVED:	DATE: 9/25/2020	JOB NO. SJ-17101	

SCOTT C. CREER RCE 58879 — DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

SIGNATURE DATE

MARK THOMAS

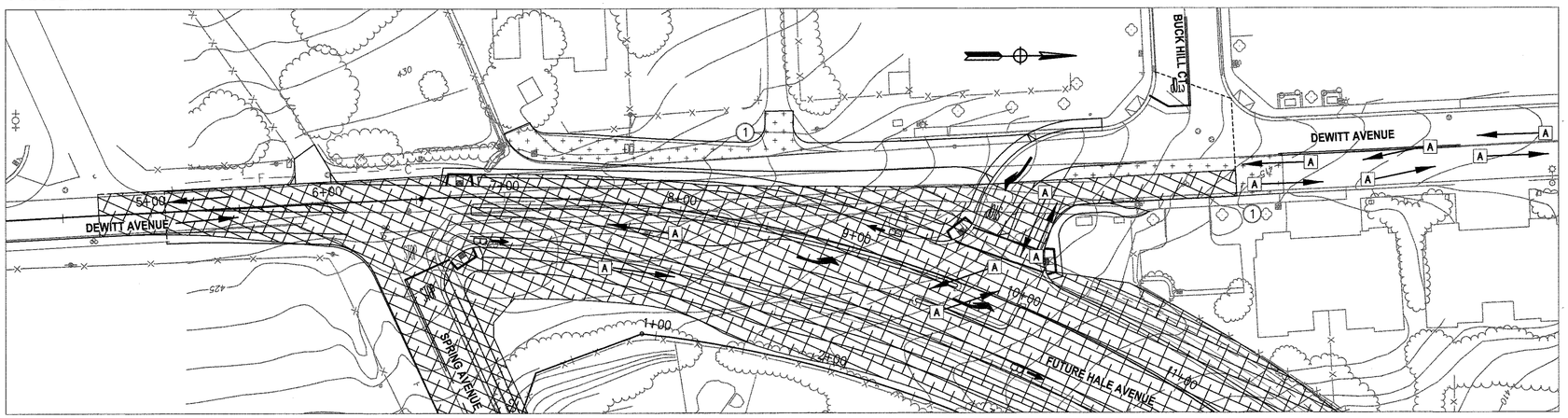
STAGE CONSTRUCTION PLAN
STAGE 1
IMPROVEMENT PLANS FOR
HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **SC-1**
88 OF 120

PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CADD\Sheets\

CAD USER: stee
PLOT DATE: Sep 23, 2020 - 03:33:39pm
FILE NAME: HAE_SC1-3
PATH: J:\Morgan Hill\SJ-17101-Hale Avenue Extension\CADD\Sheet1\

PHASE A



LEGEND:

- CONSTRUCTED PREVIOUS STAGE
- CONSTRUCT PHASE A
- CONSTRUCT PHASE B
- DIRECTION OF TRAVEL

STAGE 2:

CONSTRUCTION:

PHASE A – HALE/DEWITT:

(1) PERFORM REQUIRED GRADING & PVMT INSTALLATION (EXCLUDING FINAL LIFT) AT EAST SIDE OF DEWITT AVENUE & PORTION OF COMBINED DRIVEWAY

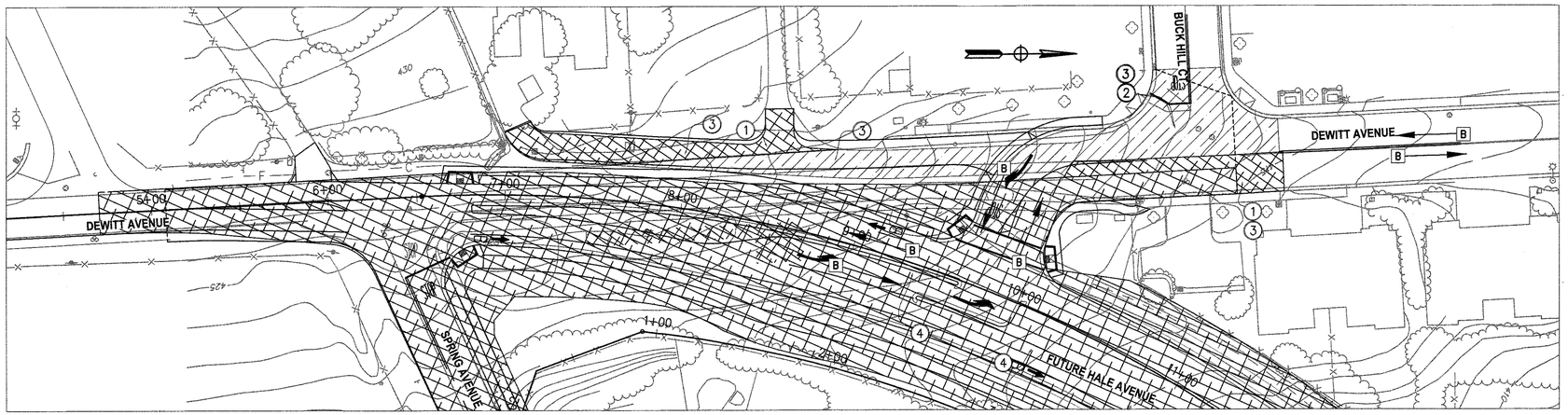
PHASE B – HALE/DEWITT:

(2) PERFORM REQUIRED GRADING & PVMT INSTALLATION (EXCLUDING FINAL LIFT) AT WEST SIDE OF DEWITT AVENUE & REMAINING PORTION OF COMBINED DRIVEWAY

(3) INSTALL FINAL LIFT OF PVMT AT DEWITT AVENUE & COMBINED DRIVEWAY. CONTRACTOR TO PERFORM WORK DURING NIGHT SHIFT – 10pm TO 5am.

(4) CONSTRACT MEDIAN WITH RAISED CURB TYPE 2" VERTICAL CURB PER CITY STD A-3.

PHASE B



TRAFFIC:

[A] TRAFFIC ALONG DEWITT / HALE AVENUE PHASE A.

[B] TRAFFIC ALONG DEWITT / HALE AVENUE PHASE B.

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: BF	DESIGN: BF	SCALE HOR. 1"=40'	
CHECKED: JK	DATE: 09/25/2020	SCALE VERT.	
APPROVED:	DATE: 9/25/2020	JOB NO. SJ-17101	

SCOTT C. CREER RCE 56879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

MICHAEL K. COOPER 29072 3/31/2021 CIVIL STATE OF CALIFORNIA

SIGNATURE DATE

MARK THOMAS

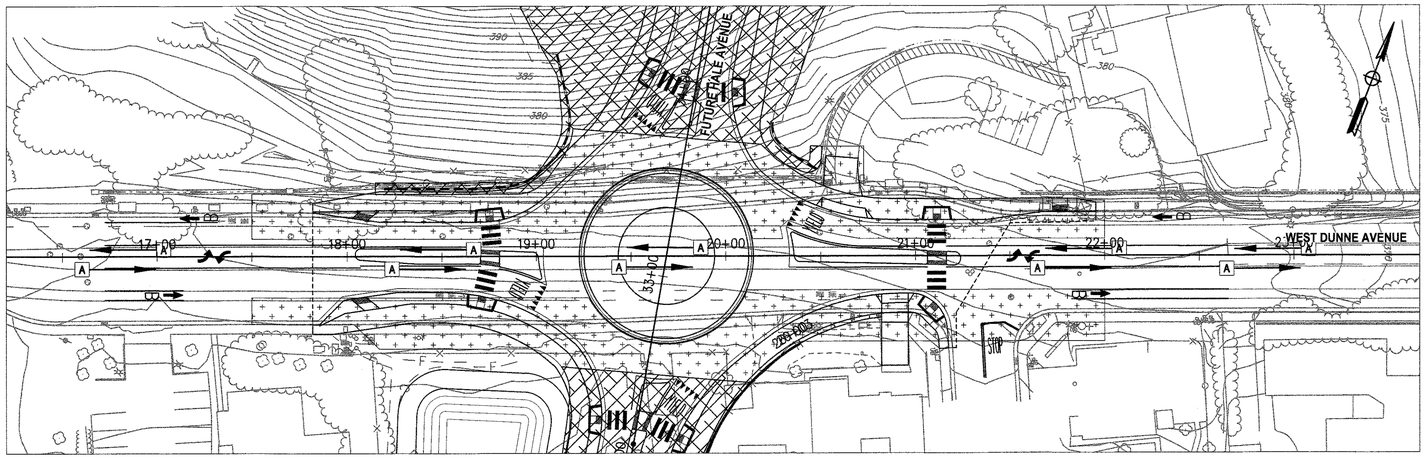
STAGE CONSTRUCTION PLAN STAGE 2 IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

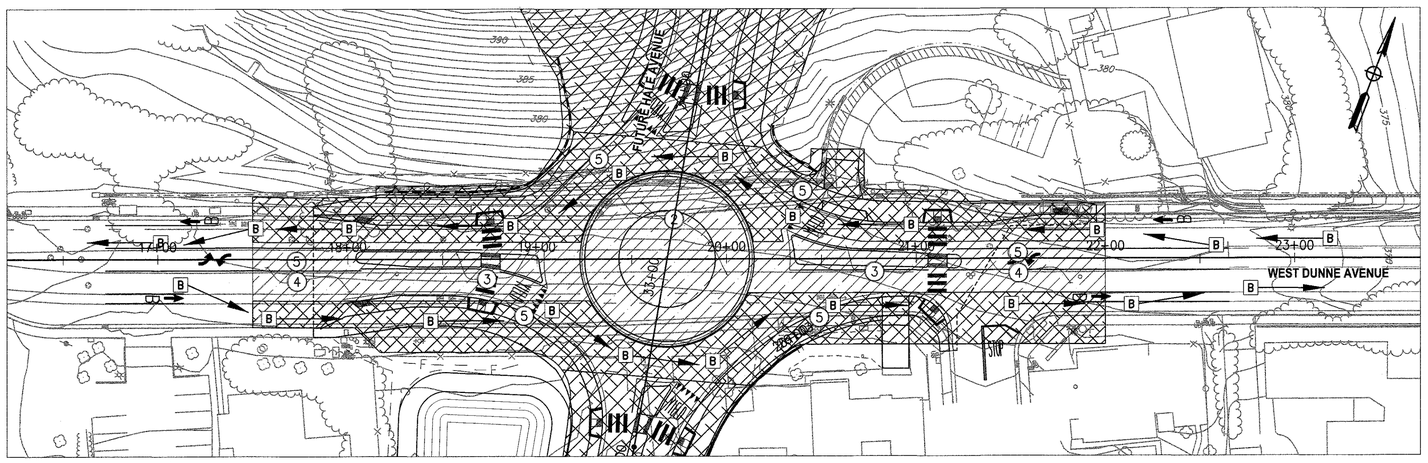
CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: SC-2
89 OF 120

PLOT DATE: Sep 23, 2020-03:33pm CAD USER: blee
FILE NAME: HAE_SC1-3
PATH: J:\Morgan Hill-SJ-17101-Hale Avenue Extension\CAD\Sheets\

PHASE A



PHASE B



LEGEND:

- CONSTRUCTED DURING PREVIOUS STAGE
- CONSTRUCT PHASE A
- CONSTRUCT PHASE B
- TRAVELED LANES IN THE DIRECTION OF TRAVEL

STAGE 2:

CONSTRUCTION:

PHASE A – ROUNDABOUT:

(1) PERFORM REQUIRED GRADING & PVMT INSTALLATION (EXCLUDING FINAL LIFT) AT NORTH & SOUTH PORTION OF ROUNDABOUT

PHASE B – ROUNDABOUT:

(2) CONSTRUCT RAISED MEDIAN & TRUCK APRON AT ROUNDABOUT

(3) CONSTRUCT MEDIANS AT WEST DUNNE AVENUE.

(4) CONSTRUCT PVMT SECTION (EXCLUDING FINAL LIFT) AT MIDDLE PORTION OF ROUNDABOUT AT WEST DUNNE AVENUE.

(5) CONSTRUCT FINAL LIFT OF PVMT AT ROUNDABOUT. CONTRACTOR TO PERFORM WORK DURING NIGHT SHIFT – 10pm TO 5am.

TRAFFIC:

[A] TRAFFIC ALONG WEST DUNNE AVENUE PHASE A.

[B] TRAFFIC ALONG WEST DUNNE AVENUE PHASE B.

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: BF	DESIGN: BF	SCALE HOR. 1"=40'	
CHECKED: JK	DATE: 09/25/2020	SCALE VERT.	
APPROVED:	DATE: 9/25/2020	JOB NO. SJ-17101	

SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

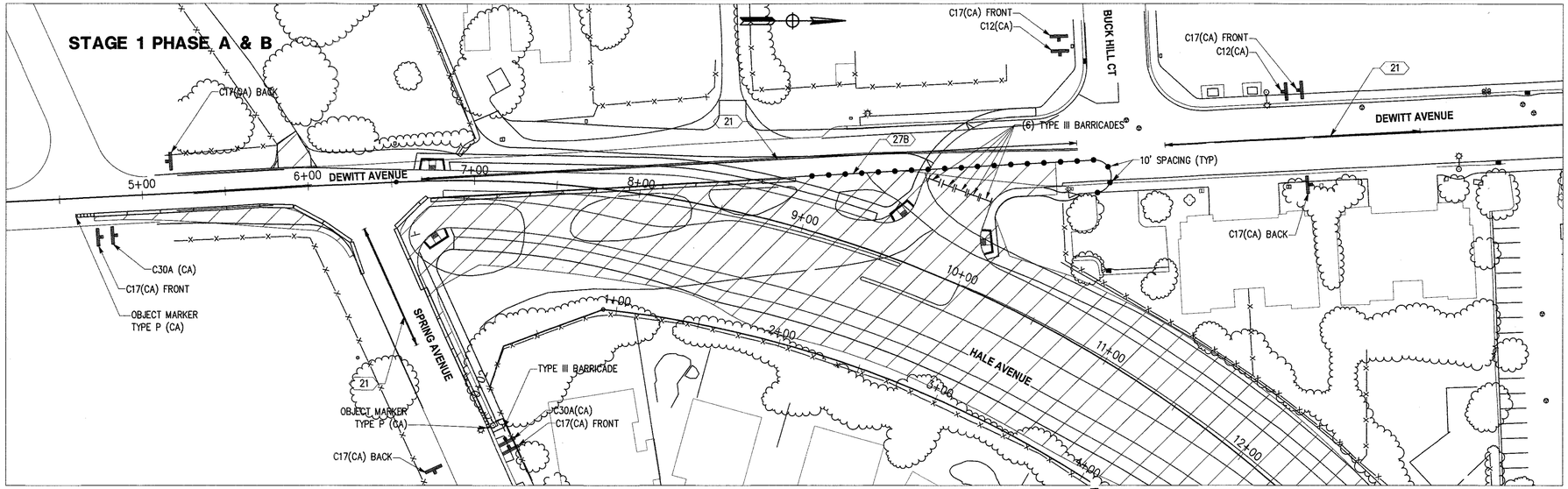
SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

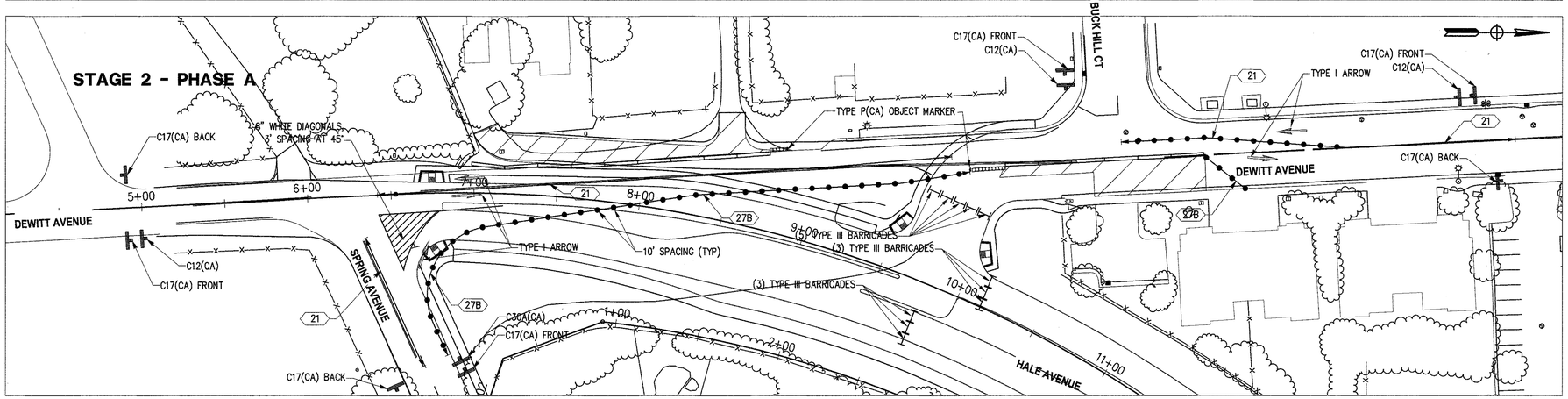
SIGNATURE DATE

MARK THOMAS

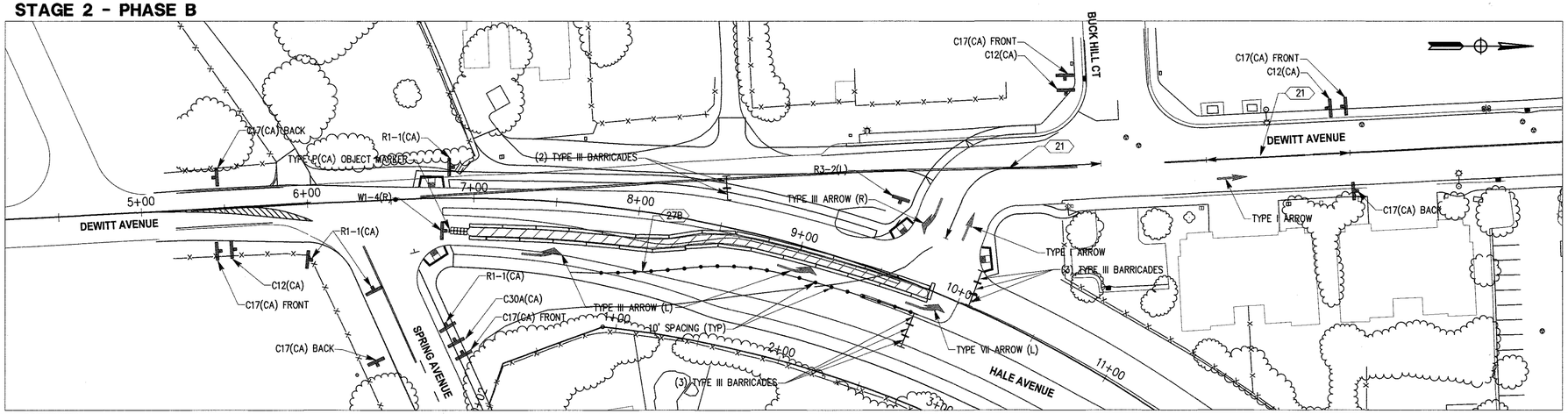
STAGE CONSTRUCTION PLAN
STAGE 2
IMPROVEMENT PLANS FOR
HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: SC-3
90 OF 120





STAGE 2 - PHASE B



LEGEND:

- CONSTRUCTION THIS STAGE
- OVERLAY
- TYPE III BARRICADE
- CHANNELIZER (SURFACE MOUNTED)
- TEMPORARY RAILING (TYPE K)
- TEMPORARY IN-LINE CRASH CUSHION
- TYPE P (CA) OBJECT MARKER
- 38A — TEMPORARY PAVEMENT DELINEATION DETAIL
- TEMPORARY

GENERAL NOTES:

1. UNLESS OTHERWISE NOTED, ALL TEMPORARY RAILING (TYPE K) SHALL BE PLACED NO CLOSER THAN 1.0 FOOT FROM EDGE OF CONSTRUCTION AREA. ANY TEMPORARY RAILING PLACED CLOSER THAN 2 FEET FROM EDGE OF CONSTRUCTION AREA SHALL BE BOLTED TO PAVEMENT (SEE CALTRANS STANDARD PLAN T-3 FOR DETAILS).
2. UNLESS OTHERWISE NOTED, ALL TRAFFIC LANES SHALL BE A MINIMUM OF 11 FEET WIDE.
3. ALL LEADING EDGES OF TEMPORARY RAILING (TYPE K) SHALL BE TAPERED 10:1 OR FLATTER WITH A 15 FEET MINIMUM OFFSET TO ETW, OR ELSE TUCKED BEHIND EXISTING RAILING OR BARRIER OR PROTECTED BY A TEMPORARY CRASH CUSHION.
4. TYPE P(CA) MARKER PANEL OBJECTS SHALL BE INSTALLED AT THE LEADING END OF TEMPORARY CRASH CUSHIONS.
5. SEE STRIPING AND SIGNING SHEETS FOR PERMANENT PAVEMENT DELINEATION PLANS.
6. CONTRACTOR SHALL REMOVE ALL CONFLICTING STRIPING AND SIGNING FROM PREVIOUS STAGE(S) BEFORE OPENING A NEW STAGE TO TRAFFIC.
7. CONTRACTOR SHALL MAINTAIN ACCESS FOR THE RESIDENTS WITHIN THE CONSTRUCTION AREA.
8. TRAFFIC HANDLING SHALL CONFORM TO THE LATEST DESIGN STANDARDS AND STANDARD DETAILS OF THE CITY OF MORGAN HILL AND THE STANDARD SPECIFICATIONS DATED MAY 2006, AND STANDARD PLANS DATED MAY 2010, OF THE CALIFORNIA DEPARTMENT OF TRANSPORTATION.

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

City of Morgan Hill
Public Works Department
CITY OF MORGAN HILL
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

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JK	09/25/2020	
APPROVED:	DATE:	JOB NO.
SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21	9/25/2020	SJ-17101

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21
SIGNATURE DATE

MARK THOMAS

TRAFFIC HANDLING - STAGE 1 & 2

IMPROVEMENT PLANS FOR HALE AVE EXTENSION

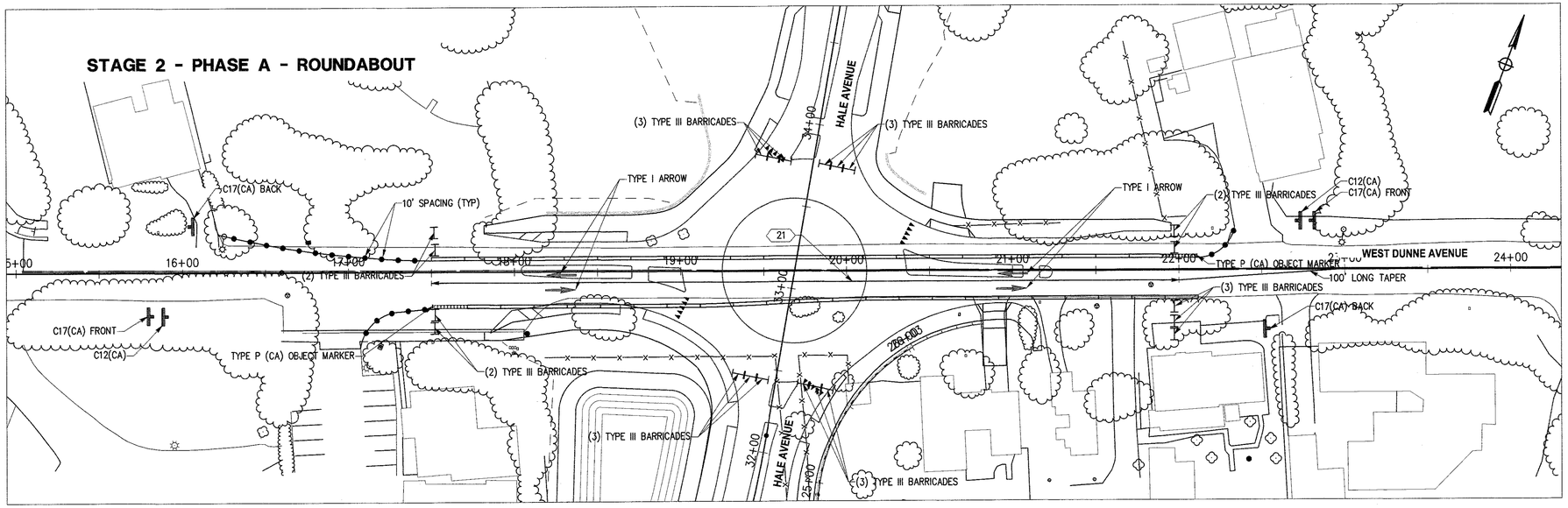
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: TH-1
91 OF 120

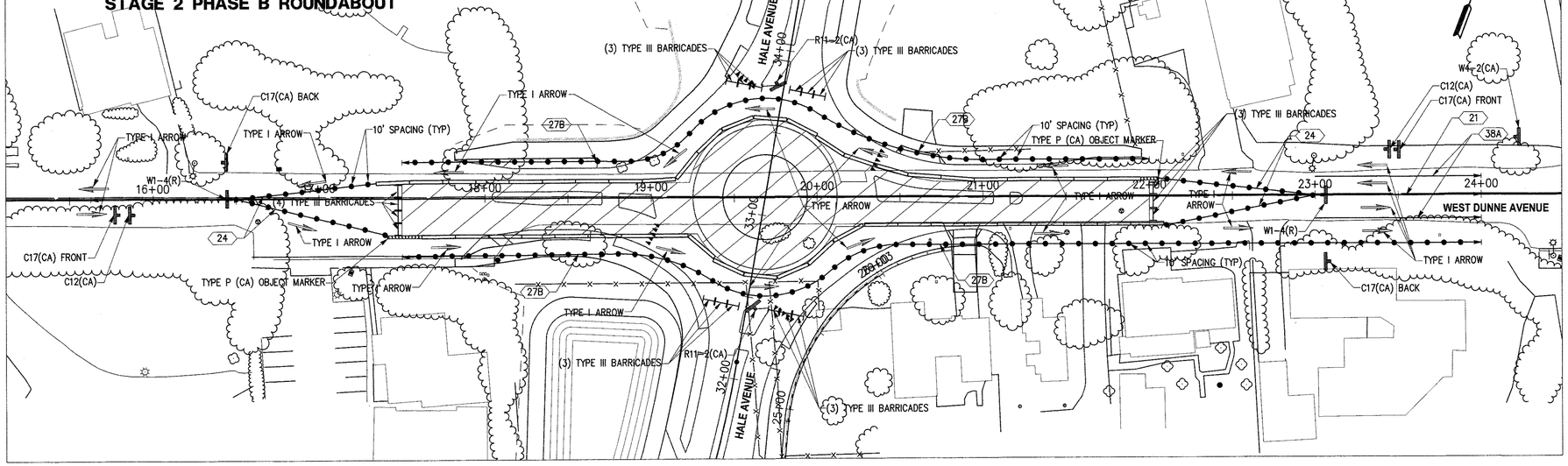
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PLOT DATE: Sep 23, 2020 - 03:19pm
CAD USER: Hae
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STAGE 2 - PHASE A - ROUNDABOUT



STAGE 2 PHASE B ROUNDABOUT



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City of Morgan Hill
Public Works Department
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SCOTT C. CREER RCE 58879 — DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

SIGNATURE DATE

MARK THOMAS

TRAFFIC HANDLING - STAGE 2

IMPROVEMENT PLANS FOR HALE AVE EXTENSION

MORGAN HILL CALIFORNIA

CITY FILE NO.	504E02
PLAN SET:	09/25/2020
DRAWING:	TH-2
	92 OF 120

CAD USER: alee
PLOT DATE: Sep 23, 2020-03:19:20pm
FILE NAME: HAE_TH1-3
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TRAFFIC HANDLING QUANTITIES (FOR INFORMATION ONLY)

TRAFFIC HANDLING STAGES	SHEET No.	TRAFFIC HANDLING ITEMS							
		TEMPORARY PAVEMENT MARKING (PAINT)	TEMPORARY TRAFFIC STRIPE (PAINT)	TEMPORARY OBJECT MARKER TYPE P	TEMPORARY PAVEMENT MARKER	TYPE III BARRICADE	TEMPORARY RAILING (TYPE K)	CHANNELIZER (SURFACE MOUNTED)	TEMPORARY IN-LINE CRASH CUSHION
		SF	LF	EA	EA	EA	LF	EA	EA
STAGE 1	TH-1	313	837	2	210	7	364	21	2
STAGE 2A	TH-1	436	1,265	2	320	12	301	56	1
STAGE 2B	TH-1	376	327	2	90	6	842	24	4
STAGE 2A-ROUNDABOUT	TH-2	124	450	2	120	21	880	20	2
STAGE 2B-ROUNDABOUT	TH-2	589	1,794	2	450	19	947	157	2
TOTAL		1,838	4,673	10	1,190	65	3,334	278	11

TRAFFIC HANDLING SIGNS (FOR INFORMATION ONLY)

MUTCD CODE	PANEL SIZE (W" x H")	SIGN MESSAGE	No. OF POSTS AND SIZE	MOUNTING HEIGHT	SIGNS PER SHEET		No. OF SIGNS
					TH-1	TH-2	
W1-4 (R)	24 X 24		X	X 9	2	2	4
C12 (CA)	36 x 36	NARROW LANE	X	X 10	8	4	12
C17 (CA) FRONT	24 X 24	ROAD WORK/SPEED LIMIT	X	X 9	12	4	16
C17 (CA) BACK	24 X 24	ROAD WORK/SPEED LIMIT	X	X 9	9	4	13
C30A (CA)	30 x 30	SHOULDER CLOSED	X	X 10	4	–	4
R5-1 (CA)	30 x 30	DO NOT ENTER	X	X 10	–	4	4
R1-1 (CA)	30 x 30	DO NOT ENTER	X	X 10	3	–	3

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AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

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BF	BF	NTS
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JK	09/25/2020	
APPROVED:	DATE:	JOB NO.
SCOTT C. CREER RCE 58879 DEPUTY DIRECTOR FOR ENGINEERING EXP. DATE 6-30-21	9/25/2020	SJ-17101

SUPERVISED BY:
MICHAEL K. COOPER
REGISTERED CIVIL ENGINEER
RCE 29072
EXP. DATE 3-31-21

REGISTERED PROFESSIONAL ENGINEER MICHAEL K. COOPER No. 29072 3/31/2021 CIVIL STATE OF CALIFORNIA

SIGNATURE DATE

MARK THOMAS

TRAFFIC HANDLING QUANTITIES

IMPROVEMENT PLANS FOR
MORGAN HILL **HALE AVE EXTENSION** CALIFORNIA

CITY FILE NO. 504E02
PLAN SET: 09/25/2020
DRAWING: **THQ-3**
93 OF 120

G IRRIGATION GENERAL NOTES

I. GENERAL IRRIGATION INFORMATION

1. DRAWINGS ARE GENERALLY DIAGRAMMATIC AND INDICATIVE OF THE WORK TO BE INSTALLED. DUE TO THE SCALE OF THE DRAWING, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, SLEEVES, THRUST BLOCKS, ETC., WHICH MAY BE REQUIRED. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE ALL CONDITIONS AFFECTING CONSTRUCTION AND PLAN WORK ACCORDINGLY, FURNISHING FITTINGS, ETC., AS REQ'D. REFER TO IRRIGATION DTL'S.

2. LAYOUT OF PIPING & LOCATIONS OF VALVES ARE SHOWN DIAGRAMMATICALLY. ALL PIPING, VALVES, ETC. SHOWN WITHIN THE ROADWAY ARE FOR CONSTRUCTION CLARIFICATION ONLY. ALL IRRIGATION EQUIPMENT TO BE INSTALLED WITHIN PLANTING AREAS, WHERE POSSIBLE.

3. DO NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM IF IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES OR AREA DIMENSIONS DIFFER FROM PLANS. SUCH OBSTRUCTIONS OR DIFFERENCES SHALL BE BROUGHT TO THE ATTENTION OF THE CITY ENGINEER. IN THE EVENT THAT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY DUE TO INSTALLATION OF EQUIPMENT IN WRONG LOCATIONS.

4. RECORD PRESSURE READING AT EACH METER TO VERIFY INFORMATION PROVIDED ABOUT AVAILABLE PRESSURE @ EACH POINT OF CONNECTION TO THE WATER SUPPLY LINE. REPORT ANY DIFFERENCE BETWEEN THE WATER PRESSURE INDICATED IN DTL. D, THIS SHT. AND THE ACTUAL PRESSURE READING TO CITY ENGINEER BEFORE PROCEEDING WITH WORK AT THAT METER.

5. ADJUST PRESSURE REGULATION MODULE'S AT EACH RCV TO OBTAIN REQUIRED OPERATING PRESSURE.

II. CONTROLLER & WIRING

CONTRACTOR TO SUPPLY ELECTRICAL SERVICE TO CONTROLLER LOCATION.

1. EACH REMOTE CONTROL VALVE STATION NUMBER SHALL BE WIRED TO THE SAME STATION ON THE CONTROLLER. SPLICING OF WIRES WILL NOT BE PERMITTED EXCEPT IN VALVE OR PULL BOXES. LEAVE A 36" COIL OF EXCESS WIRE AT EACH SPLICE AND 100 FEET ON CENTER ALONG WIRE RUN. TAPE WIRE IN BUNDLES 10 FEET ON CENTER. NO TAPING INSIDE SLEEVES.

2. ADJUST IRRIGATION CONTROLLER RUN TIME FOR OPTIMUM WATERING.

3. CONTROLLER, 2 WIRE SYSTEM, IS TO BE INSTALLED AS PER RAINMASTER SPECIFICATIONS.

III. BUBBLERS/SPRAY/AND ROTOR HEADS

1. FLUSH AND ADJUST ALL HEADS FOR OPTIMUM PERFORMANCE AND TO PREVENT OVER SPRAY ONTO WALKS, ROADWAYS AND/OR STRUCTURES.

2. ALL BUBBLER/SPRAY HEADS SHALL BE SET PERPENDICULAR TO FINISH GRADE OF THE AREA TO BE IRRIGATED.

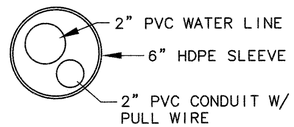
3. WHERE LOW HEAD DRAINAGE WILL CAUSE EROSION AND EXCESS WATER INSTALL A KING BROS. CV SERIES CHECK VALVE, OR EQUAL, ON LATERAL LINE..

4. WHEN VERTICAL OBSTRUCTIONS (STREET LIGHTS, FIRE HYDRANTS, ETC.) INTERFERE WITH THE SPRAY PATTERN OF THE HEADS, THE IRRIGATION CONTRACTOR SHALL FIELD ADJUST THE SPRINKLER SYSTEM TO PROVIDE PROPER COVERAGE.

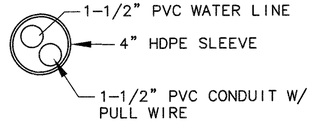
F IRRIGATION CROSSOVER

REFER TO KEYED NOTES, LEGEND. THIS SHT. FOR ADD'L. INFO ON CROSSOVERS

TYPE 1



TYPE 2



E IRR. CONTROLLER

SYM.	
C1	IRRIGATION CONTROLLER ASSEMBLY: RAIN MASTER EAGLE PLUS, # EGP-TW-PSB, 2 WIRE SYSTEM. OR APPR. EQ, PER DTL. 7, SHT. IR-8. INCLUDES ALL CONN. TO RCV'S & OTHER MISC. ITEMS PER SPEC'S. COORDINATE CONTROLLER & 2 WIRE LINE CONFIGURATION LOCATIONS IN THE FIELD, PRIOR TO CONSTR. CONTROLLER TO INCLUDE (2) SPARE WIRES, RUN TO EACH END OF MAINLINE, COIL WIRES 36" IN A RCV BOX. LABEL SPARE CONTROL WIRES. ALL WIRES TO BE 14 GAUGE. CONTROLLER TO BE INSTALLED IN A 16 GAUGE STAINLESS STEEL ENCLOSURE AS PER RAIN MASTER SPECIFICATIONS.

CONTROLLER AS FOLLOWS:

NO.	CONTROLLER
C1	CONTROLLER

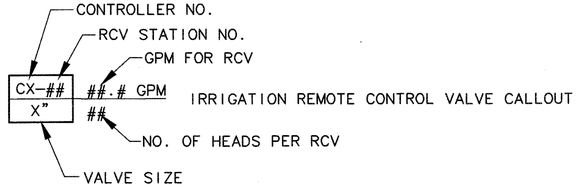
D IRRIGATION WATER METER INFO.

METER NO.	METER SIZE	METER SYSTEM	PRESSURE @ POC	DESIGN PRESSURE
M1	2"	sPRING AVE. TO W. DUNNE AVE.	90	25 – 40
M2	2"	WEST DUNNE AVE. TO W. MAIN AVE.	90	25 – 40

A IRRIGATION EQUIPMENT LEGEND

ALL IRRIGATION EQUPMENT AND PIPING TO BE LABELED WITH NON-POTABLE WATER TAGS

SYM	MANF./TYPE	MODEL NO.	DESCRIPTION
POC	——	——	POINT OF CONNECTION AT WATER METER, C1 & C2 . REFER TO ITEM D, THIS SHT.
⊙ < ⋖	TORO	570Z PRX w/ MPR NOZZLES	SPRAY HEAD
●	TORO	500 SERIES	FLOOD BUBBLER
○	TORO	570Z PRX	SPECIAL PATTERN (4-SST (4'x30') NOZZLES
+●	WEATHERMATIC_____		REMOTE CONTROL VALVE (RCV), SIZE PER ITEM B, THIS SHT.
▬ ▬	SCHED. 40 CLASS 315	1-1/2 MIN. 2" & LARGER	IRRIGATION MAINLINE, PURPLE, PVC, 1-1/2" MIN. IRRIGATION MAINLINE, PURPLE, PVC, 2" OR LARGER
———	SCHED 40	1" MIN.	IRRIGATION LATERAL LINES, PURPLE, PVC, REFER TO ITEM C, THIS SHT. FOR SIZING CHART
◓	MATCO	BRASS	ISOLATION GATE VALVE – NORMALLY OPENED
+◆	RAINBIRD	44-NP	QUICK COUPLER (QCV), 1", 2-PIECE BODY, PROVIDE (4) 44-K-VALVE KEYS
BFP	FEBCO	825Y	REDUCED PRESSURE BACKFLOW PREVENTER
C1	XXX	XXX	IRRIGATION CONTROLLER. REFER TO ITEM E, THIS SHT. FOR MODEL NO., SIZES & ADD'L INFO.
M2	2" WATER METER FOR IRRIGATION SYSTEM, REFER TO ITEM D, THIS SHT.		
═ ═	IRRIGATION LINES IN CROSSOVER, REFER TO ITEM F, THIS SHT. FOR SIZES. VERIFY LOCATIONS IN THE FIELD		
— —	POTABLE WATER LINE, REFER TO SEWER & WATER SHT'S.		
XX	IRRIGATION KEYED NOTE W/ DESCRIPTION OF WORK.		



C MAINLINE & LATERAL LINE SIZING CHART

RANGE IN GPM	LINE SIZE
1.00 TO 10.00	¾"
10.01TO 16.00	1"
16.01TO 26.00	1¼"
26.01TO 35.00	1½"
35.01TO 55.00	2"

B RCV SIZING CHART

MODEL NO. XXX-PESB-PRS-D, PURPLE HANDLE

RANGE IN GPM	LINE SIZE
5.00 TO 20.00	1"
20.01TO 50.00	1-1/2"

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NO.	DESCRIPTION	DATE	BY

REVISIONS

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BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: R.R. DESIGN: R.C.G. SCALE HOR.
CHECKED: DATE: SCALE VERT.
APPROVED: DATE: 9/29/2020 JOB NO. SJ-17101
KARL D. KLEMZ CITY ENGINEER EXP. DATE:

SUPERVISED BY:
SIGNATURE 9/25/2020 DATE

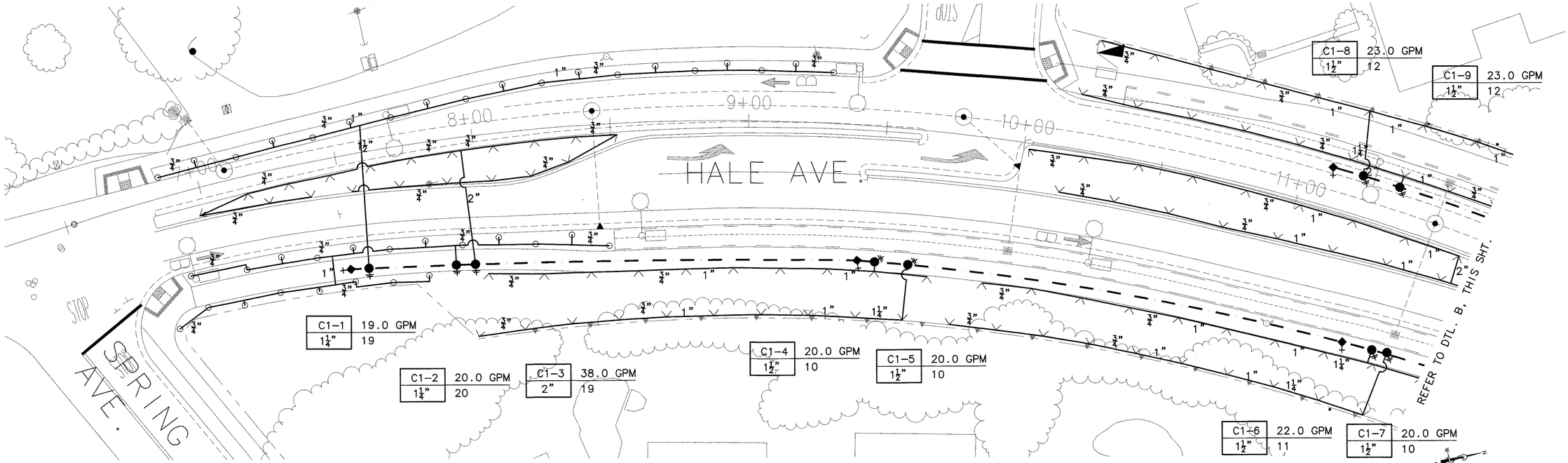
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Ph: 408.390.0777

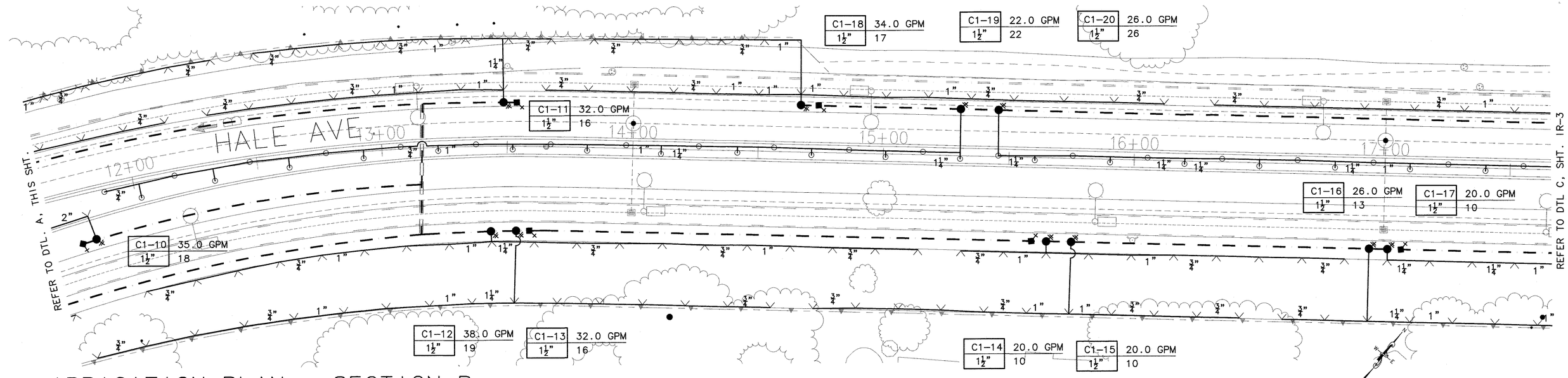
IRRIGATION LEGEND & NOTES

IMPROVEMENT PLANS FOR
MORGAN HILL HALE AVE EXTENSION CALIFORNIA

CITY FILE NO. 504E02
PLAN SET:
DRAWING: IR-1
94 OF 120



A IRRIGATION PLAN – SECTION A



B IRRIGATION PLAN – SECTION B

STATION LINE ON THIS SHEET ARE NOT TO SCALE. DO NOT SCALE OR USE STATION LINE TO MEASURE DISTANCE. REFER TO SHT. _____ THRU. _____, HORIZONTAL CONTROL PLANS FOR EXACT LOCATION. STATION LINE ON THIS PLAN HAS BEEN OFFSET 10' FOR CLARITY.

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

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CHECKED: DATE: SCALE VERT. SAME
APPROVED: DATE: 9/25/2020 JOB NO. SJ-17101
KARL D. KRIKORIAN CITY ENGINEER

SUPERVISED BY:
SIGNATURE 9/25/2020 DATE

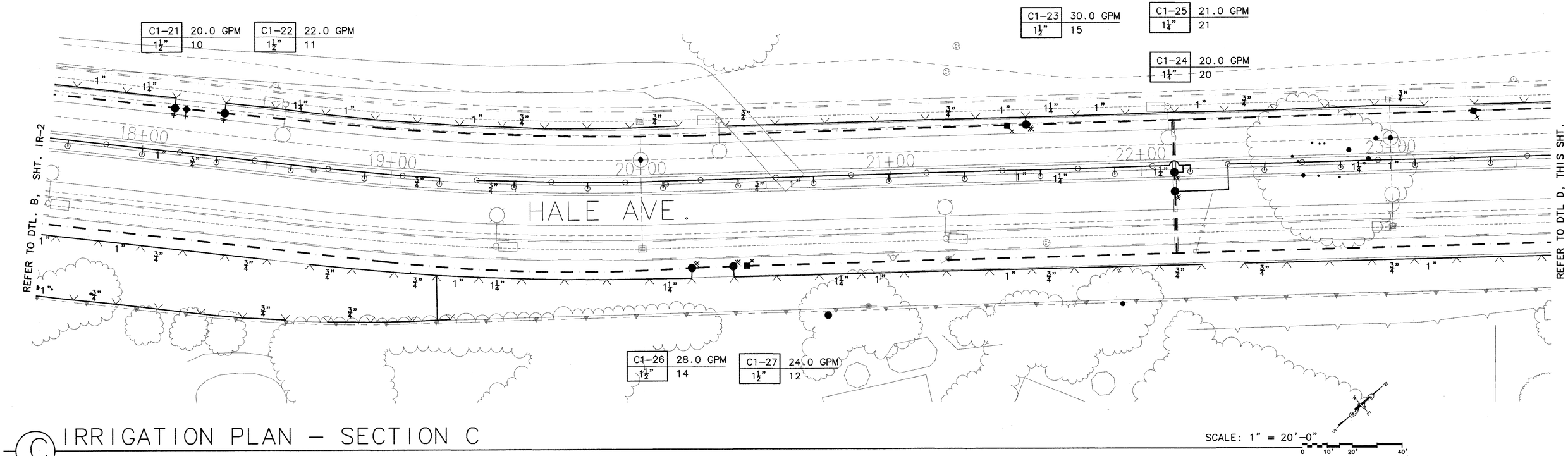
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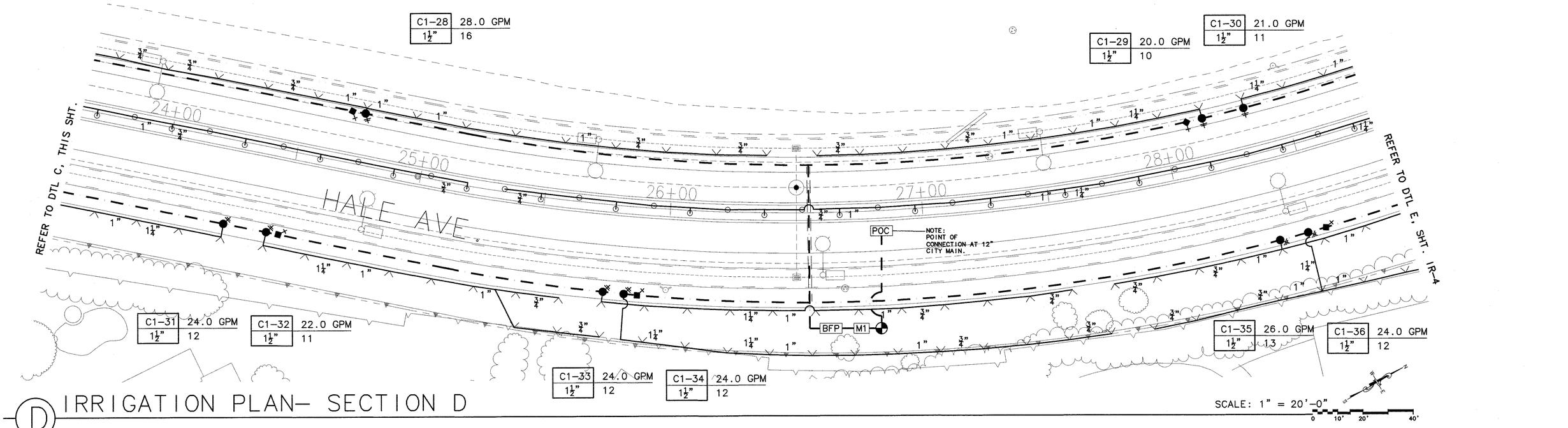
IRRIGATION PLAN

IMPROVEMENT PLANS FOR
MORGAN HILL HALE AVE EXTENSION CALIFORNIA

CITY FILE NO. 504E02
PLAN SET:
DRAWING: IR-2
95 OF 120



C IRRIGATION PLAN – SECTION C



D IRRIGATION PLAN– SECTION D

STATION LINE ON THIS SHEET ARE NOT TO SCALE. DO NOT SCALE OR USE STATION LINE TO MEASURE DISTANCE. REFER TO SHT. _____ THRU. _____, HORIZONTAL CONTROL PLANS FOR EXACT LOCATION. STATION LINE ON THIS PLAN HAS BEEN OFFSET 10' FOR CLARITY.

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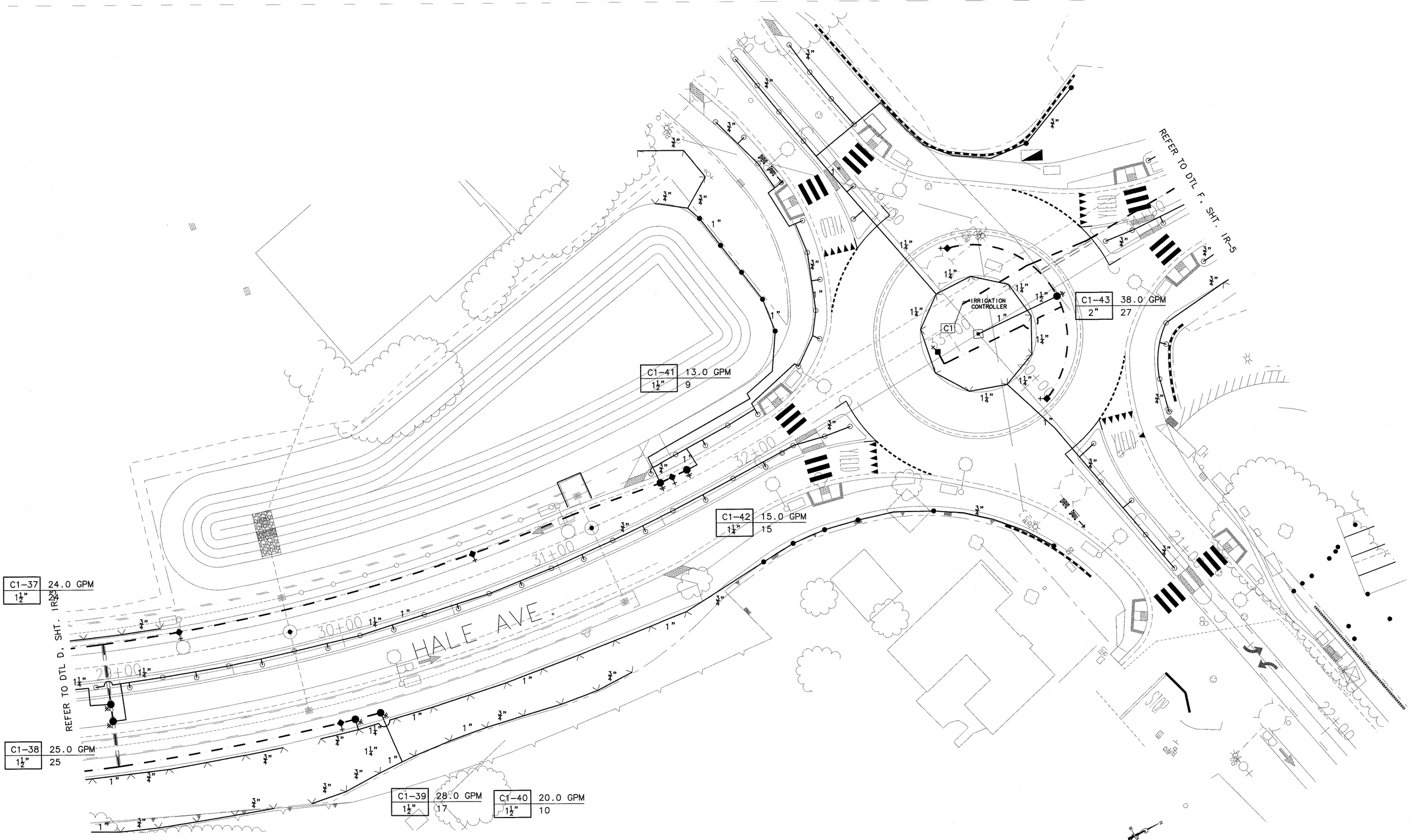
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IRRIGATION PLAN

IMPROVEMENT PLANS FOR
MORGAN HILL HALE AVE EXTENSION CALIFORNIA

CITY FILE NO. 504E02
PLAN SET:
DRAWING: IR-3
96 OF 120



E IRRIGATION PLAN – SECTION E

SCALE: 1" = 20'-0"

0 10' 20' 40'

STATION LINE ON THIS SHEET ARE NOT TO SCALE. DO NOT SCALE OR USE STATION LINE TO MEASURE DISTANCE. REFER TO SHT. ____ THRU. ____, HORIZONTAL CONTROL PLANS FOR EXACT LOCATION. STATION LINE ON THIS PLAN HAS BEEN OFFSET 10' FOR CLARITY.

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:

AS-BUILT CORRECTIONS

BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: R.R.	DESIGN: R.C.G.	SCALE HOR.
CHECKED:	DATE:	SCALE VERT.
APPROVED: 9/25/2020	DATE:	JOB NO. SJ-17101

KARL S. DARGAN, CITY ENGINEER — CITY ENGINEER DATE

SUPERVISED BY:

SIGNATURE 9/25/2020 DATE

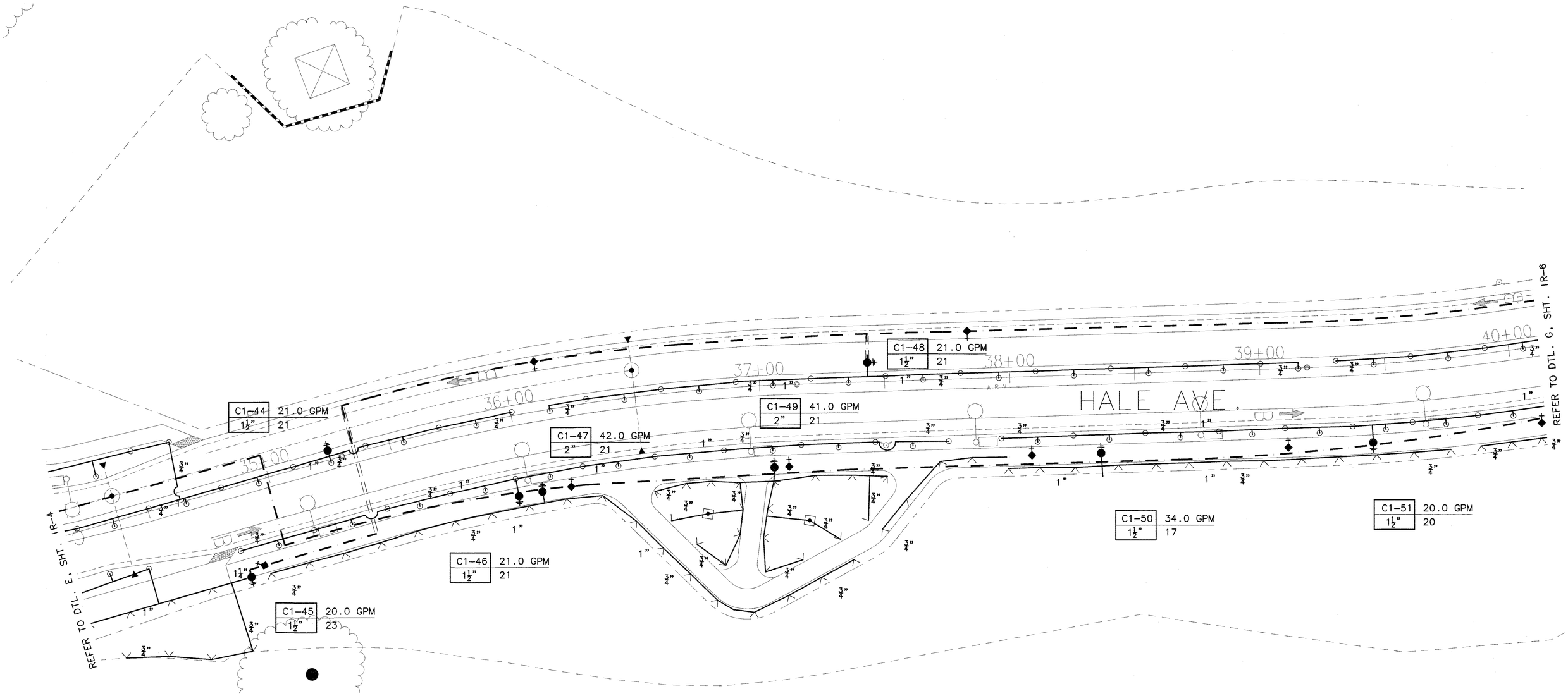
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Ph: 408.390.0777

IRRIGATION PLAN

IMPROVEMENT PLANS FOR
MORGAN HILL HALE AVE EXTENSION CALIFORNIA

CITY FILE NO. 504E02
PLAN SET:
DRAWING: IR-4
97 OF 120



F IRRIGATION PLAN – SECTION F

SCALE: 1" = 20'-0"

0 10' 20' 40'

STATION LINE ON THIS SHEET ARE NOT TO SCALE. DO NOT SCALE OR USE STATION LINE TO MEASURE DISTANCE. REFER TO SHT. _____ THRU. _____, HORIZONTAL CONTROL PLANS FOR EXACT LOCATION. STATION LINE ON THIS PLAN HAS BEEN OFFSET 10' FOR CLARITY.

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

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City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

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CHECKED: DATE: SCALE VERT.
APPROVED: DATE: 9/25/2020 JOB NO. SJ-17101
~~MARK D. DeFRANCO~~ CITY ENGINEER ~~EXP. DATE~~

SUPERVISED BY:
SIGNATURE 9/25/2020 DATE

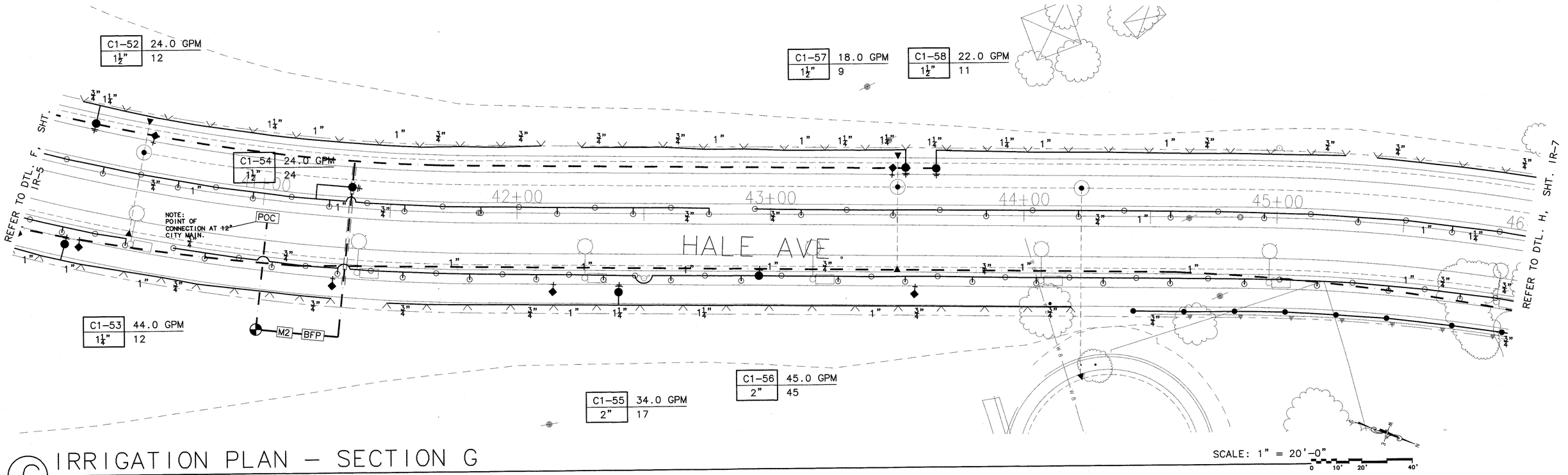
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IRRIGATION PLAN

IMPROVEMENT PLANS FOR
MORGAN HILL HALE AVE EXTENSION CALIFORNIA

CITY FILE NO. 504E02
PLAN SET:
DRAWING: **IR-5**
98 OF 120



G IRRIGATION PLAN – SECTION G

STATION LINE ON THIS SHEET ARE NOT TO SCALE. DO NOT SCALE OR USE STATION LINE TO MEASURE DISTANCE. REFER TO SHT. _____ THRU. _____, HORIZONTAL CONTROL PLANS FOR EXACT LOCATION. STATION LINE ON THIS PLAN HAS BEEN OFFSET 10' FOR CLARITY.

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

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City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

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CHECKED: DATE: SCALE VERT.
APPROVED: DATE: 9/25/2020 JOB NO. SJ-17101
~~JOEL D'ELOIA~~ CITY ENGINEER ~~CITY PLANS~~

SUPERVISED BY:
SIGNATURE 9/25/2020 DATE

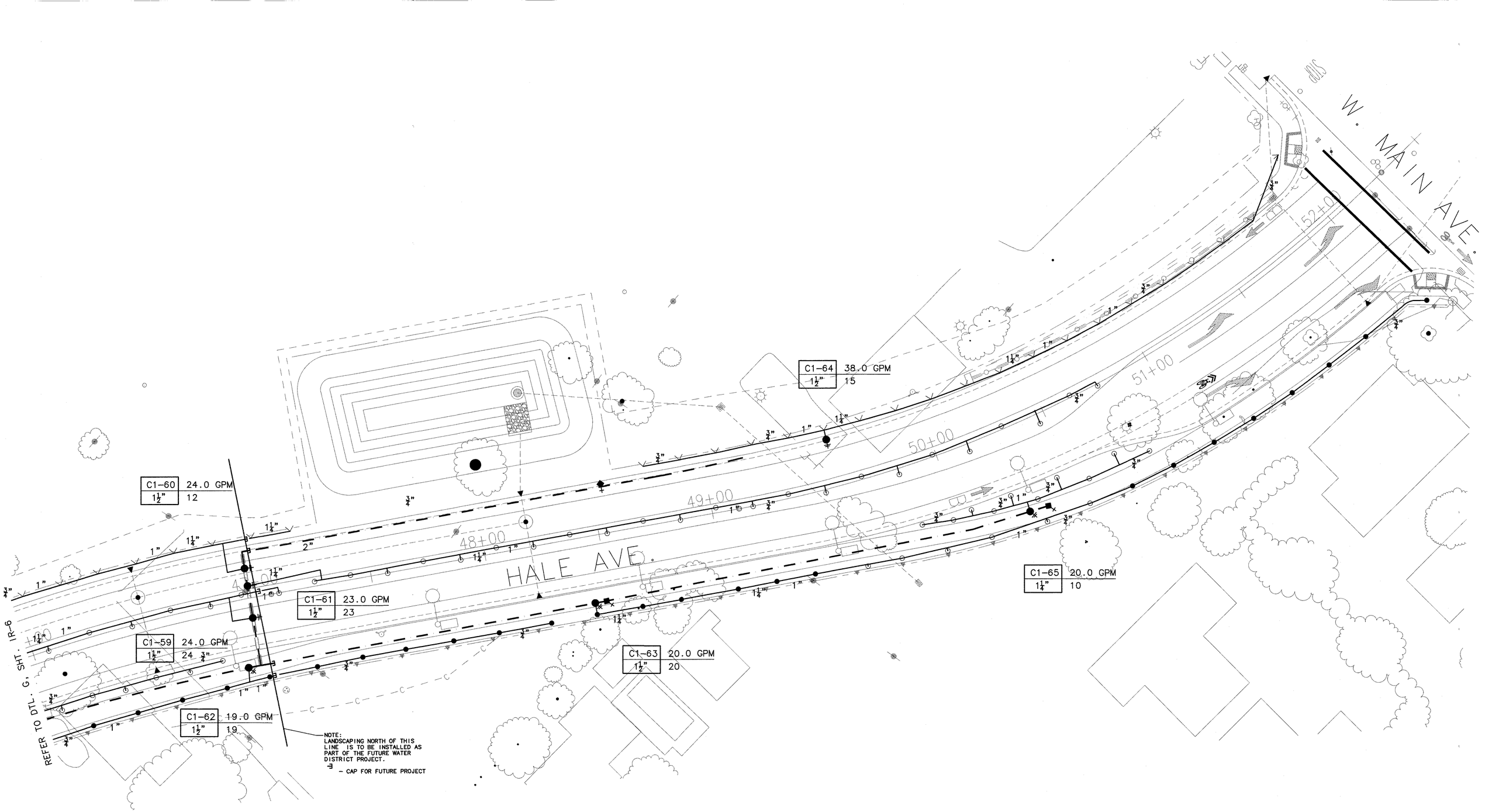
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IRRIGATION PLAN

IMPROVEMENT PLANS FOR
MORGAN HILL HALE AVE EXTENSION CALIFORNIA

CITY FILE NO: 504E02
PLAN SET:
DRAWING: IR-6
99 OF 120



(H) IRRIGATION PLAN – SECTION H

SCALE: 1" = 20'-0"

0 10' 20' 40'

STATION LINE ON THIS SHEET ARE NOT TO SCALE. DO NOT SCALE OR USE STATION LINE TO MEASURE DISTANCE. REFER TO SHT. _____ THRU. _____, HORIZONTAL CONTROL PLANS FOR EXACT LOCATION. STATION LINE ON THIS PLAN HAS BEEN OFFSET 10' FOR CLARITY.

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:

AS-BUILT CORRECTIONS

BY: DATE:

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City of Morgan Hill
Public Works Department
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(408) 776-6480 FAX (408) 779-7236

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CHECKED:	DATE:	SCALE VERT.
APPROVED: 9/25/2020	DATE:	JOB NO. SJ-17101

Kevin Riordan CITY ENGINEER EXP. DATE:

SUPERVISED BY:

Peter C. Chamberlain 9/25/2020

SIGNATURE DATE

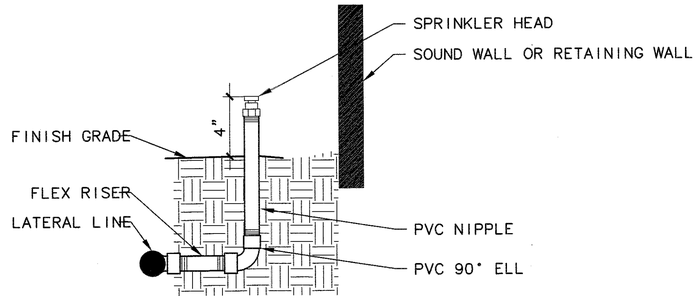
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IRRIGATION PLAN

IMPROVEMENT PLANS FOR
MORGAN HILL HALE AVE EXTENSION CALIFORNIA

CITY FILE NO. 504E02
PLAN SET:
DRAWING: IR-7
100 OF 120

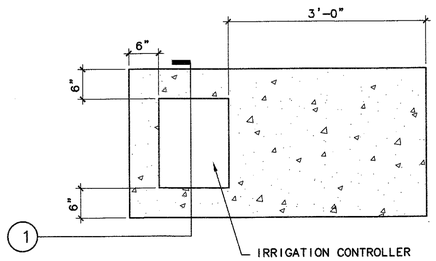


NOTES:

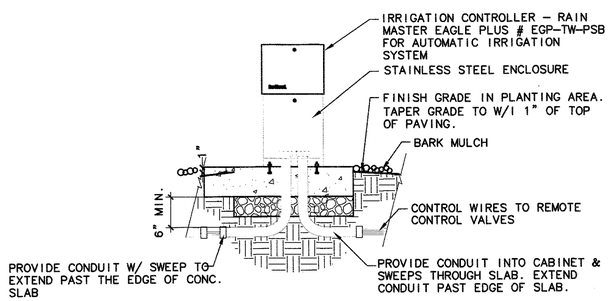
1. ALL ELEMENTS OF RISER ASSEMBLY SHALL BE AS SHOWN AND OF THE SAME DIAMETER AS THE BASE OF THE HEAD.
2. ADJUST ARC AND RADIUS TO COVER WITHOUT OVER-SPRAYING ONTO PAVED AREAS OR STRUCTURES.

8 SPRINKLER HEAD RISER @ WALLS

NTS



1 PLAN VIEW



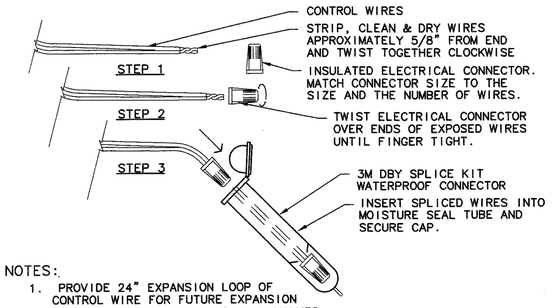
1 SECTION

NOTES:

1. CONTROLLER RAIN MASTER EAGLE PLUS # EGP-TW-PSB (OR APPROVED EQUAL) IN STAINLESS STEEL PEDESTAL ENCLOSURE.
2. ALL ELECT. WORK TO CONFORM TO LOCAL CODES. REFER TO MANUFACTURER'S RECOM.'S FOR ADDITIONAL INFORMATION

7 IRRIGATION CONTROLLER

NTS

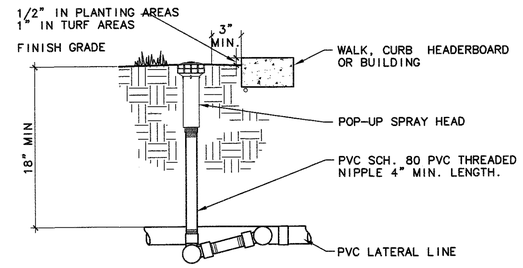


NOTES:

1. PROVIDE 24" EXPANSION LOOP OF CONTROL WIRE FOR FUTURE EXPANSION FOR EACH WIRE CONN., TYP. ALL VALVES.
2. BUNDLE & TAPE WIRES EVERY 10 FEET.
3. ALL CONNECTIONS TO HAVE SPLICE KIT.
4. ALL SPLICES ARE TO BE MADE IN VALVE BOX. NO IN GROUND SPLICES.

6 WIRE SPLICE

NTS

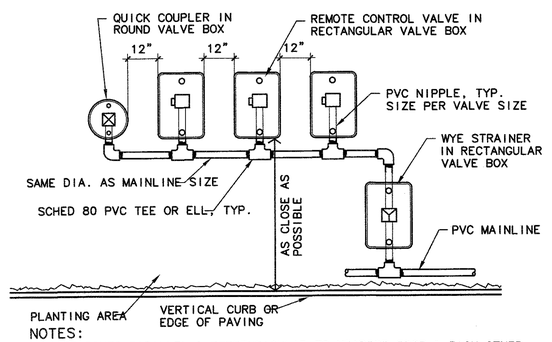


NOTES:

1. ALL ELEMENTS OF RISER ASSEMBLY SHALL BE AS SHOWN AND OF THE SAME DIAMETER AS THE BASE OF THE HEAD.
2. INSTALL SPRAYS AND SPRINKLERS FLUSH WITH GRADE.
3. ADJUST ARC AND RADIUS TO COVER WITHOUT OVER-SPRAYING ONTO WALKWAYS OR PAVED AREAS.

5 POP-UP HEAD

NTS

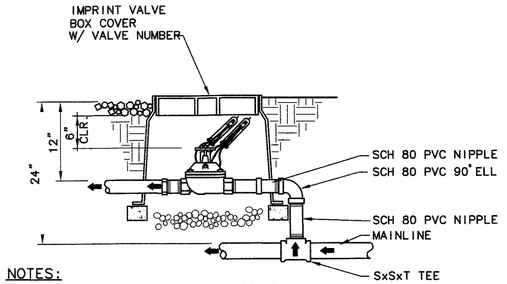


NOTES:

1. SET BOXES PARALLEL & PERPENDICULAR TO NEAREST EDGE & EACH OTHER.
2. CENTER BOXES OVER ENCLOSED VALVES.
3. AVOID OVER COMPACTING SOIL AROUND BOXES TO PREVENT DAMAGING BOX.
3. SEE STATE OF CALIFORNIA, DEPT OF TRANSPORTATION, STANDARD PLANS, MAY 2006, PLANTING AND IRRIGATION DETAILS, SHEET H7, DETAIL WYE STRAINER.

4 VALVE LAYOUT

NTS

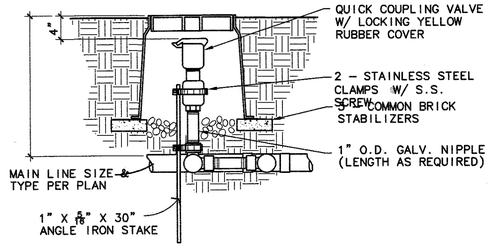


NOTES:

1. LIMIT ONE CONTROL VALVE PER BOX.
2. NO EARTH FILL INSIDE BOX OR TOUCHING VALVE.
3. USE TEFLON PASTE THREAD SEALANT ON THREADED CONNECTIONS.
4. PROVIDE 24" COIL ON 24V LINES, REFER TO WIRE SPLICING DETAIL.
5. EACH CONTROL VALVE TO HAVE MANUAL BLEED AND FLOW CONTROL.
6. ADJUST EACH CONTROL VALVE TO OPTIMUM FLOW AS REQUIRED BY THE HEADS.

3 REMOTE CONTROL VALVE

NTS

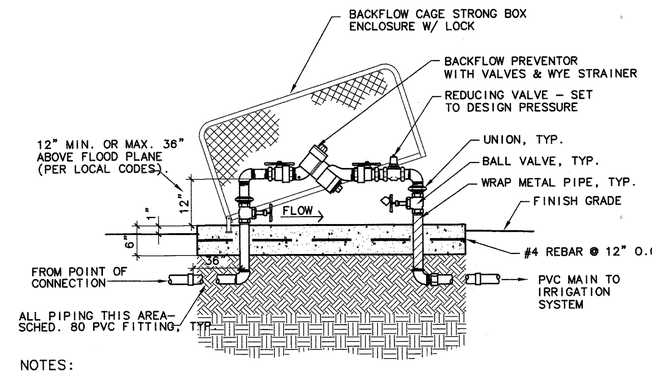


NOTE:

1. USE TEFLON PASTE THREAD SEALANT FOR THREADED CONNECTIONS.
2. LOCATE Q.C.V. ADJACENT TO R.C.V. IN GROUND COVER AREAS WHERE POSSIBLE.
3. LOCATE 12" AWAY FROM ADJACENT BUILDINGS OR FENCES. LOCATE MIN. 6" AWAY FROM ADJACENT SIDEWALKS, CURBS OR HEADERBOARDS.
4. INSTALL CHECK VALVE AT HEAD LOCATIONS THAT ARE SUBJECT TO LATERAL DRAINAGE.
5. ALL JOINTS HAND TIGHT TO ALLOW MOVEMENT.
6. SET TOP OF BOX 1" ABOVE FINISH GRADE IN SHRUB ATEAS.

2 QUICK COUPLER

NTS



NOTES:

1. INSTALLATION SHALL COMPLY WITH LOCAL & STATE PLUMBING CODES.
2. INSTALL PAD W/ 18" MIN. CLEAR FROM EDGE OF MAINT. PATH OR CONC. SIDEWALK.
3. CAGE TO BE FACTORY PRIMED & PAINTED BLACK. ALL ABOVE GRADE MATERIALS TO BE PAINTED W/ 2 COATS RUSTOLEUM PAINT, COLOR: BLACK
4. WRAP ALL ABOVE GRADE METAL PIPE & SECTION IN CONCRETE W/ .010" x 2" P.E. TAPE, USE HALF LAP.
5. USE TEFLON PASTE THREAD SEALANT FOR ALL THREADED CONNECTIONS.

1 BACKFLOW PREVENTER

NTS

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

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APPROVED: CITY ENGINEER	DATE: 9/20/2020	JOB NO. SJ-17101

KAREN D. GARNER EXP. DATE

SUPERVISED BY:
SIGNATURE
9/25/2020 DATE

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Ph: 408.390.0777

IRRIGATION PLAN

IMPROVEMENT PLANS FOR
HALE AVE EXTENSION
MORGAN HILL CALIFORNIA

CITY FILE NO. 504E02
PLAN SET:
DRAWING: IR-8
101 OF 120

(E) PLANTING NOTES

GENERAL PLANTING INFORMATION

1. THESE NOTES ARE FOR GENERAL REFERENCE, IN CONJUNCTION WITH, AND AS A SUPPLEMENT TO, THE WRITTEN SPECIFICATIONS ASSOCIATED WITH THE CONTRACT DOCUMENTS. A COMPLETE SET OF CONTRACT DOCUMENTS SHALL BE ON-SITE AT ALL TIMES FOR USE BY THE LAND. ARCH & CITY ENGINEER. THIS INCLUDES ADDENDUM'S, CHANGE ORDERS, SUPPLEMENTAL INSTRUCTIONS & OTHER CHANGE DOCUMENTS.

2. CONTRACTOR SHALL SUPPLY TREES, SHRUBS, GROUNDCOVERS OF THE SPECIES & SIZE SPECIFIED ON SHT'S.PL-1, THRU. PL-6. CONTRACTOR TO PROVIDE NURSERY ORDER SLIPS TO LAND. ARCH.W/I 30 DAYS OF THE CONTRACT APPROVAL TO ENSURE THE PURCHASE OF SPECIFIED PLANTS. CONTRACTOR IS RESPONSIBLE FOR SECURING & CARING FOR PLANT MATERIAL UNTIL INSTALLATION ON-SITE.

3. IF CONTRACTOR IS UNABLE TO LOCATE PLANT MATERIAL, SUBMIT TO THE LANDSCAPE ARCHITECT A LIST OF MATERIAL NOT AVAILABLE AND CONTRACTOR PROPOSED SUBSTITUTIONS FOR REVIEW. SUBSTITUTIONS SHALL MEET THE ORIGINAL PLANT SPECIES MATURE SIZE, COLORS AND SHAPE. ALL SUBSTITUTIONS SHALL BE APPROVED PRIOR TO DELIVERY OF MATERIAL TO THE SITE.

4. PLANT MATERIAL SHALL BE REVIEWED BY THE LANDSCAPE ARCHITECT PRIOR TO DELIVERY ON-SITE & PRIOR TO INSTALLATION. CONTRACTOR TO COORDINATE AND SCHED. NURSERY SITE VISITS, WHERE PLANT MATERIAL IS TO BE ORGANIZED BY SPECIES FOR REVIEW. NURSERY'S SHALL BE WITHIN 45 MILES OF THE PROJECT SITE. FOR NURSERY'S FARTHER AWAY, CONTRACTOR IS RESPONSIBLE FOR LAND. ARCH.'S TRANSPORTATION. MAX. OF (3) NURSERY SITE VISITS BY LAND. ARCH.

5. THE CONTRACTOR SHALL BE FAMILIAR WITH THE LOCATIONS OF EXISTING AND FUTURE UNDERGROUND SERVICES AND IMPROVEMENTS WHICH MAY CONFLICT WITH THE WORK TO BE DONE. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL LOCATIONS OF UNDERGROUND UTILITIES PRIOR TO THE START OF WORK. WHEN WORKING IN THE PUBLIC RIGHT OF WAY OR OVER UTILITY EASEMENTS, CONTACT UNDERGROUND SERVICE ALERT (USA) 1.800.227.2600 6AM TO 7PM MONDAY THROUGH FRIDAY, AT LEAST TWO WORKING DAYS PRIOR TO DIGGING. NOTIFY CITY ENGINEER IMMEDIATELY SHOULD CONFLICTS ARISE. REFER TO EX SHT'S. FOR UTILITY INFORMATION AVAILABLE.

6. CONTRACTOR SHALL COORDINATE ALL WORK OF THE VARIOUS TRADES TO ENSURE THAT TREE/SHRUB/ GRASS PLANTING PITS ARE FREE OF UNDERGROUND UTILITIES, UTILITY BOXES & IRRIGATION MAIN/LATERAL LINES.

7. REFER TO DETAILS AND SPECIFICATIONS FOR SITE PREPARATION PROCEDURES, PLANTING METHODS & SOIL AMENDMENTS QUANTITIES.

8. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN THE SITE IN A SAFE AND CLEAN CONDITION. AT THE END OF EACH DAY THE SITE SHALL BE CLEANED UP AND LEFT IN A CONDITION THAT IS SAFE.

SOIL PREPARATION

1. THE CONTRACTOR IS TO FINE GRADE THE SITE TO ALLOW FOR GOOD SOIL DRAINAGE. WATER IS TO DRAIN AWAY FROM TREE OR SHRUB TRUNKS. IF THERE ARE PUDDLES OR WATER STANDING IN PLANTING PITS FOR MORE THAN 2 HOURS, NOTIFY THE ENGINEER IMMEDIATELY. DO NOT PROCEED WITH WORK IN THESE AREAS UNTIL SITUATION HAS BEEN REVIEWED BY THE CITY ENGINEER.

2. FINE GRADING, HEADERBOARD LAYOUT, LOCATIONS OF IRRIGATION LINES & MAIN LINE PRESSURE TEST SHALL BE REVIEWED ON-SITE BY THE CITY ENGINEER PRIOR TO BEGINNING PLANTING OPERATIONS. CONTRACTOR RESPONSIBLE FOR ANY ADJUSTMENTS THAT MAY BE NEEDED TO MEET DIRECTIONS GIVEN AT SITE VISITS.

3. ALL AREAS TO RECEIVE A WEED CONTROL PRE-EMERGENT, PER SPECIFICATIONS, PRIOR TO PAVING & PLANTING OPERATIONS,

PLANTING OPERATIONS

1. PLANTING OPERATIONS SHALL BE COMPLETED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS & THESE NOTES.

2. PRIOR TO PLANT MATERIAL INSTALLATION, LOCATIONS SHALL BE COORDINATED W/ LAYOUT OF UNDERGROUND UTILITIES. CONTRACTOR SHALL PLACE PLANT MATERIAL SO THEY DO NOT INTERFERE W/ IRRIGATION SYSTEMS OR UTILITIES.

3. PLACE PLANT MATERIAL, WHILE IN THEIR CONTAINERS, PER LOCATIONS SHOWN ON THE 'LA' SHT'S. LOCATIONS TO BE REVIEWED BY LAND. ARCH. PRIOR TO INSTALLATION. CONTRACTOR SHALL HAVE WORKERS AVAILABLE ON-SITE TO WORK W/ LAND. ARCH. TO.ADJ. CONTAINER LOCATIONS, AS NEEDED, TO AVOID EX. SITE FEATURES, WHILE MAINTAINING DESIGN CONCEPT.

4. CARE SHALL BE TAKEN TO EVENLY SPACE PLANT MATERIAL W/I EACH ROW & TO ORIENT FOR MAX. AESTHETICS OF PLANT MATERIAL.

5. TREES AND SHRUBS SHALL BE INSTALLED AS PER CITY STANDARD AND PLATING DETAILS.

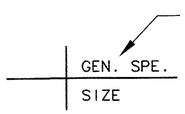
(D) LAYOUT NOTES

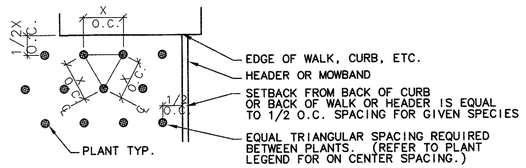
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXISTENCE OF AND LOCATIONS OF EX. UNDERGROUND SERVICES AND IMPROVEMENTS WHICH MAY CONFLICT WITH THE WORK. COORDINATE ALL UNDERGROUND CONSTRUCTION ELEMENTS PRIOR TO INSTALLATION. VERIFY CURBS, COLUMNS, UTILITIES, ALL CRITICAL DIMENSIONS & CONSTRUCTION CONDITIONS PRIOR TO START OF WORK. COORDINATE WORK TO ENSURE THAT ALL UNDERGROUND IRRIGATION LINES AND UTILITIES ARE INSTALLED PRIOR TO LAYING LANDSCAPE FABRIC, PAVING MATERIALS & BARK MULCH. NOTIFY THE CITY'S ENGINEER IMMEDIATELY, SHOULD DISCREPANCIES ARISE, FOR ON-SITE REVIEW PRIOR TO INITIATING MODIFICATIONS TO THE DESIGN LAYOUT.

2. CONTRACTOR SHALL KEEP ALL ISLANDS & ROADWAYS IN A NEAT CONDITION AT ALL TIMES & AT THE END OF EACH DAY.

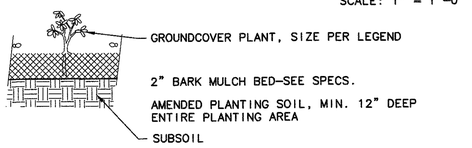
(C) GENERAL LEGEND

SYM. DESCRIPTION





2 PLAN VIEW — SCALE: 1" = 1'-0"



1 SECTION — SCALE: 1" = 1'-0"

(B) GROUNDCOVER PLANTING

NTS

REFER TO:
* TS SHEETS FOR ROADWAY CROSS SECTIONS
* DM SHEETS FOR EX. CONDITIONS PLANS
*HC SHEETS FOR HORZ. CONTROL PLANS
*D SHEETS FOR DRAINAGE PLANS
*U SHEETS FOR UTILITIES PLANS
*IR SHEETS FOR IRRIGATION PLANS

(A) PLANT LEGEND

SYM.	ABBREV.	BOTANICAL NAME	COMMON NAME MATURE	SIZE
OR	QUE. AGR.	QUERCUS AGRIFOLA	COAST LIVE OAK	15 GC
	QUE. LOB.	QUERCUS LOBATA	VALLEY OAK	15 GC
	PIS. CHI.	PISTACHIA CHINENSIS	CHINESE PISTACHE	15 GC
	ACE. RUB.	ACER RUBRUM 'OCTOBER GLORY'	RED MAPLE'	15 GC
	LAG. IND.	LAGERSTROEMIA INDICA (MULTI)	CRAPEMYRTLE	5 GC
	NER. OLE.	NERIUM OLEANDER 'MOROCCO'	OLEANDER	5 GC
✳	LIR. MUS.	LIRIOPE MUSCARI	LILY TURF	1 GC
⊕	MAH. REP.	MAHONIA REPENS	CREEPING MAHONIA	5 GC
○	LAN. MON.	LANTANA MONTEVIDENSIS	TRAILING LANTANA	1 GC
⊖	NER. OLE.	NERIUM OLEANDER 'PETITE PINK'	DWARF PINK OLEANDER	1 GC
	MAC. UNG.	MACFADYENA UNGUIS – CATTI	CAT'S CLAW	1 GC
	PAR. TRI.	PARTHENOCISSUS TRICUSPIDATA	BOSTON IVY	1 GC
	HYDROSEED WITH NATIVE GRASSES			
	DES. HOL.	DESCHAMPSIA C. HOLCIFORMIS	PACIFIC HAIRGRASS	1 GC @ ± 12" O.C.
	ZOY. TEN.	ZOYSIA TENUIFOLIA	KOREAN GRASS	CLUMPS @6" O.C.
	CAR. BAR.	CAREX BARBARAE	SANTA BARBARA SEDGE	1 GC @ 20" O.C.
	HYP. CAL.	HYPERIUM CALYCINIUM	AARONS BEARD	FLATS @ 18" O.C.
	RIVER WASHED COBBLES SET IN CONCRETE , AS PER CITY STANDARD, DETAILS A-27, CONTRACTOR TO PROVIDE SAMPLE FOR APPROVAL.			

(1) LAYER OF LAND FABRIC & MIN. 2" LAYER OF BARK MULCH IN ALL PLANTING AREAS EXCEPT HYDROSED AREAS.

BID SUBMITTAL

NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:
AS-BUILT CORRECTIONS
BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: R.R. DESIGN: R.C.G. SCALE HOR.
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~~MARCEL DIANNE~~ CITY ENGINEER EXP. DATE

SUPERVISED BY:
SIGNATURE 9/25/2020 DATE

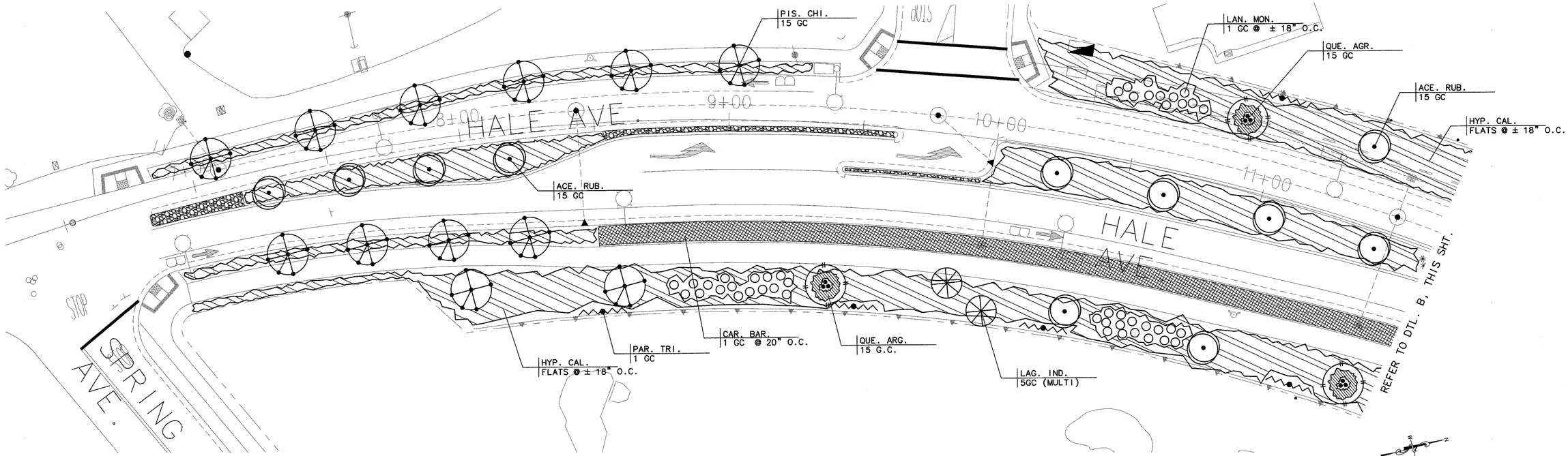
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PLANTING LEGEND & NOTES

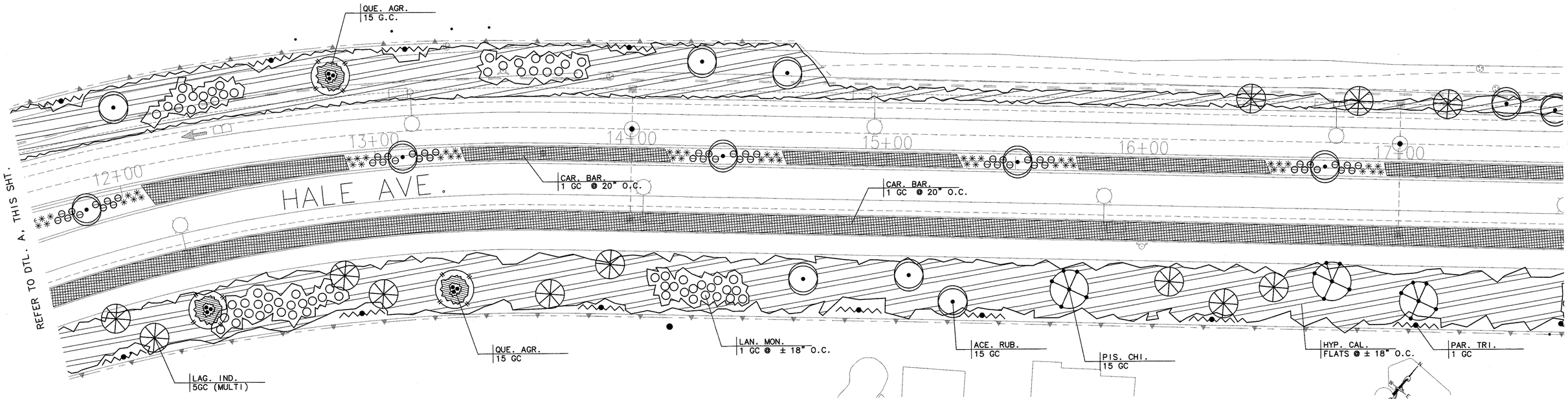
IMPROVEMENT PLANS FOR
MORGAN HILL HALE AVE EXTENSION CALIFORNIA

CITY FILE NO. 504E02
PLAN SET:
DRAWING: PL-1
102 OF 120



(A) PLANTING PLAN – SECTION A

SCALE: 1" = 20'-0"



(B) PLANTING PLAN – SECTION B

SCALE: 1" = 20'-0"

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NO.	DESCRIPTION	DATE	BY

REVISIONS

WORK ACCEPTED: INSPECTOR:

AS-BUILT CORRECTIONS

BY: DATE:

CITY OF MORGAN HILL

City of Morgan Hill
Public Works Department
17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

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CHECKED:	DATE:	SCALE VERT.: SAME
APPROVED: [signature]	DATE: 9/25/2020	JOB NO.: SJ-17101
~~KARL D. KRAPPE~~ CITY ENGINEER	EXP. DATE:	

SUPERVISED BY:

[signature] 9/25/2020
SIGNATURE DATE

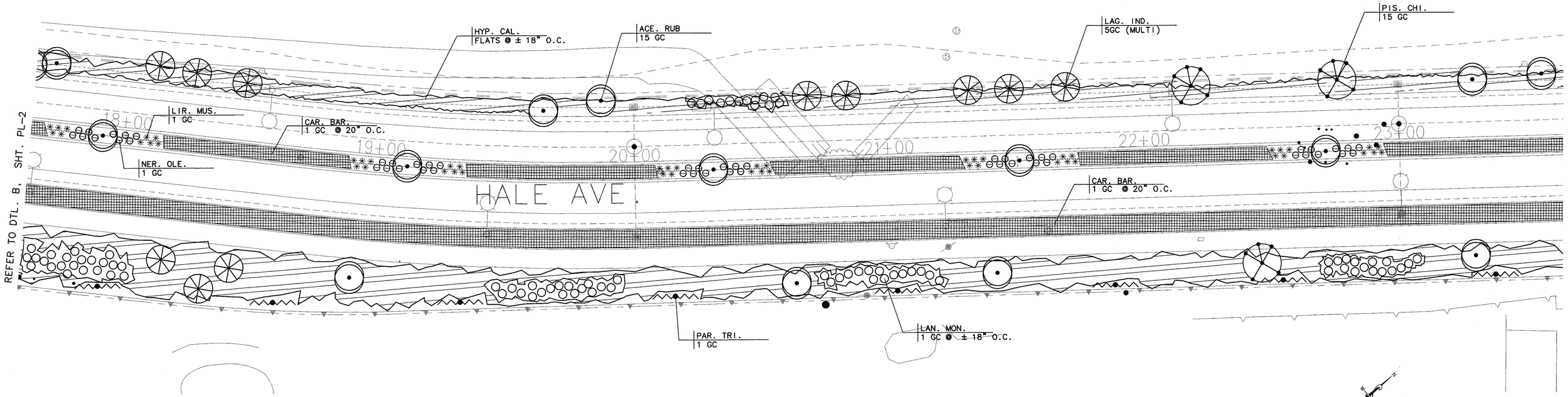
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PLANTING PLAN

IMPROVEMENT PLANS FOR
MORGAN HILL HALE AVE EXTENSION CALIFORNIA

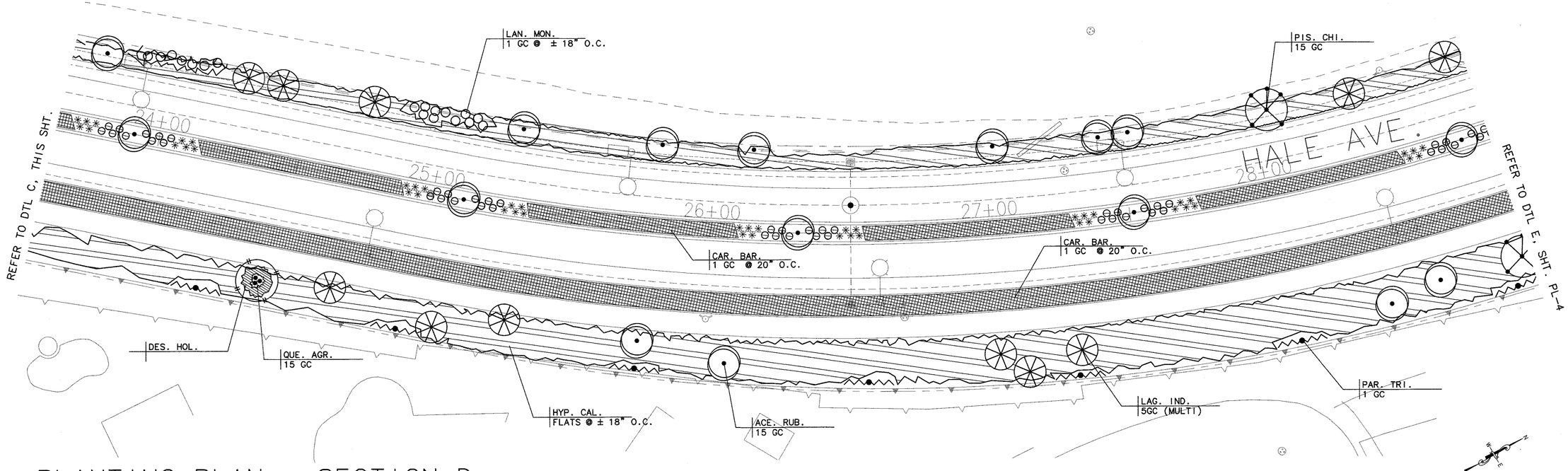
CITY FILE NO. 504E02
PLAN SET:
DRAWING: PL-2
103 OF 120



C PLANTING PLAN – SECTION C

SCALE: 1" = 20'-0"

0 10' 20' 40'



D PLANTING PLAN – SECTION D

SCALE: 1" = 20'-0"

0 10' 20' 40'

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CHECKED: DATE: SCALE VERT.

APPROVED: DATE: 9/25/2020 JOB NO. SJ-17101

JOHN D. HERVIG CITY ENGINEER R.C.E. 36113

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PLANTING PLAN

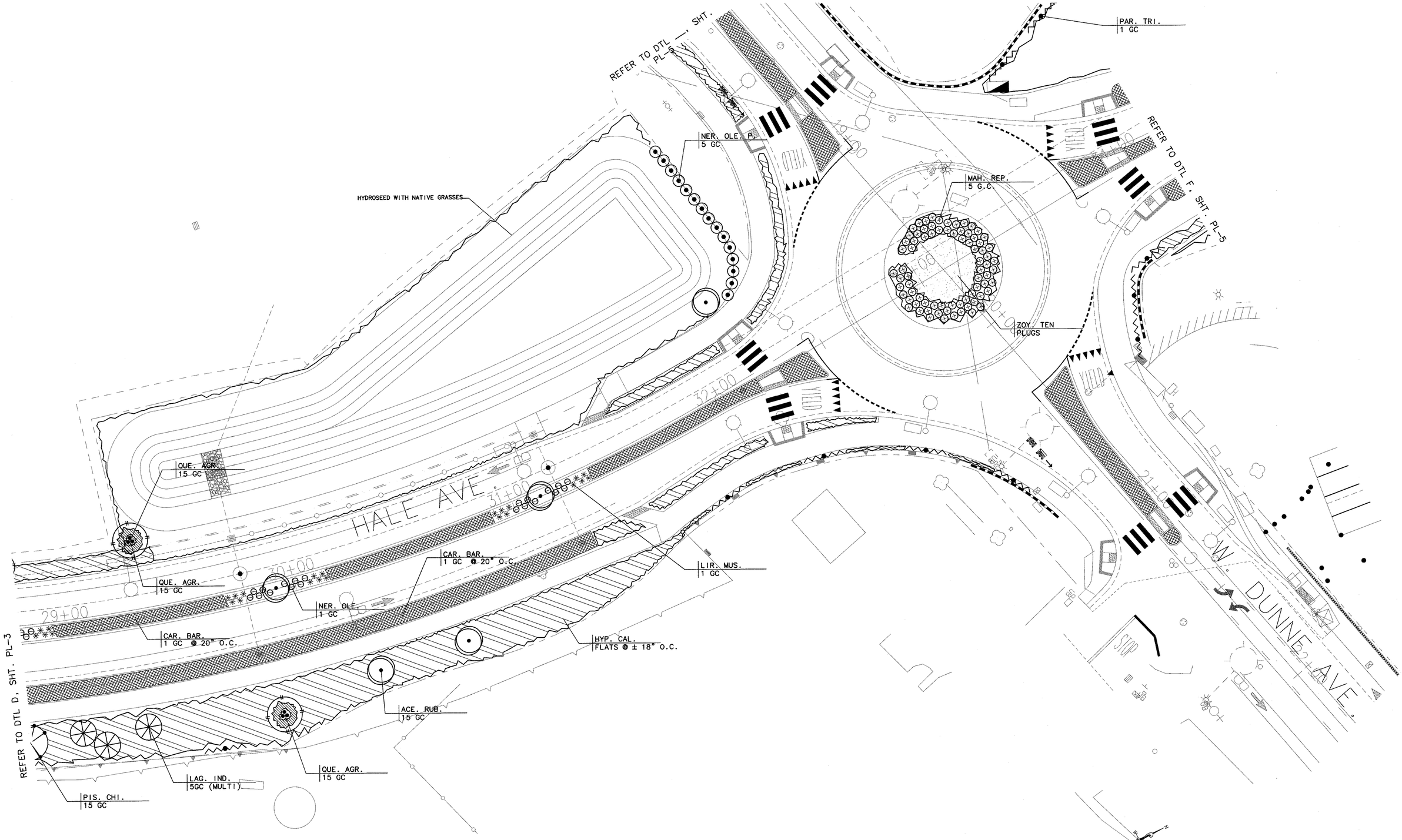
IMPROVEMENT PLANS FOR
MORGAN HILL HALE AVE EXTENSION CALIFORNIA

CITY FILE NO. 504E02

PLAN SET: 1

DRAWING: PL-3

104 OF 120



E PLANTING PLAN – SECTION E

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~~KARL S. ESPOHNE~~ CITY ENGINEER ~~RCE 35145~~ CITY ENGINEER RCE DATE

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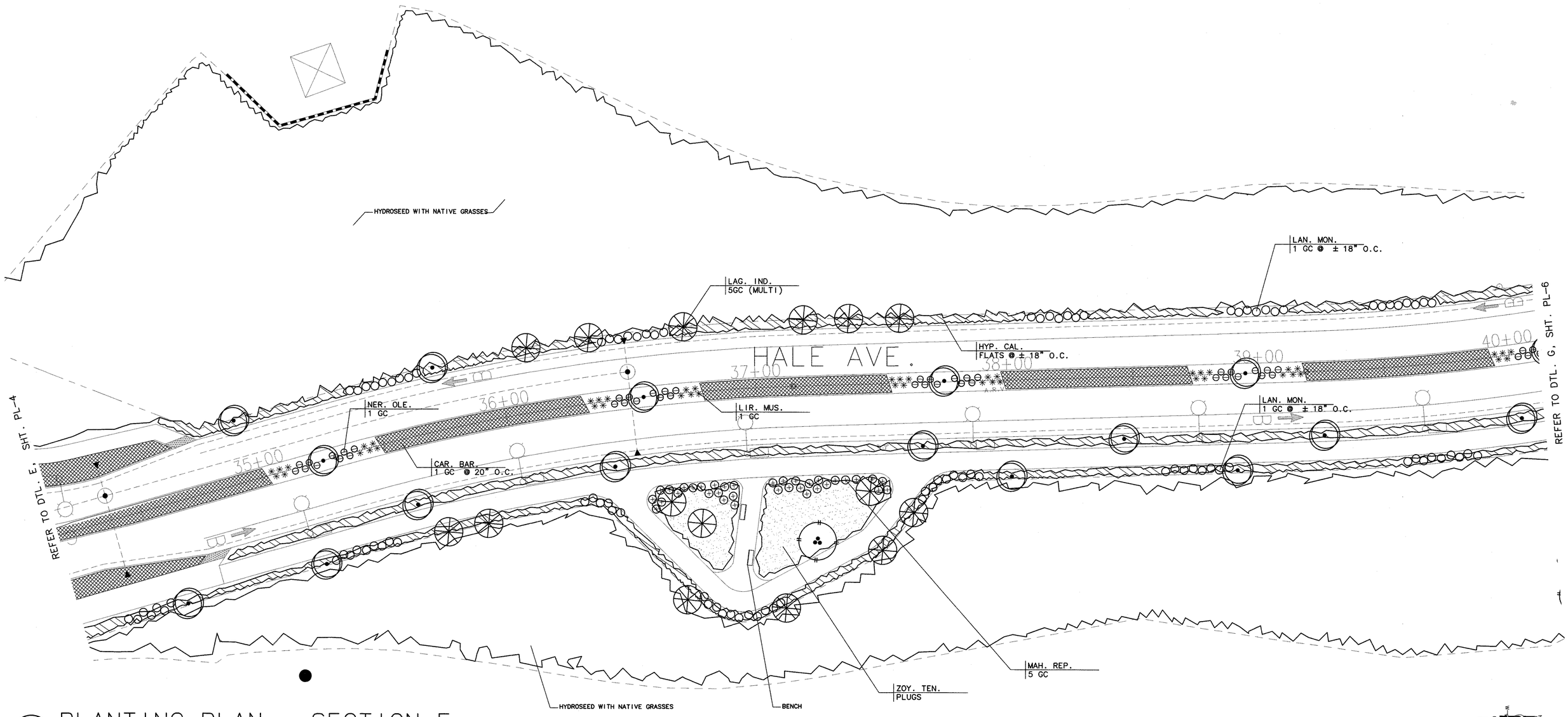
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PLANTING PLAN

IMPROVEMENT PLANS FOR
MORGAN HILL HALE AVE EXTENSION CALIFORNIA

CITY FILE NO. 504E02
PLAN SET:
DRAWING: PL-4
105 OF 120



(F) PLANTING PLAN – SECTION F

SCALE: 1" = 20'-0"

0 10' 20' 40'

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NO.	DESCRIPTION	DATE	BY

REVISIONS

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(408) 776-6480 FAX (408) 779-7236

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CHECKED: DATE: SCALE VERT.
APPROVED: 9/25/2020 JOB NO. SJ-17101
~~KARI D. CHAPPIE~~ CITY ENGINEER ~~PWD DATE~~

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9/25/2020
SIGNATURE DATE

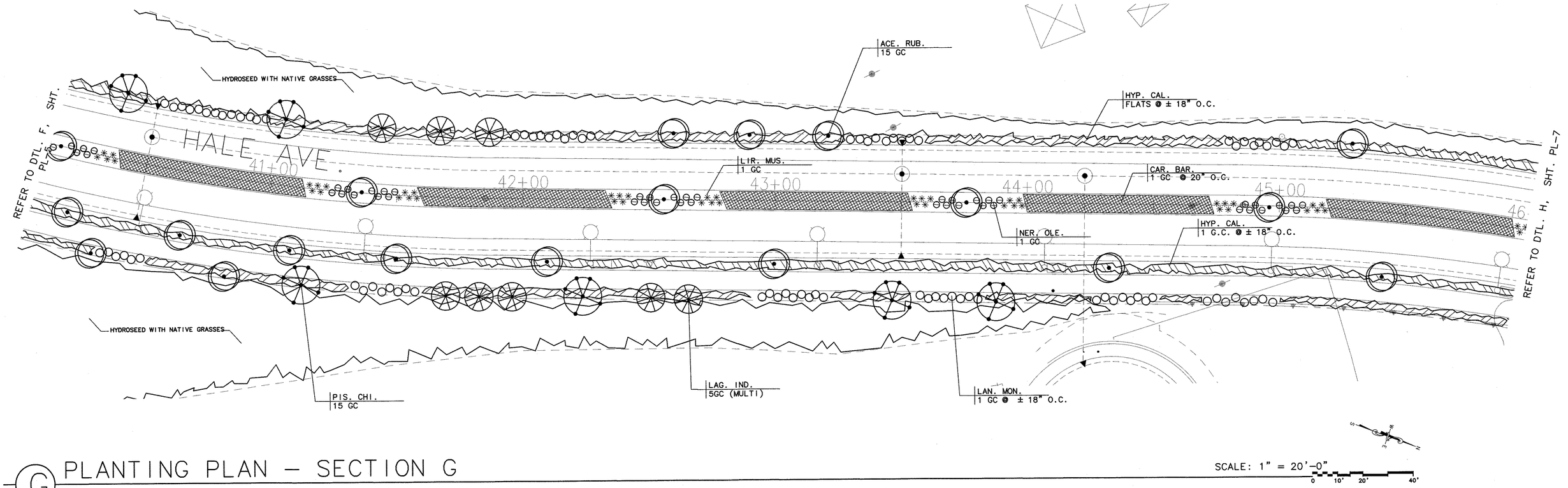
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PLANTING PLAN

IMPROVEMENT PLANS FOR
MORGAN HILL HALE AVE EXTENSION CALIFORNIA

CITY FILE NO. 504E02
PLAN SET:
DRAWING: PL-5
106 OF 120



G PLANTING PLAN – SECTION G

SCALE: 1" = 20'-0"

0 10' 20' 40'

STATION LINE ON THIS SHEET ARE NOT TO SCALE. DO NOT SCALE OR USE STATION LINE TO MEASURE DISTANCE. REFER TO SHT. HC-1 THRU. HC-5, HORIZONTAL CONTROL PLANS FOR EXACT LOCATION. STATION LINE ON THIS PLAN HAS BEEN OFFSET 10' FOR CLARITY.

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Public Works Department
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APPROVED: DATE: 9/25/2020 JOB NO. SJ-17101
KARL G. KRAMP CITY ENGINEER R.C.E. DATE

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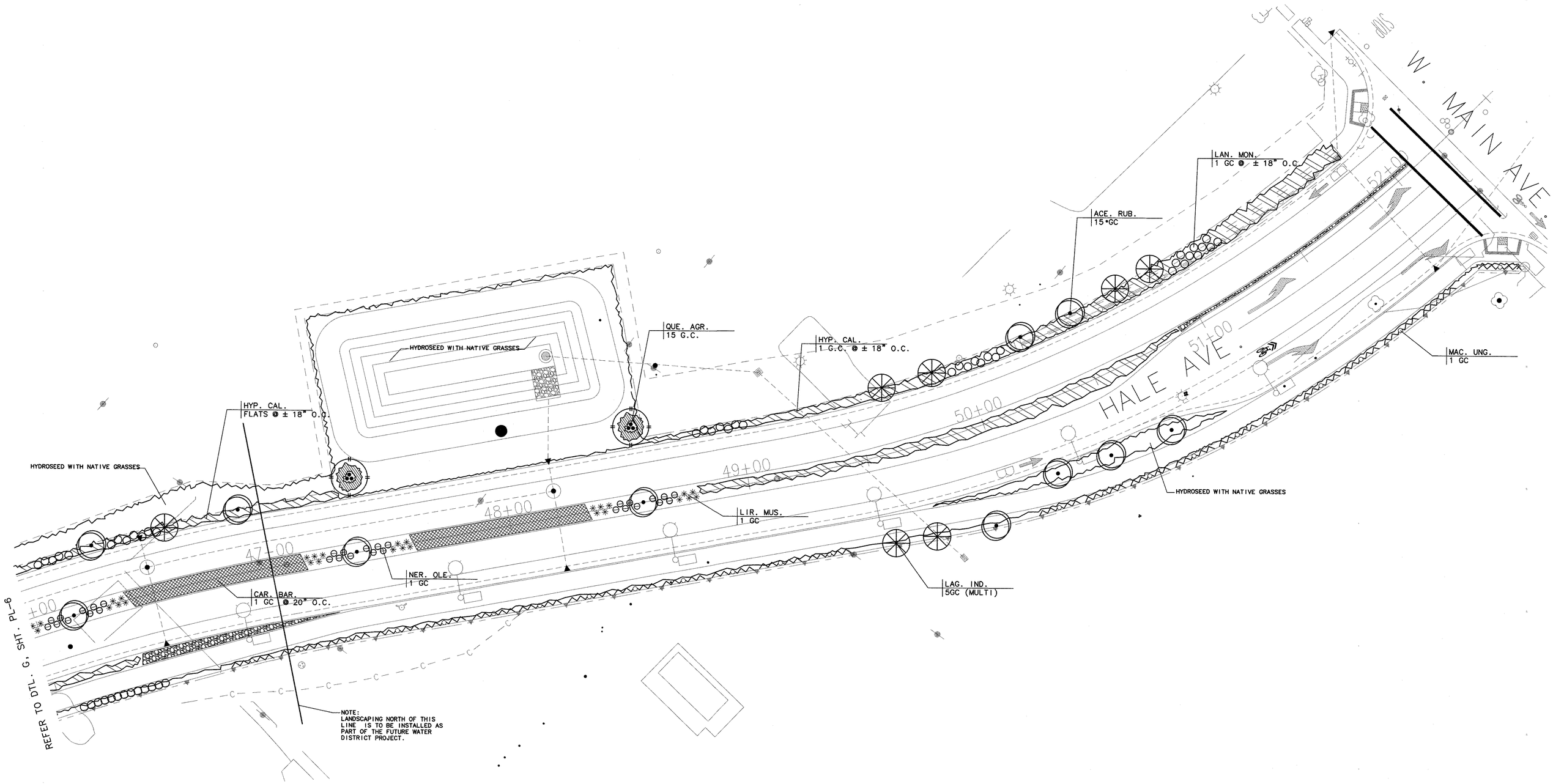
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PLANTING PLAN

IMPROVEMENT PLANS FOR
MORGAN HILL HALE AVE EXTENSION CALIFORNIA

CITY FILE NO. 504E02
PLAN SET:
DRAWING: PL-6
107 OF 120



(H) PLANTING PLAN – SECTION H

SCALE: 1" = 20'-0"

0 10' 20' 40'

STATION LINE ON THIS SHEET ARE NOT TO SCALE. DO NOT SCALE OR USE STATION LINE TO MEASURE DISTANCE. REFER TO SHT. HC-1 THRU. HC-5, HORIZONTAL CONTROL PLANS FOR EXACT LOCATION. STATION LINE ON THIS PLAN HAS BEEN OFFSET 10' FOR CLARITY.

NO.	DESCRIPTION	DATE	BY

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MARK D. GROVE CITY ENGINEER R.C.E. DATE

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PLANTING PLAN

IMPROVEMENT PLANS FOR
MORGAN HILL HALE AVE EXTENSION CALIFORNIA

CITY FILE NO. 504E02
PLAN SET:
DRAWING: PL-7
108 OF 120

CONSTRUCTION NOTES:

1. ALL TRENCHING, BACKFILLING AND INSTALLATION BY CONTRACTOR MUST COMPLY WITH PG&E UO STANDARD S5453 (EFFECTIVE DATE 7-31-2015).

2. ALL WORK MUST COMPLY WITH PG&E, TELEPHONE, CATV STANDARDS AND PRACTICES. ALL WORK MUST BE INSPECTED AND APPROVED BY RESPECTIVE INSPECTORS. RANDOM SOIL SAMPLES SHALL BE TAKEN FROM A MINIMUM OF THREE LOCATIONS PER 1,000' OF TRENCH. 100% OF THE SAMPLE MUST PASS THROUGH A ½" SIEVE AND 75% MUST PASS THROUGH A #4 SCREEN. ADDITIONAL SAMPLES MUST BE TAKEN IF EXISTING SOIL CONDITIONS CHANGE AND IS TO BE AT THE DISCRETION OF THE PG&E REPRESENTATIVE ON SITE. THE SOILS MUST NOT CONTAIN CLODS LARGER THE ½" IF TO BE USED AS SHADING, BEDDING OR LEVELING MATERIALS. COMPACTION REQUIREMENTS MUST MEET ANY APPLICABLE PG&E FEDERAL, STATE, COUNTY OR LOCAL REQUIREMENTS. ANY NATIVE SOILS OR IMPORT MATERIALS USED MUST NOT HINDER THOSE EFFORTS.

3. BACKFILL SHALL BE APPROVED BY THE UTILITY COMPANIES AND THE CITY. COMPACTION WILL BE TESTED AND PASSED BY THE SOILS ENGINEER.

4. IF SOIL IS NOT ROCK FREE, ADD 4" DEPTH OF TRENCH FOR SAND BEDDING.

5. VERIFY SPLICE BOX EXCAVATION SIZES WITH SUPPLIER(S).

6. THE TRENCHING CONTRACTOR SHALL COORDINATE THE UTILITY COMPANIES' INSTALLATION.

7. CONTRACTOR SHALL MAKE HIMSELF FAMILIAR WITH THE PROJECT IMPROVEMENT PLANS AND CONDUCT HIS WORK ACCORDINGLY.

8. IT IS THE TRENCHING CONTRACTOR'S RESPONSIBILITY TO PROTECT IN PLACE ALL EXISTING FACILITIES. NO EXTRA PAYMENT WILL BE CONSIDERED FOR CROSSING OTHER SYSTEMS.

9. PMG DESIGN ASSUMES NO RESPONSIBILITY FOR THE PROJECT CONDITIONS. THESE DRAWINGS WERE PREPARED USING DATA SUPPLIED BY PG&E, TELEPHONE, CATV, IMPROVEMENT PLANS AND THE CITY'S VARIOUS "AS-BUILT" INFORMATION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PHYSICALLY REVIEW THE PROJECT PRIOR TO SUBMITTING HIS BID.

10. CONTRACTOR WILL COMPLY WITH ALL LAWS, ORDINANCES AND REGULATIONS. CONTRACTOR SHALL BE FAMILIAR WITH OSHA INDUSTRIAL SAFETY ORDERS AND SHALL CONDUCT HIS WORK ACCORDINGLY. WHEN WORKING NEAR ENERGIZED OR "HOT" EQUIPMENT, THE UTILITY OWNER SHALL BE NOTIFIED TO SUPPLY THE APPROPRIATE MAN POWER. PUBLIC SAFETY AND TRAFFIC CONTROL MEASURES ARE THE CONTRACTOR'S RESPONSIBILITY.

11. THE CONTRACTOR SHALL PROTECT CONSTRUCTION STAKING. HE SHALL COORDINATE STAKING WITH THE PROJECT'S CIVIL ENGINEER.

12. CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA) TWO WORKING DAYS PRIOR TO START OF WORK.

13. CONTRACTOR SHALL NOTIFY INSPECTORS OF ANY POTENTIAL CONFLICTS PRIOR TO START OF WORK.

14. THIS PLAN IS TO BE USED FOR THE SOLE PURPOSE OF DIGGING THE JOINT TRENCH. SEE PG&E, AT&T, AND COMCAST PLANS FOR EXACT SIZE AND NUMBER OF CONDUITS INSTALLED IN THE JOINT TRENCH. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THE CORRECT NUMBER, SIZE AND TYPES OF CONDUITS ARE INSTALLED PER THE ENGINEERED PLANS BY EACH UTILITY.

15. NOTE: PLANS ISSUED AT THE PRE-CONSTRUCTION MEETING MAY BE SUBJECT TO REVISIONS, IF FINAL PLANS FROM EACH UTILTIY COMPANY WERE NOT AVAILABLE AT THE START OF CONSTRUCTION.

16. WATER, SEWER, DRAINS, SANITARY WASTE, FUELS (INCLUDING DIESEL AND GASOLINE), OIL, PROPANE AND OTHER VOLATILE HEAVIER THAN AIR GASES, SPRINKLER, IRRIGATION, STEAM AND OTHER "WET" FACILITIES SHALL MAINTAIN A MINIMUM OF THREE FEET FROM THE NEAREST OUTER SURFACE OF PG&E FACILITIES WITH NO LESS THAN ONE FOOT OF EARTH (SOIL BARRIER) BETWEEN THE ADJACENT SIDES OF THE INDIVIDUAL TRENCHES.

17. IN THE EXTRAORDINARY CASE THAT THE MINIMUM THREE FOOT HORIZONTAL SEPARATION CANNOT BE ATTAINED BETWEEN "WET" UTILITIES AND COMPANY DRY FACILITIES, A VARIANCE MAY BE APPROVED BY THE LOCAL INSPECTION SUPERVISOR AND SUBMITTED TO SERVICE PLANNING SUPPORT PROGRAM MANAGER FOR APPROVAL.

18. ALL METER PANELS: INDIVIDUAL, RESIDENTIAL, OR NONRESIDENTIAL APPLICANTS WITH A METER PANEL RATING OF ANY SIZE, INSTALLED INSIDE A METER ROOM OR OTHER STRUCTURE, MUST FOLLOW ALL OF THE REQUIREMENTS DESCRIBED BELOW.
   - A. INSTALL, OWN AND MAINTAIN A SEPARATE, NOMINAL, 2-INCH DIAMETER CONDUIT WITH PULL TAPE INSIDE. THE CONDUIT AND PULL TAPE MUST EXTEND FROM THE OUTSIDE SURFACE OF THE BUILDING AND TERMINATE OUTSIDE THE METER PANEL OR SWITCHBOARD AT THE TOP OF THE METER SECTION.
   - B. ENSURE THE 2-INCH DIAMETER CONDUIT AND PULL TAPE EXIT THE OUTSIDE OF THE BUILDING A MINIMUM OF 8 FEET AND A MAXIMUM OF 10 FEET ABOVE GROUND. THE OPEN END OF THE CONDUIT THAT IS EXPOSED TO THE OUTSIDE MUST HAVE A REMOVABLE, TEMPORARY CAP OR PLUG.
   - C. DO NOT USE THE CONDUIT. THE CONDUIT IS FOR PG&E'S METERING EQUIPMENT ONLY.

19. THIS JOINT TRENCH PLAN WAS PREPARED BASED ON TOPOGRAPHICAL SURVEY AS PROVIDED BY A CIVIL ENGINEER. THE CONTRACTOR IS CAUTIONED THAT EXPLORATORY WORK IS NECESSARY TO DETERMINE THE ACTUAL LOCATION OF ANY EXISTING UTILITY. PMG STRONGLY RECOMMENDS THAT ALL UTILITIES BE PHYSICALLY LOCATED ON THE SITE BEFORE THE ONSET OF SITE WORK. SUBSTRUCTURE LOCATIONS MAY REQUIRE FIELD ADJUSTMENT TO COMPENSATE FOR ACTUAL EXISTING UTILTIY LOCATIONS.

NOTE:
PSE/PUE WILL BE REQUIRED FOR ALL UTILITIES IN THIS PROJECT. INCLUDING THE "WORKING SPACE" REQUIRED AROUND ALL EQUIPMENT. THE AREA MUST ALSO BE LEVEL.

811
Know what's **below.**
Call before you dig.

PHASE 1
DEWITT AVE & SPRING AVE
MORGAN HILL, CA



VICINITY MAP
N.T.S

N

UTILITY APPROVALS			
UTILITY	APPROVED BY	DATE	REFERENCE #
PG&E ELECTRIC			
PG&E GAS			
FRONTIER			
COMCAST			

GENERAL NOTES:

1. THE PREFERRED TRENCH LOCATION IS IN A PUBLIC UTILITY EASEMENT (PUE).

2. ALL DEPTHS AND RESULTING COVER REQUIREMENTS ARE MEASURED FROM FINAL GRADE.

3. COVER, CLEARANCES AND SEPARATION SHALL BE AS GREAT AS PRACTICABLE UNDER THE CIRCUMSTANCES, BUT UNDER NO CIRCUMSTANCES SHALL BE LESS THAN THE MINIMUM COVER, CLEARANCE, AND SEPARATION REQUIREMENTS SET FORTH IN GENERAL ORDER 128 AND 49CFR 192.321, 49CFR 192.325, AND 49CFR 192.327. ALL FACILITIES SHALL BE ANCHORED IN PLACE PRIOR TO COMPACTION, OR OTHER MEANS SHALL BE TAKEN TO ENSURE NO MOTION OF THE FACILITIES. DIMENSIONAL REQUIREMENTS FOR SHADING, LEVELING, AND BACKFILLING SHALL BE DETERMINED SUBSEQUENT TO COMPACTION.

4. TRENCH DIMENSIONS SHOWN ARE TYPICAL. TRENCH SIZES AND CONFIGURATIONS MAY VARY DEPENDING UPON OCCUPANCY AND/OR FIELD CONDITIONS. TRENCH SIZE AND CONFIGURATION MUST AT ALL TIMES BE CONSTRUCTED IN A MANNER THAT ENSURES PROPER CLEARANCES AND COVER REQUIREMENTS ARE MET. ANY "CHANGE" TO THE TRENCH WIDTH AND CONFIGURATIONS AS SHOWN IN THIS EXHIBIT MUST BE DESIGNED TO ENSURE THIS REQUIREMENT.

5. IT IS PREFERRED TO HAVE NON-PG&E OWNED STREETLIGHTS AT A LEVEL OTHER THAN THE GAS OR ELECTRIC LEVEL. NON-PG&E OWNED STREETLIGHTS MAY BE AT THE ELECTRICAL LEVEL OF THE TRENCH AS LONG AS MINIMUM CLEARANCES ARE PROVIDED AND COMPLY WITH ALL SPECIAL NOTES FOR A JOINT TRENCH WITH A SECOND ELECTRIC UTILITY.

6. NON-UTILITY FACILITIES ARE NOT ALLOWED IN ANY JOINT UTILITY TRENCH, E.G., IRRIGATION CONTROL LINES, BUILDING FIRE ALARM SYSTEMS, PRIVATE TELEPHONE SYSTEMS, OUTDOOR ELECTRICAL CABLE, ETC.

7. WHEN COMMUNICATION DUCTS ARE INSTALLED, A MINIMUM OF 12" RADIAL SEPARATION SHALL BE MAINTAINED FROM GAS FACILITIES. EXCEPTION: WITH MUTUAL AGREEMENT, WHEN 4-INCH DIAMETER OR SMALLER GAS PIPE IS INSTALLED, THE SEPARATION MAY BE REDUCED TO NOT LESS THAN 6 INCHES.

8. PROVIDE SEPARATION FROM TRENCH WALL AND OTHER FACILITIES SUFFICIENT TO ENSURE PROPER COMPACTION.

9. MAINTAIN PROPER SEPARATION BETWEEN PG&E FACILITIES AND "WET" UTILITY LINES AS DESCRIBED IN UO STANDARD S5453. THE MINIMUM ALLOWABLE HORIZONTAL SEPARATION BETWEEN COMPANY FACILITIES AND "WET" FACILITIES IS 3' WITH A MINIMUM OF 1' OF UNDISTURBED EARTH OR THE INSTALLATION OF A SUITABLE BARRIER BETWEEN THE FACILITIES. IF A 3' HORIZONTAL SEPARATION CANNOT BE ATTAINED BETWEEN "WET" UTILITIES AND COMPANY DRY FACILITIES, A VARIANCE MAY BE APPROVED BY THE LOCAL INSPECTION SUPERVISOR AND SUBMITTED TO THE SERVICE PLANNING SUPPORT PROGRAM MANAGER FOR APPROVAL. SEPARATIONS OF 1' OR LESS ARE NOT PERMISSABLE AND WILL NOT BE ALLOWED. THE COMPANY MAY AGREE TO WAIVE THE MINIMUM 3' SEPARATION REQUIREMENT AT THE REQUEST OF AN APPLICANT IF WARRANTED AND THE NEED IS JUSTIFIED. THE REQUEST FOR A WAIVER MUST:
   - ☐ BE MADE IN WRITING AND SUBMITTED TO THE COMPANY ADE DURING THE PLANNING AND DESIGN PHASE OF THE PROJECT;
   - ☐ CLEARLY DESCRIBE THE CONDITIONS NECESSITATING THE WAIVER,
   - ☐ INCLUDE A PROPOSED DESIGN AND INCLUDE A DESIGN FOR A BARRIER BETWEEN THE "WET" UTILITIES AND COMPANY DRY FACILITIES IN THE EVENT 1' OF UNDISTURBED EARTH CANNOT BE MAINTAINED. NOTE: DRAIN LINES CONNECTED TO DOWNSPOUTS OF BUILDINGS ARE CONSIDERED A "WET" UTILITY FOR THE PURPOSES OF THIS STANDARD.

10. SEPARATIONS SHALL BE MAINTAINED AT ABOVEGROUND TERMINATION POINTS.

11. PROCEDURES FOR APPROVING NATIVE BACKFILL FOR SHADING OF PG&E GAS FACILITIES:
   - ☐ RANDOM SOIL SAMPLES SHALL BE TAKEN FROM A MINIMUM OF 3 LOCATIONS PER 1,000' OF TRENCH. 100% OF THE SAMPLE MUST PASS THROUGH A ½" SIEVE AND 75% MUST PASS THROUGH A #4 SCREEN. ADDITIONAL SAMPLES MUST BE TAKEN IF EXISTING SOIL CONDITIONS CHANGE AND IS TO BE AT THE DISCRETION OF THE PG&E REPRESENTATIVE ON SITE.
   - ☐ THE SOILS MUST NOT CONTAIN ANY ROCKS THAT HAVE SHARP EDGES OR THAT MAY OTHERWISE BE ABRASIVE.
   - ☐ THE SOILS MUST NOT CONTAIN CLODS LARGER THE ½" IF TO BE USED AS SHADING, BEDDING OR LEVELING MATERIALS.
   - ☐ COMPACTION REQUIREMENTS MUST MEET ANY APPLICABLE PG&E FEDERAL, STATE, COUNTY OR LOCAL REQUIREMENTS.
   - ☐ AT NO TIME SHALL THE OVER SATURATION OF NATIVE SOILS BE USED TO ACHIEVE THESE REQUIREMENTS.
   - ☐ THE SIEVES AND SCREENS SHALL BE:
     ½" SIEVE: 8" DIAMETER BY 2" DEEP, STAINLESS STEEL MESH SCREEN.
     #4 SCREEN: 8" DIAMETER BY 2" DEEP, STAINLESS STEEL MESH SCREEN.

12. PROCEDURES FOR APPROVING NATIVE BACKFILL FOR SHADING AT PG&E ELECTRIC FACILITIES:
   - ☐ RANDOM SOIL SAMPLES SHALL BE TAKEN FROM A MINIMUM OF 3 LOCATIONS PER 1,000' OF TRENCH. ADDITIONAL SAMPLES MUST BE TAKEN IF EXISTING SOIL CONDITIONS CHANGE AND ARE TO BE TAKEN AT THE DISCRETION OF THE PG&E REPRESENTATIVE ON SITE.
   - ☐ SHADING MATERIAL CONTAINING LARGE ROCK, PAVING MATERIAL, CINDERS, SHARPLY ANGULAR SUBSTANCES, OR CORROSIVE MATERIAL SHALL NOT BE PLACED IN THE TRENCH WHERE SUCH MATERIAL MAY DAMAGE THE CONDUITS AND/OR PREVENT PROPER COMPACTION OVER OR AROUND THE CONDUITS.
   - • NATIVE SOILS CONTAINING CLODS NOT TO EXCEED 6" IN DIAMETER MAY BE INCLUDED IN THE SHADING MATERIAL PROVIDED THE CLODS ARE READILY BREAKABLE BY HAND. NOTE: SOILS CONSISTING PRIMARILY OF ADOBE, HARD COMPACT (DENSE) CLAY, AND BAY MUDS SHALL NOT BE USED AS SHADING MATERIAL.
   - ☐ AT NO TIME SHALL THE OVER SATURATION OF NATIVE SOILS BE USED TO ACHIEVE THESE REQUIREMENTS.
   - ☐ REFER TO ENGINEERING DOCUMENT 062288, ITEM 13 ON PAGE 2.

13. COMPETENT NATIVE SOILS ARE PREFERRED TO BE USED FOR SHADING, BEDDING, AND BACKFILLING THROUGHOUT THE TRENCH.
   - • WHERE NATIVE SOILS EXCEED ½" MINUS AND/OR WHERE GAS IS TO BE PLACED AT THE BOTTOM OF A TRENCH IN AREAS THAT EXCEED ½" MINUS SOIL CONDITIONS, OR WHERE THE BOTTOM OF A TRENCH IS CONSIDERED TO CONSIST OF HARD PAN, PG&E APPROVED ½" MINUS IMPORT MATERIAL SHALL BE USED FOR SHADING AND/OR BEDDING OF GAS FACILITIES.
   - ☐ PG&E APPROVED IMPORT MATERIAL IS PER CGT ENGINEERING GUIDELINE 4123.
   - ☐ IF A LEVELING COURSE IS REQUIRED FOR GAS FACILITIES, THE USE OF NATIVE SOILS IS PREFERRED, BUT IF ½" MINUS CONDITIONS ARE NOT ATTAINABLE WITH NATIVE SOILS, THEN THE USE OF PG&E APPROVED IMPORT MATERIALS IS REQUIRED. BEDDING UNDER GAS FACILITIES WILL BE A MINIMUM OF 2" OF COMPACTED ½" MINUS NATIVE SOILS OR PG&E APPROVED IMPORT MATERIAL.
   - ☐ FOR ELECTRIC FACILITIES, REFER TO NOTE 12. THIS APPLIES TO LEVELING COURSES AS WELL AS SHADING.
   - ☐ THE MINIMUM PG&E APPROVED BEDDING MATERIAL MAY BE INCREASED AT THE DISCRETION OF PG&E WHEN WARRANTED BY EXISTING FIELD CONDITIONS (E.G., ROCKY SOILS, HARD PAN, ETC.)
   - ☐ THE USE OF ANY IMPORTED MATERIAL FOR BACKFILLING PURPOSES SHALL BE LIMITED TO THOSE SITUATIONS WHEN NATIVE SOILS DO NOT ALLOW FOR REQUIRED COMPACTION.

14. THE APPLICANT IS RESPONSIBLE FOR THE REMOVAL OF EXCESS SPOIL AND ASSOCIATED COSTS.

15. SEPARATION BETWEEN GAS FACILITIES AND ELECTRIC FACILITIES MAY BE REDUCED TO 6" WHEN CROSSING.

16. SERVICE SADDLES ARE THE PREFERRED SERVICE FITTINGS FOR USE THROUGHOUT THE JOINT TRENCH PROJECT. ALL PROJECTS WILL BE DESIGNED AND ESTIMATED USING SERVICE SADDLES. HOWEVER, SERVICE TEES MAY BE USED IF ALL CLEARANCES, SEPARATION, AND COVERAGE REQUIREMENTS ARE MAINTAINED.

17. CONTRACTOR TO INCREASE METER SPACING AS NECESSARY WHEN EARTHQUAKE VALVES OR OTHER ADDITIONAL SAFETY EQUIPMENT ARE REQUIRED. EARTHQUAKE VALVES ARE REQUIRED IN SOME AREAS AND ARE NOT PART OF PG&E/PMG SCOPE. THIS INFORMATION CAN BE FOUND ON BUILDING MECHANICAL ENGINEER'S PLANS. PG&E STANDARD METER SPACING REQUIREMENTS DO NOT INCLUDE CLEARANCE FOR EARTHQUAKE VALVES.

PENNINO MANAGEMENT GROUP
PHONE #:(209) 370-1908 FAX #:(209) 751-1608
PENNINO MANAGEMENT GROUP

CUST #:
Other:
SHT#:
JN:
SHEETS
REV.

DWN:
CHK:
SUPV:
SCALE: NO SCALE
DATE: 11/12/19

NO.	DATE	DESCRIPTION	ORDER #	DWN	CHKD	SUPV	APVD BY

REVISIONS

PHASE 1
DEWITT AVE & SPRING AVE
MORGAN HILL, CA

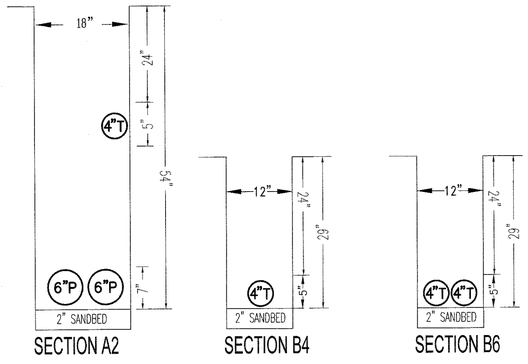
DRAWING # COVER

SHEET 1 OF 8

0 1 INCH
6 5 4 3 2 1 INCH 0

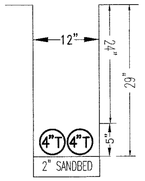
DRY UTILITIES

JOINT TRENCH COMPOSITE



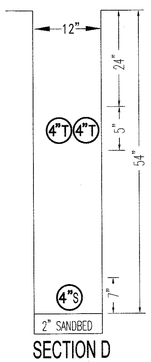
SECTION A2

SECTION B4

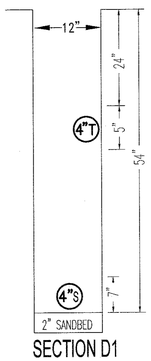


SECTION B6

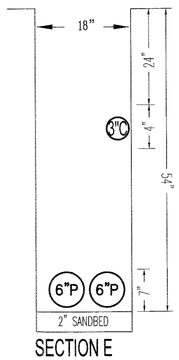
SECTION C



SECTION D

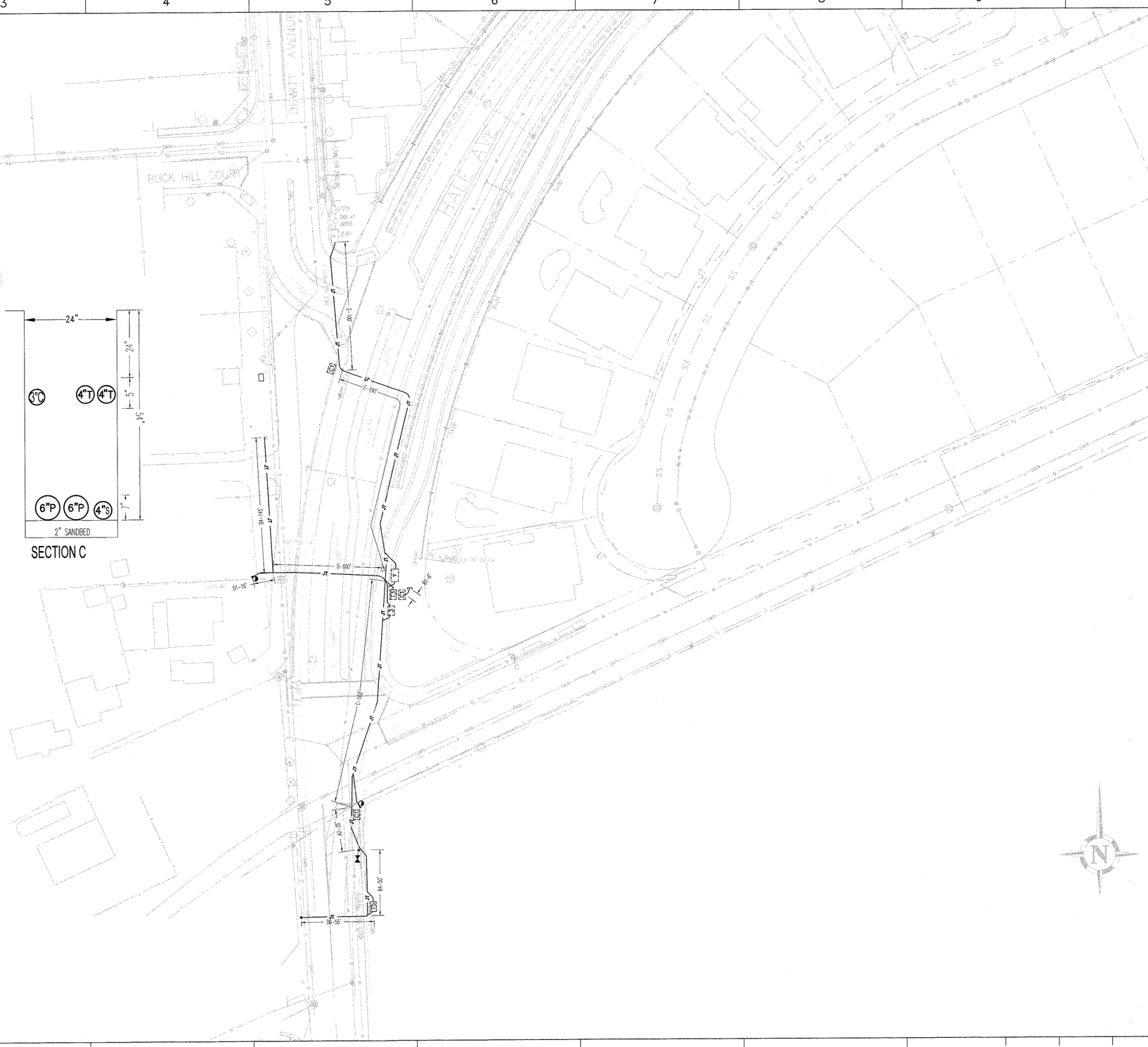


SECTION D1



SECTION E

TRENCH DETAILS
N.T.S



Rev #1 Add Approved Frontier - CATV Drawing

RULE 20C: OH TO UG CONVERSION FOR THE CITY OF MORGAN HILL

NOTES:

1. APPLICANT TO TRENCH JOINT WITH ELECTRIC, PHONE, & CATV
2. APPLICANT TO PROVIDE ALL ELECTRIC SUBSTRUCTURES AS SHOWN.
3. APPLICANT TO PROVIDE MULE TAPE IN ALL ELECTRIC CONDUITS.
4. APPLICANT "TO PROVIDE MANDREL" AND PROVING OF ALL ELECTRIC CONDUIT FACILITIES WITH PG&E INSPECTOR STANDBY.
5. THE TOTAL NUMBER OF BENDS INSTALLED IN ANY PRIMARY DUCT RUN SHALL NOT EXCEED 300 DEGREES. THE TOTAL NUMBER OF BENDS IN ANY SECONDARY DUCT RUN IN EXCESS OF 200 FEET SHALL NOT EXCEED 300 DEGREES. ANY SECONDARY DUCT RUN EQUAL TO OR LESS THAN 200 FEET IN LENGTH MAY CONTAIN UP TO A TOTAL OF 315 DEGREES IN BENDS.
6. PG&E INSPECTOR'S PHONE # (408) 299-1024
7. APPLICANT IS RESPONSIBLE TO ENSURE TRENCHING AND SUBSTRUCTURE INSTALLATION MEET PG&E GREENBOOK STANDARDS. GREENBOOKS ARE AVAILABLE AT YOUR LOCAL PG&E HEADQUARTERS OR CAN BE FOUND ON THE INTERNET @ WWW.PGE.COM/GREENBOOK
8. A 3' SEPARATION IS REQUIRED BETWEEN JOINT TRENCH AND WET FACILITIES.
9. APPLICANT TO FOLLOW CLEARANCE REQUIREMENTS FOR ALL NEW EQUIPMENT PER DOCUMENT 051122.
10. FLAME RESISTANT (FR) CLOTHING IS REQUIRED WHEN WORKING ON OR AROUND PG&E FACILITIES AND EQUIPMENT. SEE PG&E GREENBOOK FOR ADDITIONAL DETAILS

LEGEND

- [3] = APPLICANT TO INSTALL 24"X36"X26" (IVT) SECONDARY ENCLOSURE
- [7] = APPLICANT TO INSTALL 4'6"X8'6"X 6' (IVT) PRIMARY ENCLOSURE
- P6 = PG&E TO INSTALL 3-1100A EPR UG PRIMARY CABLE IN 1 OF (2) 6" PRIMARY CONDUITS BY APPLICANT (1-6" SPARE CONDUIT BY APPLICANT)
- S4 = PG&E TO INSTALL 750A TPX (600V) UG SECONDARY CABLE IN (1) 4" SECONDARY CONDUIT BY APPLICANT
- S = PG&E TO INSTALL 1/0 ACSR TPX SECONDARY AERIAL CABLE
- [7] = EXISTING 4'6"X8'6"X6' PRIMARY SPLICE BOX
- X = PG&E TO INSTALL NEW POLES
- = PG&E TO RELINQUISH JOINT POLE
- = PG&E TO REMOVE CONTACTED POLES
- = TRANSFER MSO RISER SWITCH 125787
- = REMOVE 25 KVA 1ø OH TRANSFORMER
- = INSTALL 50 KVA 1ø OH TRANSFORMER
- = REMOVE 397A &1-1/0A(CN) OH PRIMARY CONDUCTOR
- = REMOVE 3-1/0A OH SECONDARY CONDUCTOR
- = REMOVE 3-1100A EPR UG PRIMARY CABLE IN

JOINT POLE DATA

PG&E TO INSTALL JP#1 @ LOC. 2
50' PG190335VP-1 CLASS 1
PG GRADE: 43-14'
GT GRADE: 23'

INSTALL PG190343VP-A @ LOC 2
20M JOINT PISA
WITH 7/16" PRIMARY DOWN GUY
& 7/32" SECONDARY DOWN GUY
LEAD = 20'

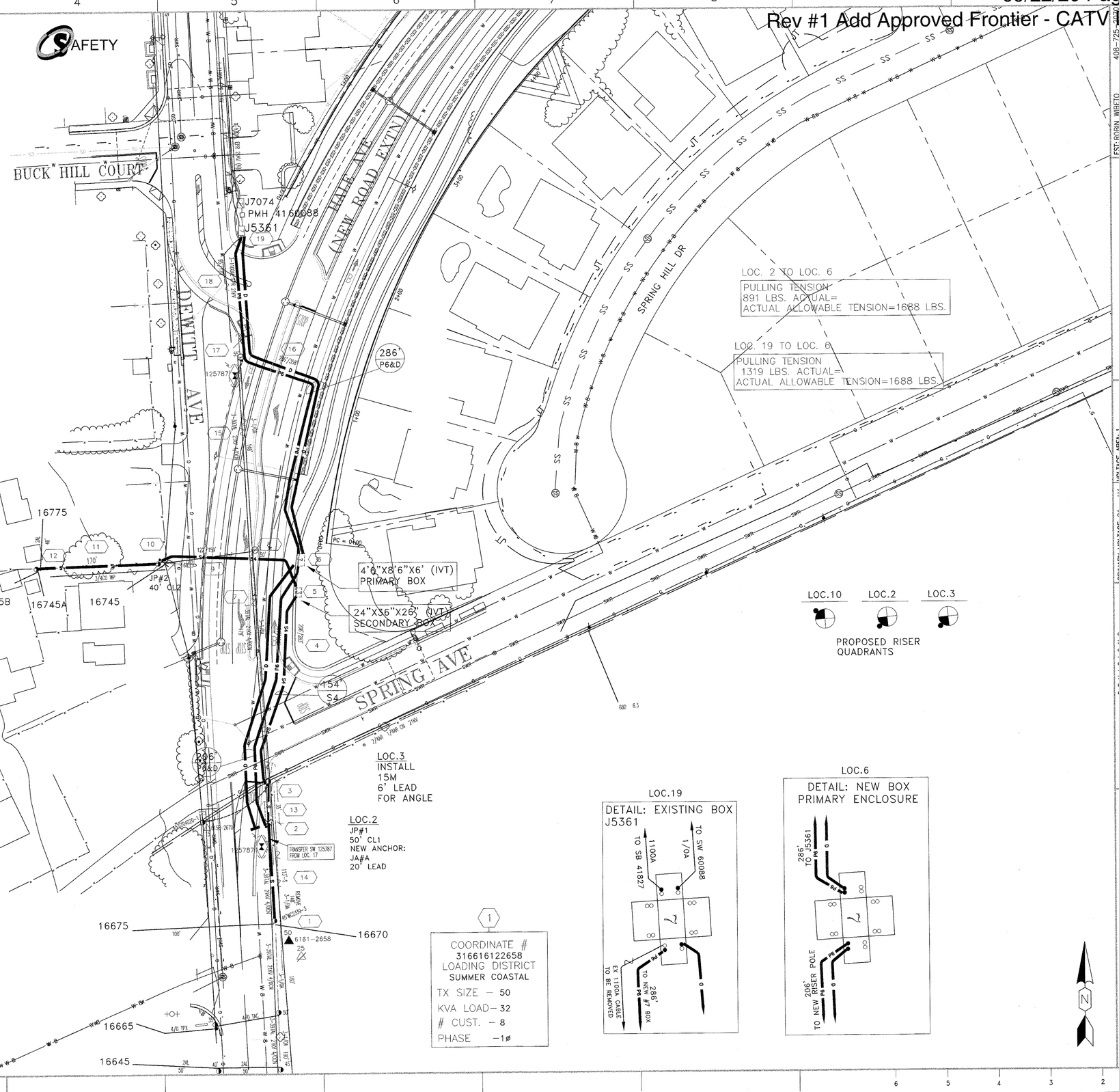
PG&E TO INSTALL JP#2 @ LOC. 10
40' PG190335VP-2 CLASS 2
PG GRADE: 34-4'
GT GRADE: 24'

PG&E TO RELINQUISH @ LOC. 10
40' GT03421
PG GRADE: 34-4'
GT GRADE: 24'
GT GRADE: 24'

CONTACT POLE DATA

PG&E TO REMOVE @ LOC. 8
50' CLASS 3

PG&E TO REMOVE @ LOC. 17
55' CLASS 1



LOC.19

DETAIL: EXISTING BOX J5361

LOC.6

DETAIL: NEW BOX PRIMARY ENCLOSURE

1

COORDINATE #
316616122658
LOADING DISTRICT
SUMMER COASTAL
TX SIZE – 50
KVA LOAD– 32
CUST. – 8
PHASE –1ø

ENGINEERING AND PLANNING DEPT.
10900 N. BLANEY AVE.
CUPERTINO, CA. 95014

EST: ROBIN WIBETO 408-725-2160
ADE: GREG ELDER 408-725-2141
SUPV: DAVID T. MIRANDA 408-725-2165
REP: CA HUYNH 408-299-2340
PLNR: MOHAMED ELZAIN 408-365-2372
NOTIF: 114993896 APN: PG190343VP
SCALE: 1"=40' DATE: 10/02/20
PM: 314382332 SHEET: 1 OF 1 REV: 0

NO ENVIRONMENTAL ISSUES
NEAR LOC: NONE
Know what's below. Call before you dig.
GAS CONFLICT: NO

PRIMARY VOLTAGE: 21 KV
LATITUDE: 37.118406
LONGITUDE: -121.661522
SOURCE SIDE DEVICE: 41827
SUB & CIRCUIT: MORGAN HILL 2105
DSGN SAG: SSU
LOADING AREA: LIGHT
CORROSION AREA: NON
EXEMPT EQUIP INST.: NO
RAPTOR ZONE: YES
FIRE AREA: UPA
ARRESTER DIST: 3
INSULATION DIST: B

REVISIONS

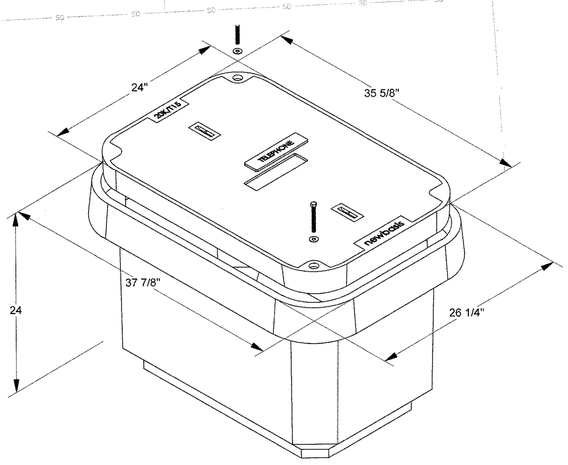
NO.	DATE	DESCRIPTION

CONSTRUCTION SKETCH
DEWITT AVE & SPRING ST
MORGAN HILL
SANTA CLARA COUNTY
PACIFIC GAS & ELECTRIC COMPANY

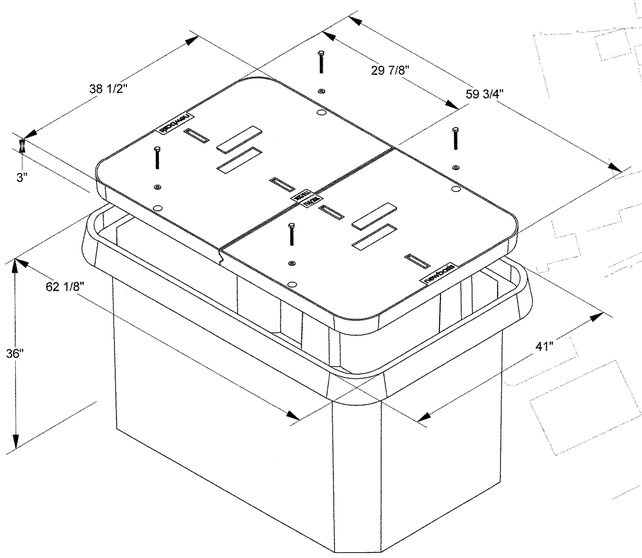
SHEET 4 OF 8

DRY UTILITIES

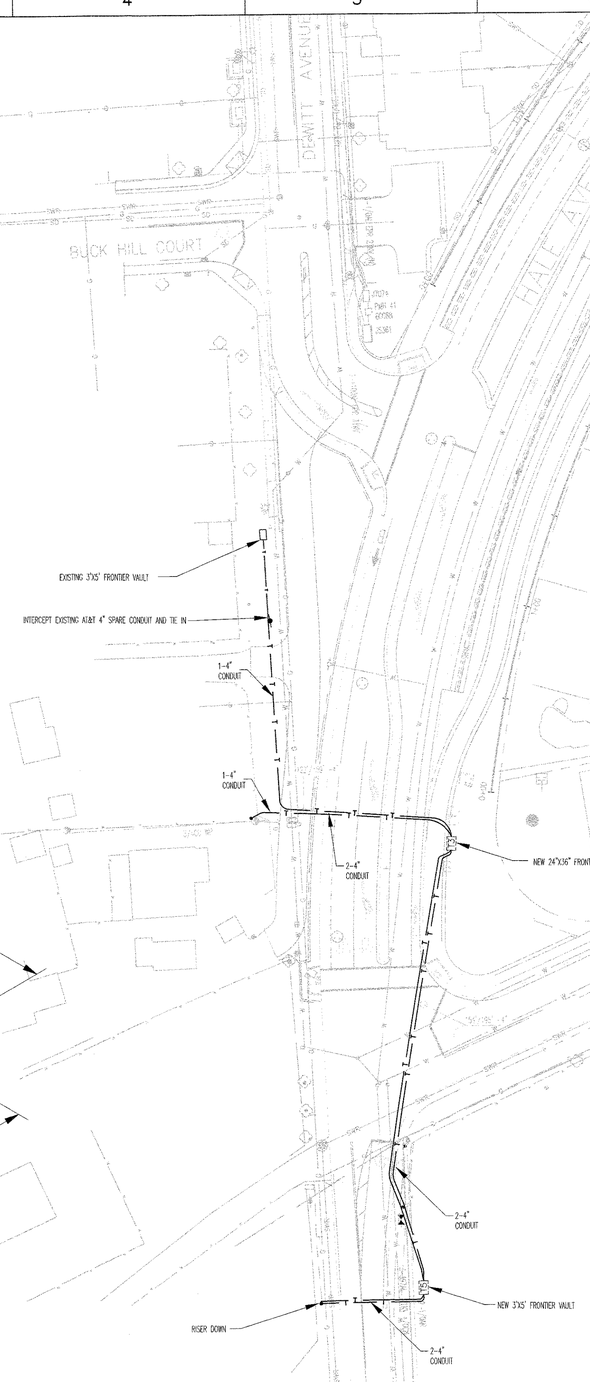
APPROVED - TELEPHONE DRAWING



TYPICAL 24"X36" VAULT
N.T.S



TYPICAL 3'X5' VAULT
N.T.S



FRONTIER APPROVED

AT&T APPROVED:

PENNINO MANAGEMENT GROUP
PHONE #: (209) 370-1908 FAX #: (209) 751-1608
PENNINO MANAGEMENT GROUP

CUST #:
Other:
SHT:
JN:
SHEETS
REV.

DWN:
CHK:
SUPV:
SCALE: 1:40
DATE: 11/12/19

NO.	DATE	DESCRIPTION	ORDER #	DWN	CHKD	SUPV	APVD BY

REVISIONS

PHASE 1
DEWITT AVE & SPRING AVE
MORGAN HILL, CA

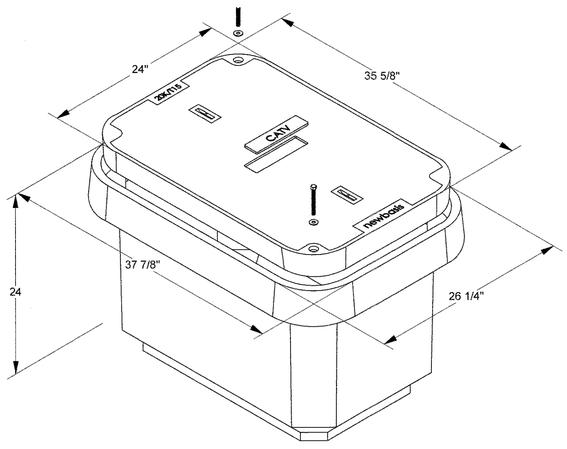
DRAWING # FRONT

SHEET 5 OF 8

0 INCH 1

DRY UTILITIES

APPROVED - CATV DRAWING



TYPICAL 24"X36" CATV VAULT
N.T.S

RE: Morgan Hill Dewitt & Spring CATV Plan

RD Rodriguez, David A <David.Rodriguez@charter.com>
To Nick King

You replied to this message on 12/4/2019 5:02 PM.

This is approved.

PENNINO MANAGEMENT GROUP
PHONE #:(209) 370-1908 FAX #:(209) 751-1608
PENNINO MANAGEMENT GROUP

CUST #:
Other:
SHT: SHEETS REV.
JN:

DWN:
CHK:
SUPV:
SCALE: 1:40
DATE: 11/12/19

NO.	DATE	DESCRIPTION	ORDER #	DWN	CHKD	SUPV	APVD BY

REVISIONS

PHASE 1
DEWITT AVE & SPRING AVE
MORGAN HILL, CA

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SHEET 6 OF 8

TYPICAL DISTRIBUTION TRENCH

Joint Trench - Franchise Area or P.U.E.

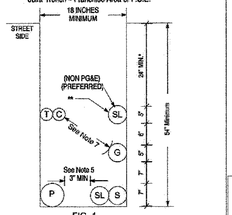


FIG. 1

Placement of the Distribution Trench within a P.U.E. is the preferred method. Trenching in the Franchise Area should only be used when a P.U.E. is unobtainable or otherwise infeasible.
* Increase cover to 30" in the street area (see Note 3).
** Separation must be 12" unless a reduction (6") is mutually agreed upon by affected utilities.

TYPICAL SERVICE TRENCH

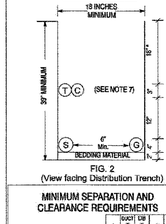
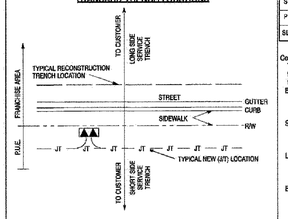


FIG. 2
(View facing Distribution Trench)

MINIMUM SEPARATION AND CLEARANCE REQUIREMENTS

		G	DUCT T	DB T	C	S	P
G	(GAS) SEE NOTES 4, 7 & 13	—	12"	12"	12"	6"	12"
T	(TELEPHONE) DUCT	12"	—	1"	1"	12"	12"
T	(TELEPHONE) DIRECT BURY	12"	1"	—	1"	12"	12"
C	(CATV)	12"	1"	1"	—	12"	12"
S	(ELECTRIC SECONDARY)	6"	12"	12"	12"	—	3"
P	(ELECTRIC PRIMARY)	12"	12"	12"	12"	3"	—
SL	(STREETLIGHT) SEE NOTE 5	6"	12"	12"	12"	1"	3"

STANDARD TRENCH LOCATIONS



SEPARATION AND CLEARANCE DEFINITIONS

Cover:
The term "cover" means the radial distance between the surface of an underground cable, conduit, pipe, or other substructure and the surface elevation (grade).

Backfill:
The term "backfill" refers to the materials used to refill a cut or other excavation, or the act of such refilling after any needed shading is performed.

Shading:
The term "shading" refers to the materials used to provide a measure of separation between facilities installed at different levels within an excavation or cut.

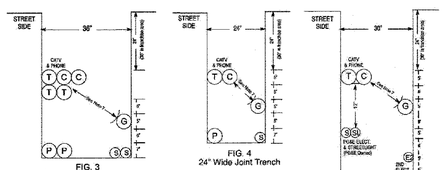
Lift:
The term "lift" is a layer of fill as spread or as compacted or a measurement of material depth that is the rated effective soil depth a compactor can achieve.

Bedding:
The term "bedding" refers to the materials installed beneath facilities at the bottom of a cut or other excavation and intended to provide support and/or protection for those facilities.

JOINT TRENCH CONFIGURATIONS & OCCUPANCY GUIDE 09-27-06

S5453, Exhibit B PACIFIC GAS AND ELECTRIC COMPANY **Page 1 of 4**

OTHER TYPICAL PG&E DISTRIBUTION JOINT TRENCH CONFIGURATIONS



Trench Configuration Notes

The trench configurations shown in this guide are to be considered "typical" only and that other trench widths, depths, as well as utility configurations (placement) may be used, provided all minimum requirements for separation, clearances, and cover are observed. In no case shall electric primary or secondary (excluding street lighting) be placed at a level higher than that of the gas and communications level. Gas shall be placed at the same level or below communications when gas is placed above the electric facilities.

Special Notes for Joint Trench With Second Electric Utility

A. Refer to Sheet 3 for General Notes.
B. A red 3-inch wide "PG&E Electric Line in Conduit" plastic marking tape, Code 375054, shall be installed, spiral wound in a manner that allows for the tape to be readily visible every 3 feet, with each conduit intended to be used for PG&E electric facilities. An equivalent red tape marked to identify the owner shall be installed with the conduit intended to be used for the second electric facility.
C. Each utility shall ensure adequate grounding between electric facilities is provided (See UO Standard S5453, "Joint Trench").
D. Provide a minimum of 2 inches of compacted PG&E approved bedding material as a trench leveling concourse, where required. See General Notes items 11 and 12 (on Page 3), in order to obtain proper compaction.

JOINT TRENCH CONFIGURATIONS & OCCUPANCY GUIDE 09-27-06

S5453, Exhibit B PACIFIC GAS AND ELECTRIC COMPANY **Page 2 of 4**

General Notes

1. The preferred trench location is in a Public Utility easement (P.U.E.).
2. All depths and resulting cover requirements are measured from final grade.
3. Cover, clearances, and separation shall be as great as practicable under the circumstances, but under no circumstances shall be less than the minimum cover, clearance, and separation requirements set forth in General Order 128 and 49CFR 192.321, 49CFR 192.325, and 49CFR 192.327. All facilities shall be anchored in place prior to compaction, or other means shall be taken to ensure no motion of the facilities. Dimensional requirements for shading, leveling, and backfilling shall be determined subsequent to compaction.
4. Trench dimensions shown are typical. Trench sizes and configurations may vary depending upon occupancy and/or field conditions. Trench size and configuration must at all times be constructed in a manner that ensures proper clearances and cover requirements are met. Any "change" to the trench width and configurations as shown in this exhibit must be designed to ensure this requirement.
5. It is preferred to have non-PG&E owned streetlights at a level other than the gas or electric level. Non-PG&E owned streetlights may be at the electric level of the trench as long as minimum clearances are provided and comply with all special notes for a joint trench with a second electric utility.
6. Non-Utility facilities are not allowed in any Joint Utility trench, e.g., irrigation control lines, building fire alarm systems, private telephone systems, outdoor electrical cable, etc.
7. When communication ducts are installed, a minimum of 12" radial separation shall be maintained from gas facilities. Exception: With mutual agreement, when 4-inch diameter or smaller gas pipe is installed, the separation may be reduced to not less than 6 inches.
8. Provide separation from trench wall and other facilities sufficient to ensure proper compaction.
9. Maintain proper separation between PG&E facilities and "wet" utility lines as described in UO Standard S5453. The minimum allowable horizontal separation between Company facilities and "wet" facilities is 3' with a minimum 1' of undisturbed earth or the installation of a suitable barrier between the facilities.
   If a 3' horizontal separation cannot be attained between "wet" utilities and Company dry facilities, a variance may be approved by the local Inspection Supervisor and submitted to the Service Planning Support Program Manager for approval. Separations of 1' or less are not permissible and will not be allowed. The Company may agree to waive the minimum 3' separation requirement at the request of an applicant if warranted and the need is justified. The request for a waiver must:
   - Be made in writing and submitted to the Company ADE during the planning and design phase of the project,
   - Clearly describe the conditions necessitating the waiver,
   - Include a proposed design,
   - And, include a design for a barrier between the "wet" utilities and Company dry facilities in the event 1' of undisturbed earth cannot be maintained.

   Note: Drain lines connected to downspouts on buildings are considered a "wet" utility for the purposes of this standard.
10. Separations shall be maintained at aboveground termination points.
11. Procedures for approving native backfill for shading of PG&E gas facilities:
    - Random soil samples shall be taken from a minimum of 3 locations per 1,000' of trench. 100% of the sample must pass through a 1/2" sieve and 75% must pass through a #4 screen. Additional samples must be taken if existing soil conditions change and are to be taken at the discretion of the PG&E representative on site.
    - The soils must not contain any rocks that have sharp edges or that may otherwise be abrasive.
    - The soils must not contain clods larger than 1/2" if to be used as shading, bedding, or leveling materials.
    - Compaction requirements must meet any applicable PG&E, Federal, State, County, or local requirements.
    - At no time shall the over saturation of native soils be used to achieve these requirements.

    The sieves and screens shall be:
    - 1/2" Sieve: 8" diameter by 2" deep, stainless steel mesh screen.
    - #4 Screen: 8" diameter by 2" deep, stainless steel mesh screen.

Notes continued on the next page

JOINT TRENCH CONFIGURATIONS & OCCUPANCY GUIDE 09-27-06

S5453, Exhibit B PACIFIC GAS AND ELECTRIC COMPANY **Page 3 of 4**

General Notes, continued

12. Procedures for approving native backfill for shading at PG&E electric facilities:
    - Random soil samples shall be taken from a minimum of 3 locations per 1,000' of trench. Additional samples must be taken if existing soil conditions change and are to be taken at the discretion of the PG&E representative on site.
    - Shading material containing large rock, paving material, cinders, sharply angular substances, or corrosive material shall not be placed in the trench where such material may damage the conduits and/or prevent proper compaction over or around the conduits.
    - Native soils containing clods not to exceed 6" in diameter may be included in the shading material provided the clods are readily breakable by hand.
      Note: Soils consisting primarily of adobe, hard compact (dense) clay, and bay muds shall not be used as shading material.
    - At no time shall the over saturation of native soils be used to achieve these requirements.
    - Refer to Engineering Document 062288, Item 13 on Page 2.
13. Competent native soils are preferred to be used for shading, bedding, and backfilling throughout the trench.
    - Where native soils exceed 1/2" minus and/or where gas is to be placed at the bottom of a trench in areas that exceed 1/2" minus soil conditions, or where the bottom of a trench is considered to consist of hard pan, PG&E approved 1/2" minus import material shall be used for shading and/or bedding of gas facilities.
    - PG&E approved import material is per CGT Engineering Guideline 4123.
    - If a leveling course is required for gas facilities, the use of native soils is preferred, but if 1/2" minus conditions are not attainable with the native soils, then the use of PG&E approved import materials is required. Bedding under gas facilities will be a minimum of 2" of compacted 1/2" minus native soils or PG&E approved import material.
    - For electric facilities, refer to Note 12. This applies to leveling courses as well as shading.
    - The minimum PG&E approved bedding material may be increased at the discretion of PG&E when warranted by existing field conditions (e.g., rocky soils, hard pan, etc.).
    - The use of any imported material for backfilling purposes shall be limited to those situations when native soils do not allow for required compaction.
14. The applicant is responsible for the removal of excess spoil and associated costs.
15. Separation between gas facilities and electric facilities may be reduced to 6" when crossing.
16. Service saddles are the preferred service fittings for use throughout the joint trench project. All projects will be designed and estimated using service saddles. However, service tees may be used if all clearances, separation, and coverage requirements are maintained.

Revision Notes

1. Revised Note 9 to clarify the minimum allowable horizontal separations requirements.
2. This document was revised on 09-27-2006.

JOINT TRENCH CONFIGURATIONS & OCCUPANCY GUIDE 09-27-06

S5453, Exhibit B PACIFIC GAS AND ELECTRIC COMPANY **Page 4 of 4**

PG&E Typical Standards For Joint Trench

Pacific Gas and Electric Company®

Utility Bulletin: TD-5453B-002
Publication Date: 07/10/2015 Effective Date: 07/31/2015 Rev: 1

Updated Separation Requirements For Conduit in Joint Trench

WHAT YOU NEED TO KNOW

Utility Standard S5453, "Joint Trench," Exhibit B, currently shows:

MINIMUM SEPARATION AND CLEARANCE REQUIREMENTS

		G	DUCT T	DB T	C	S	P
G	(GAS) SEE NOTES 4, 7 & 13	—	12"	12"	12"	6"	12"
T	(TELEPHONE) DUCT	12"	—	1"	1"	12"	12"
T	(TELEPHONE) DIRECT BURY	12"	1"	—	1"	12"	12"
C	(CATV)	12"	1"	1"	—	12"	12"
S	(ELECTRIC SECONDARY)	6"	12"	12"	12"	—	3"
P	(ELECTRIC PRIMARY)	12"	12"	12"	12"	3"	—
SL	(STREETLIGHT) SEE NOTE 5	6"	12"	12"	12"	1"	3"

Utility Standard S5453, "Joint Trench," Exhibit B, is updated per this bulletin as follows:

MINIMUM SEPARATION AND CLEARANCE REQUIREMENTS (inches)

		G	DUCT T	DB T	C	S	P	SL
G	(GAS) SEE NOTES 4,7, & 13	-	12	12	12	6	12	6
T	(TELEPHONE) DUCT	12	-	1	1	12	12	12
T	(TELEPHONE) DIRECT BURY	12	1	-	1	12	12	12
C	(CATV)	12	1	1	-	12	12	12
S	(ELECTRIC SECONDARY)	6	12	12	12	1.5	3	1.5
P	(ELECTRIC PRIMARY)	12	12	12	12	3	3	3
SL	(STREETLIGHT) SEE NOTE 5	6	12	12	12	1.5	3	1.5
FE*	(FOREIGN ELECTRIC SOURCES, NON-PG&E*) SEE NOTE 5	12	12**	12**	12**	12	12	12

*Must be considered a "Utility" as defined in Utility Standard S5453, "Joint Trench."
Notes 4, 5, 7, and 13 are located in Utility Standard S5453, Exhibit B, "Joint Trench Configurations and Occupancy Guide."
**For exceptions, refer to G.O. 128 rule, Section B, Items (1) and (2).

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GAS PIPELINE UNDERGROUND WARNING TAPE NOTES:

1. A warning tape is to be installed in open trench installation over gas pipelines in both Transmission and Distribution facilities. This includes trenches, bell holes, excavations for repair purposes and riser replacements. The warning tape is intended for excavator digging in the "tolerance zone" to strike the warning tape prior than the pipeline. When the warning tape is exposed and grabbed with excavating equipment, it stretches without breaking, thus alerting the excavator of the gas facility below.
2. Install 6" wide warning tape above the gas pipeline at least 12" below grade, and no closer than 12" from the pipe. Installation should provide the greatest distance between the pipeline and the tape as possible. Install the tape along the length of the excavation. Ensure that the tape overlaps when two or more pieces of tape are used.

EXCEPTION: When a joint trench design does not allow for installment of warning tape within the "warning tape installation zone", install the warning tape a minimum of 6" above the gas pipeline, and below the facility above the pipe.

3. Warning tape shall be brightly colored yellow and marked "Caution: Gas Line Buried Below" or marked with a similar notification.
4. Warning tape shall be stored in such a manner that limits Ultraviolet (UV) exposure.

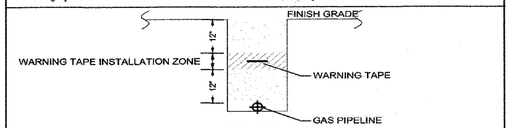
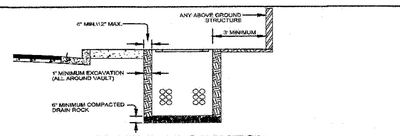
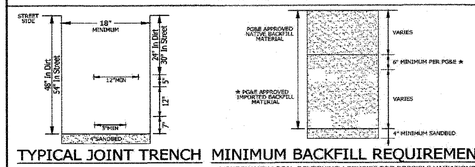


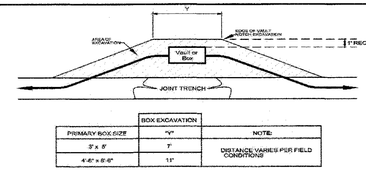
FIGURE 2
GAS PIPELINE UNDERGROUND WARNING TAPE INSTALLATION



TYPICAL EXCAVATION
FOR PG&E PRIMARY VAULTS, TRANSFORMERS AND PHONE VAULTS AND MANHOLES

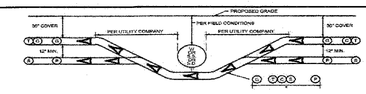


TYPICAL JOINT TRENCH MINIMUM BACKFILL REQUIREMENTS
★ CHECK WITH LOCAL GOVERNING AGENCIES FOR POSSIBLE VARIATIONS



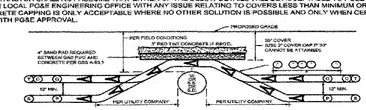
	BOX EXCAVATION	
PRIMARY BOX SIZE	"V"	NOTE:
3' x 5'	7'	DISTANCE VARIES PER FIELD CONDITIONS
4'-6" x 8'-6"	13'	

TYPICAL PG&E PRIMARY BOX EXCAVATION DETAIL



JOINT TRENCH UNDER WATER & S.S. & S.D.
★ WIDTH PER SIZE & NUMBER OF EACH UTILITY. PG&E AND CITY INSPECTOR TO DETERMINE METHOD OF CROSSING.

TRENCHING CONTRACTOR SHALL NOT ASSUME THAT EITHER OF THE BELOW DETAILS WILL BE ACCEPTABLE TO PG&E YOU ARE REQUIRED TO CONTACT THE LOCAL PG&E ENGINEERING OFFICE WITH ANY ISSUE RELATING TO COVERS LESS THAN MINIMUM OR COVERS REQUIRING SHORING. CONCRETE CAPPING IS ONLY ACCEPTABLE WHERE NO OTHER SOLUTION IS POSSIBLE AND ONLY WHEN CERTAIN CRITERIA ARE MET AND ONLY WITH PG&E APPROVAL.



JOINT TRENCH OVER WATER & S.S. & S.D.
★ WIDTH PER SIZE & NUMBER OF EACH UTILITY. PG&E AND CITY INSPECTOR TO DETERMINE METHOD OF CROSSING.
NOTE: MAXIMUM DEPTH ON PLASTIC PIPE TO BE 10'

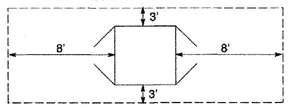
Electric Conduit
Minimum Bend Radius for New Construction

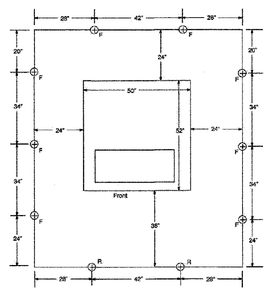
Conduit Diameter	Vertical Radius	Horizontal
2"	24"	36"
3"	24"	36"
4"	36"	36"
5"	36"	60"

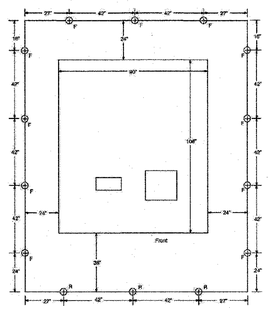
NOTE:
300° DEGREES MAX BENDS IN ANY CONDUIT RUN

Primary Enclosures	Required Clearances
Round or Square	3' From Outside Edges
3' x 5' (interior dimensions)	
4' 6" x 8' 6" (interior dimensions)	3' From the Outside Edge of the Long Side / 5' From the Outside Edge of the Short Side
J-Box in 3' x 5'	3' on short sides, 2' on long side adjacent to the junction bars (the non-operable side), 5' on the long side opposite the junction bars (the operable side)
J-Box in 4' 6" x 8' 6"	5' on short sides, 2' on long side adjacent to the junction bars (the non-operable side), 5' on the long side opposite the junction bars (the operable side)

Pad-Mount With Front and Rear Doors







PENNINO MANAGEMENT GROUP
PHONE #:(209) 370-1908 FAX #:(209) 751-1608
PENNINO MANAGEMENT GROUP

CUST #:
Other:
SHT:
JN:
SHEETS
REV.

DWN:
CHK:
SUPV:
DATE: 11/12/19
SCALE: NO SCALE

NO.	DATE	DESCRIPTION	ORDER #	DWN	CHKD	SUPV	APVD BY
1		REVISIONS					

PHASE 1
DEWITT AVE & SPRING AVE
MORGAN HILL, CA

DRAWING # SPECS
SHEET 7 OF 8

0 1 INCH

DRY UTILITIES

MATERIALS LIST

CITY OF MORGAN HILL DEWITT AVE AND SPRING AVE (TRENCH)

QUANTITY	SECTION	DESCRIPTION
35 Ft	A2	18"X56"
250 Ft	B4	12"X31"
160 Ft	C	24"X36"
100 Ft	D	12"X56"
16 Ft	D1	30"X54"
290 Ft	E	36"X59"
TOTAL = 851 FT		

IT IS THE RESPONSIBILITY OF THE BIDDER TO REVIEW THE 11/12/19 DRAWINGS.
DO NOT RELY SOLEY ON MATERIAL LIST.

CITY OF MORGAN HILL DEWITT AVE AND SPRING AVE (PG&E ELECTRIC)

QUANTITY	PRIMARY	DESCRIPTION	
492 LF	6" CONDUIT DB120	P6	
492 LF	6" CONDUIT DB120	D6	
276 LF	4" CONDUIT DB120	S4	
1 EACH	VAULT #7 4'-6"X8'6"X6'0" IVT		CODE:043411
1 EACH	SECONDARY BOX #3 24"X36"X26" IVT		CODE:040942
	PLUS MISC. TEMP CAPS, COUPLINGS AND RIGID CAPS		

IT IS THE RESPONSIBILITY OF THE BIDDER TO REVIEW THE 11/12/19 DRAWINGS.
DO NOT RELY SOLEY ON MATERIAL LIST.

CITY OF MORGAN HILL DEWITT AVE AND SPRING AVE (AT&T)

QUANTITY	DESCRIPTION
961 Ft	4" CONDUIT
1 EACH	3'X5'X4' VAULT IVT
1 EACH	2'X3' VAULT IVT
1,153 Ft	MULE TAPE
	PLUS MISC. TEMP CAPS, COUPLINGS AND RIGID CAPS

IT IS THE RESPONSIBILITY OF THE BIDDER TO REVIEW THE 11/12/19 DRAWINGS.
DO NOT RELY SOLEY ON MATERIAL LIST.

CITY OF MORGAN HILL DEWITT AVE AND SPRING AVE (COMCAST)

QUANTITY	DESCRIPTION
476 LF	3" CONDUIT
0 EACH	3'X5'X3' VAULT IVT LID
0 EACH	30"X48" VAULT IVT
3 EACH	24"X36" BOX AND LID
0 EACH	17"X30" BOX (FIBER STORAGE)
0 EACH	NODE PEDESTAL 24"X36"
0 EACH	POWER SUPPLY - 44"X44"

NOTE: COMCAST TO PROVIDE OWN MATERIALS

PENNINO MANAGEMENT GROUP
PHONE #:(209) 370-1908 FAX #:(209) 751-1608
PENNINO MANAGEMENT GROUP

CUST #:
Other:
SHT:
JN:
SHEETS
REV.

DWN:
CHK:
SUPV:
SCALE: NO SCALE
DATE: 11/12/19

REVISIONS

NO.	DATE	DESCRIPTION	ORDER #	DWN	CHKD	SUPV	APVD BY

PHASE 1
DEWITT AVE & SPRING AVE
MORGAN HILL, CA

DRAWING # MAT.

SHEET 8 OF 8

0 1 INCH

DRY UTILITIES

COVER PAGE

CONSTRUCTION NOTES:

1. ALL TRENCHING, BACKFILLING AND INSTALLATION BY CONTRACTOR MUST COMPLY WITH PG&E UO STANDARD SS453 (EFFECTIVE DATE 7-31-2015).
2. ALL WORK MUST COMPLY WITH PG&E, TELEPHONE, CATV STANDARDS AND PRACTICES. ALL WORK MUST BE INSPECTED AND APPROVED BY RESPECTIVE INSPECTORS. RANDOM SOIL SAMPLES SHALL BE TAKEN FROM A MINIMUM OF THREE LOCATIONS PER 1,000' OF TRENCH. 100% OF THE SAMPLE MUST PASS THROUGH A ½" SIEVE AND 75% MUST PASS THROUGH A #4 SCREEN. ADDITIONAL SAMPLES MUST BE TAKEN IF EXISTING SOIL CONDITIONS CHANGE AND IS TO BE AT THE DISCRETION OF THE PG&E REPRESENTATIVE ON SITE. THE SOILS MUST NOT CONTAIN CLODS LARGER THE ½" IF TO BE USED AS SHADING, BEDDING OR LEVELING MATERIALS. COMPACTION REQUIREMENTS MUST MEET ANY APPLICABLE PG&E FEDERAL, STATE, COUNTY OR LOCAL REQUIREMENTS. ANY NATIVE SOILS OR IMPORT MATERIALS USED MUST NOT HINDER THOSE EFFORTS.
3. BACKFILL SHALL BE APPROVED BY THE UTILITY COMPANIES AND THE CITY. COMPACTION WILL BE TESTED AND PASSED BY THE SOILS ENGINEER.
4. IF SOIL IS NOT ROCK FREE, ADD 4" DEPTH OF TRENCH FOR SAND BEDDING.
5. VERIFY SPLICE BOX EXCAVATION SIZES WITH SUPPLIER(S).
6. THE TRENCHING CONTRACTOR SHALL COORDINATE THE UTILITY COMPANIES' INSTALLATION.
7. CONTRACTOR SHALL MAKE HIMSELF FAMILIAR WITH THE PROJECT IMPROVEMENT PLANS AND CONDUCT HIS WORK ACCORDINGLY.
8. IT IS THE TRENCHING CONTRACTOR'S RESPONSIBILITY TO PROTECT IN PLACE ALL EXISTING FACILITIES. NO EXTRA PAYMENT WILL BE CONSIDERED FOR CROSSING OTHER SYSTEMS.
9. PMG DESIGN ASSUMES NO RESPONSIBILITY FOR THE PROJECT CONDITIONS. THESE DRAWINGS WERE PREPARED USING DATA SUPPLIED BY PG&E, TELEPHONE, CATV, IMPROVEMENT PLANS AND THE CITY'S VARIOUS "AS-BUILT" INFORMATION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PHYSICALLY REVIEW THE PROJECT PRIOR TO SUBMITTING HIS BID.
10. CONTRACTOR WILL COMPLY WITH ALL LAWS, ORDINANCES AND REGULATIONS. CONTRACTOR SHALL BE FAMILIAR WITH OSHA INDUSTRIAL SAFETY ORDERS AND SHALL CONDUCT HIS WORK ACCORDINGLY. WHEN WORKING NEAR ENERGIZED OR "HOT" EQUIPMENT, THE UTILITY OWNER SHALL BE NOTIFIED TO SUPPLY THE APPROPRIATE MAN POWER. PUBLIC SAFETY AND TRAFFIC CONTROL MEASURES ARE THE CONTRACTOR'S RESPONSIBILITY.
11. THE CONTRACTOR SHALL PROTECT CONSTRUCTION STAKING. HE SHALL COORDINATE STAKING WITH THE PROJECT'S CIVIL ENGINEER.
12. CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA) TWO WORKING DAYS PRIOR TO START OF WORK.
13. CONTRACTOR SHALL NOTIFY INSPECTORS OF ANY POTENTIAL CONFLICTS PRIOR TO START OF WORK.
14. THIS PLAN IS TO BE USED FOR THE SOLE PURPOSE OF DIGGING THE JOINT TRENCH. SEE PG&E, AT&T, AND COMCAST PLANS FOR EXACT SIZE AND NUMBER OF CONDUITS INSTALLED IN THE JOINT TRENCH. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THE CORRECT NUMBER, SIZE AND TYPES OF CONDUITS ARE INSTALLED PER THE ENGINEERED PLANS BY EACH UTILITY.
15. NOTE: PLANS ISSUED AT THE PRE-CONSTRUCTION MEETING MAY BE SUBJECT TO REVISIONS, IF FINAL PLANS FROM EACH UTILITY COMPANY WERE NOT AVAILABLE AT THE START OF CONSTRUCTION.
16. WATER, SEWER, DRAINS, SANITARY WASTE, FUELS (INCLUDING DIESEL AND GASOLINE), OIL, PROPANE AND OTHER VOLATILE HEAVIER THAN AIR GASES, SPRINKLER, IRRIGATION, STEAM AND OTHER "WET" FACILITIES SHALL MAINTAIN A MINIMUM OF THREE FEET FROM THE NEAREST OUTER SURFACE OF PG&E FACILITIES WITH NO LESS THAN ONE FOOT OF EARTH (SOIL BARRIER) BETWEEN THE ADJACENT SIDES OF THE INDIVIDUAL TRENCHES.
17. IN THE EXTRAORDINARY CASE THAT THE MINIMUM THREE FOOT HORIZONTAL SEPARATION CANNOT BE ATTAINED BETWEEN "WET" UTILITIES AND COMPANY DRY FACILITIES, A VARIANCE MAY BE APPROVED BY THE LOCAL INSPECTION SUPERVISOR AND SUBMITTED TO SERVICE PLANNING SUPPORT PROGRAM MANAGER FOR APPROVAL.
18. ALL METER PANELS: INDIVIDUAL, RESIDENTIAL, OR NONRESIDENTIAL APPLICANTS WITH A METER PANEL RATING OF ANY SIZE, INSTALLED INSIDE A METER ROOM OR OTHER STRUCTURE, MUST FOLLOW ALL OF THE REQUIREMENTS DESCRIBED BELOW.
    A. INSTALL, OWN AND MAINTAIN A SEPARATE, NOMINAL, 2-INCH DIAMETER CONDUIT WITH PULL TAPE INSIDE. THE CONDUIT AND PULL TAPE MUST EXTEND FROM THE OUTSIDE SURFACE OF THE BUILDING AND TERMINATE OUTSIDE THE METER PANEL OR SWITCHBOARD AT THE TOP OF THE METER SECTION.
    B. ENSURE THE 2-INCH DIAMETER CONDUIT AND PULL TAPE EXIT THE OUTSIDE OF THE BUILDING A MINIMUM OF 8 FEET AND A MAXIMUM OF 10 FEET ABOVE GROUND. THE OPEN END OF THE CONDUIT THAT IS EXPOSED TO THE OUTSIDE MUST HAVE A REMOVABLE, TEMPORARY CAP OR PLUG.
    C. DO NOT USE THE CONDUIT. THE CONDUIT IS FOR PG&E'S METERING EQUIPMENT ONLY.
19. THIS JOINT TRENCH PLAN WAS PREPARED BASED ON TOPOGRAPHICAL SURVEY AS PROVIDED BY A CIVIL ENGINEER. THE CONTRACTOR IS CAUTIONED THAT EXPLORATORY WORK IS NECESSARY TO DETERMINE THE ACTUAL LOCATION OF ANY EXISTING UTILITY. PMG STRONGLY RECOMMENDS THAT ALL UTILITIES BE PHYSICALLY LOCATED ON THE SITE BEFORE THE ONSET OF SITE WORK. SUBSTRUCTURE LOCATIONS MAY REQUIRE FIELD ADJUSTMENT TO COMPENSATE FOR ACTUAL EXISTING UTILITY LOCATIONS.

811

Know what's **below.**
Call before you dig.

HALE AVE EXT. RULE 20

HALE AVE AND MAIN AVE
MORGAN HILL, CA



VICINITY MAP
N.T.S

UTILITY APPROVALS			
UTILITY	APPROVED BY	DATE	REF #
PG&E ELECTRIC	GREG ELDER	4/30/2020	
AT&T			
FRONTIER			
COMCAST			

GENERAL NOTES:

1. THE PREFERRED TRENCH LOCATION IS IN A PUBLIC UTILITY EASEMENT (PUE).
2. ALL DEPTHS AND RESULTING COVER REQUIREMENTS ARE MEASURED FROM FINAL GRADE.
3. COVER, CLEARANCES AND SEPARATION SHALL BE AS GREAT AS PRACTICABLE UNDER THE CIRCUMSTANCES, BUT UNDER NO CIRCUMSTANCES SHALL BE LESS THAN THE MINIMUM COVER, CLEARANCE, AND SEPARATION REQUIREMENTS SET FORTH IN GENERAL ORDER 128 AND 49CFR 192.321, 49CFR 192.325, AND 49CFR 192.327. ALL FACILITIES SHALL BE ANCHORED IN PLACE PRIOR TO COMPACTION, OR OTHER MEANS SHALL BE TAKEN TO ENSURE NO MOTION OF THE FACILITIES. DIMENSIONAL REQUIREMENTS FOR SHADING, LEVELING, AND BACKFILLING SHALL BE DETERMINED SUBSEQUENT TO COMPACTION.
4. TRENCH DIMENSIONS SHOWN ARE TYPICAL. TRENCH SIZES AND CONFIGURATIONS MAY VARY DEPENDING UPON OCCUPANCY AND/OR FIELD CONDITIONS. TRENCH SIZE AND CONFIGURATION MUST AT ALL TIMES BE CONSTRUCTED IN A MANNER THAT ENSURES PROPER CLEARANCES AND COVER REQUIREMENTS ARE MET. ANY "CHANGE" TO THE TRENCH WIDTH AND CONFIGURATIONS AS SHOWN IN THIS EXHIBIT MUST BE DESIGNED TO ENSURE THIS REQUIREMENT.
5. IT IS PREFERRED TO HAVE NON-PG&E OWNED STREETLIGHTS AT A LEVEL OTHER THAN THE GAS OR ELECTRIC LEVEL. NON-PG&E OWNED STREETLIGHTS MAY BE AT THE ELECTRICAL LEVEL OF THE TRENCH AS LONG AS MINIMUM CLEARANCES ARE PROVIDED AND COMPLY WITH ALL SPECIAL NOTES FOR A JOINT TRENCH WITH A SECOND ELECTRIC UTILITY.
6. NON-UTILITY FACILITIES ARE NOT ALLOWED IN ANY JOINT UTILITY TRENCH, E.G., IRRIGATION CONTROL LINES, BUILDING FIRE ALARM SYSTEMS, PRIVATE TELEPHONE SYSTEMS, OUTDOOR ELECTRICAL CABLE, ETC.
7. WHEN COMMUNICATION DUCTS ARE INSTALLED, A MINIMUM OF 12" RADIAL SEPARATION SHALL BE MAINTAINED FROM GAS FACILITIES. EXCEPTION: WITH MUTUAL AGREEMENT, WHEN 4-INCH DIAMETER OR SMALLER GAS PIPE IS INSTALLED, THE SEPARATION MAY BE REDUCED TO NOT LESS THAN 6 INCHES.
8. PROVIDE SEPARATION FROM TRENCH WALL AND OTHER FACILITIES SUFFICIENT TO ENSURE PROPER COMPACTION.
9. MAINTAIN PROPER SEPARATION BETWEEN PG&E FACILITIES AND "WET" UTILITY LINES AS DESCRIBED IN UO STANDARD SS453. THE MINIMUM ALLOWABLE HORIZONTAL SEPARATION BETWEEN COMPANY FACILITIES AND "WET" FACILITIES IS 3' WITH A MINIMUM OF 1' OF UNDISTURBED EARTH OR THE INSTALLATION OF A SUITABLE BARRIER BETWEEN THE FACILITIES. IF A 3' HORIZONTAL SEPARATION CANNOT BE ATTAINED BETWEEN "WET" UTILITIES AND COMPANY DRY FACILITIES, A VARIANCE MAY BE APPROVED BY THE LOCAL INSPECTION SUPERVISOR AND SUBMITTED TO THE SERVICE PLANNING SUPPORT PROGRAM MANAGER FOR APPROVAL. SEPARATIONS OF 1' OR LESS ARE NOT PERMISSABLE AND WILL NOT BE ALLOWED. THE COMPANY MAY AGREE TO WAIVE THE MINIMUM 3' SEPARATION REQUIREMENT AT THE REQUEST OF AN APPLICANT IF WARRANTED AND THE NEED IS JUSTIFIED. THE REQUEST FOR A WAIVER MUST:
    - ☐ BE MADE IN WRITING AND SUBMITTED TO THE COMPANY ADE DURING THE PLANNING AND DESIGN PHASE OF THE PROJECT;
    - ☐ CLEARLY DESCRIBE THE CONDITIONS NECESSITATING THE WAIVER,
    - ☐ INCLUDE A PROPOSED DESIGN AND INCLUDE A DESIGN FOR A BARRIER BETWEEN THE "WET" UTILITIES AND COMPANY DRY FACILITIES IN THE EVENT 1' OF UNDISTURBED EARTH CANNOT BE MAINTAINED. NOTE: DRAIN LINES CONNECTED TO DOWNSPOUTS OF BUILDINGS ARE CONSIDERED A "WET" UTILITY FOR THE PURPOSES OF THIS STANDARD.
10. SEPARATIONS SHALL BE MAINTAINED AT ABOVEGROUND TERMINATION POINTS.
11. PROCEDURES FOR APPROVING NATIVE BACKFILL FOR SHADING OF PG&E GAS FACILITIES:
    - ☐ RANDOM SOIL SAMPLES SHALL BE TAKEN FROM A MINIMUM OF 3 LOCATIONS PER 1,000' OF TRENCH. 100% OF THE SAMPLE MUST PASS THROUGH A ½" SIEVE AND 75% MUST PASS THROUGH A #4 SCREEN. ADDITIONAL SAMPLES MUST BE TAKEN IF EXISTING SOIL CONDITIONS CHANGE AND IS TO BE AT THE DISCRETION OF THE PG&E REPRESENTATIVE ON SITE.
    - ☐ THE SOILS MUST NOT CONTAIN ANY ROCKS THAT HAVE SHARP EDGES OR THAT MAY OTHERWISE BE ABRASIVE.
    - ☐ THE SOILS MUST NOT CONTAIN CLODS LARGER THE ½" IF TO BE USED AS SHADING, BEDDING OR LEVELING MATERIALS.
    - ☐ COMPACTION REQUIREMENTS MUST MEET ANY APPLICABLE PG&E FEDERAL, STATE, COUNTY OR LOCAL REQUIREMENTS.
    - ☐ AT NO TIME SHALL THE OVER SATURATION OF NATIVE SOILS BE USED TO ACHIEVE THESE REQUIREMENTS.
    - ☐ THE SIEVES AND SCREENS SHALL BE:
      ½" SIEVE: 8" DIAMETER BY 2" DEEP, STAINLESS STEEL MESH SCREEN.
      #4 SCREEN: 8" DIAMETER BY 2" DEEP, STAINLESS STEEL MESH SCREEN.
12. PROCEDURES FOR APPROVING NATIVE BACKFILL FOR SHADING AT PG&E ELECTRIC FACILITIES:
    - ☐ RANDOM SOIL SAMPLES SHALL BE TAKEN FROM A MINIMUM OF 3 LOCATIONS PER 1,000' OF TRENCH. ADDITIONAL SAMPLES MUST BE TAKEN IF EXISTING SOIL CONDITIONS CHANGE AND ARE TO BE TAKEN AT THE DISCRETION OF THE PG&E REPRESENTATIVE ON SITE.
    - ☐ SHADING MATERIAL CONTAINING LARGE ROCK, PAVING MATERIAL, CINDERS, SHARPLY ANGULAR SUBSTANCES, OR CORROSIVE MATERIAL SHALL NOT BE PLACED IN THE TRENCH WHERE SUCH MATERIAL MAY DAMAGE THE CONDUITS AND/OR PREVENT PROPER COMPACTION OVER OR AROUND THE CONDUITS.
    - NATIVE SOILS CONTAINING CLODS NOT TO EXCEED 6" IN DIAMETER MAY BE INCLUDED IN THE SHADING MATERIAL PROVIDED THE CLODS ARE READILY BREAKABLE BY HAND. NOTE: SOILS CONSISTING PRIMARILY OF ADOBE, HARD COMPACT (DENSE) CLAY, AND BAY MUDS SHALL NOT BE USED AS SHADING MATERIAL.
    - ☐ AT NO TIME SHALL THE OVER SATURATION OF NATIVE SOILS BE USED TO ACHIEVE THESE REQUIREMENTS.
    - ☐ REFER TO ENGINEERING DOCUMENT 062288, ITEM 13 ON PAGE 2.
13. COMPETENT NATIVE SOILS ARE PREFERRED TO BE USED FOR SHADING, BEDDING, AND BACKFILLING THROUGHOUT THE TRENCH.
    - WHERE NATIVE SOILS EXCEED ½" MINUS AND/OR WHERE GAS IS TO BE PLACED AT THE BOTTOM OF A TRENCH IN AREAS THAT EXCEED ½" MINUS SOIL CONDITIONS, OR WHERE THE BOTTOM OF A TRENCH IS CONSIDERED TO CONSIST OF HARD PAN, PG&E APPROVED ½" MINUS IMPORT MATERIAL SHALL BE USED FOR SHADING AND/OR BEDDING OF GAS FACILITIES.
    - ☐ PG&E APPROVED IMPORT MATERIAL IS PER CGT ENGINEERING GUIDELINE 4123.
    - ☐ IF A LEVELING COURSE IS REQUIRED FOR GAS FACILITIES, THE USE OF NATIVE SOILS IS PREFERRED, BUT IF ½" MINUS CONDITIONS ARE NOT ATTAINABLE WITH NATIVE SOILS, THEN THE USE OF PG&E APPROVED IMPORT MATERIALS IS REQUIRED. BEDDING UNDER GAS FACILITIES WILL BE A MINIMUM OF 2" OF COMPACTED ½" MINUS NATIVE SOILS OR PG&E APPROVED IMPORT MATERIAL.
    - ☐ FOR ELECTRIC FACILITIES, REFER TO NOTE 12. THIS APPLIES TO LEVELING COURSES AS WELL AS SHADING.
    - ☐ THE MINIMUM PG&E APPROVED BEDDING MATERIAL MAY BE INCREASED AT THE DISCRETION OF PG&E WHEN WARRANTED BY EXISTING FIELD CONDITIONS (E.G., ROCKY SOILS, HARD PAN, ETC.)
    - ☐ THE USE OF ANY IMPORTED MATERIAL FOR BACKFILLING PURPOSES SHALL BE LIMITED TO THOSE SITUATIONS WHEN NATIVE SOILS DO NOT ALLOW FOR REQUIRED COMPACTION.
14. THE APPLICANT IS RESPONSIBLE FOR THE REMOVAL OF EXCESS SPOIL AND ASSOCIATED COSTS.
15. SEPARATION BETWEEN GAS FACILITIES AND ELECTRIC FACILITIES MAY BE REDUCED TO 6" WHEN CROSSING.
16. SERVICE SADDLES ARE THE PREFERRED SERVICE FITTINGS FOR USE THROUGHOUT THE JOINT TRENCH PROJECT. ALL PROJECTS WILL BE DESIGNED AND ESTIMATED USING SERVICE SADDLES. HOWEVER, SERVICE TEES MAY BE USED IF ALL CLEARANCES, SEPARATION, AND COVERAGE REQUIREMENTS ARE MAINTAINED.
17. CONTRACTOR TO INCREASE METER SPACING AS NECESSARY WHEN EARTHQUAKE VALVES OR OTHER ADDITIONAL SAFETY EQUIPMENT ARE REQUIRED. EARTHQUAKE VALVES ARE REQUIRED IN SOME AREAS AND ARE NOT PART OF PG&E/PMG SCOPE. THIS INFORMATION CAN BE FOUND ON BUILDING MECHANICAL ENGINEER'S PLANS. PG&E STANDARD METER SPACING REQUIREMENTS DO NOT INCLUDE CLEARANCE FOR EARTHQUAKE VALVES.

PENNINO MANAGEMENT GROUP
PHONE #:(209) 370-1988 FAX #:(209) 751-1698
PENNINO MANAGEMENT GROUP

CUST #:
Other:
SHT:
JN:
SHEETS
REV.

DWN:
CHK:
SUPV:
SCALE: NO SCALE
DATE: 06/30/2020

NO.	DATE	DESCRIPTION	ORDER #	DWN	CHKD	SUPV	APV'D BY

REVISIONS

HALE AVE. EXT. R20
HALE AVE AND MAIN AVE
MORGAN HILL, CA

COVER

SHEET 1 OF 12

1 INCH 0

JOINT TRENCH GENERAL NOTES:

1. THE PREFERED TRENCH LOCATION IS IN A PUBLIC UTILITY EASEMENT.
2. ALL DEPTHS AND RESULTING COVER REQUIREMENTS ARE MEASURED FROM FINAL GRADE.
3. COVER, CLEARANCES, AND SEPERATION SHALL BE AS GREAT AS PRECTICABLE UNDER THE CIRCUMSTANCES, BUT UNDER NO CIRCUMSTANCES SHALL BE LESS THAN THE MINIMUM COVER, CLEARANCE, AND SEPARATION REQUIREMENTS SET FORTH IN GENERAL ORDER 128 AND 49CFR 192.321, AND 49CFR 192.327. ALL FACILITIES SHALL BE ANCHORED IN PLACE PRIOR TO COMPACTION, OR OTHER MEANS SHALL BE TAKEN TO ENSURE NO MOTION OF THE FACILITIES. DIMENSIONAL REQUIREMENTS FOR SHADING, LEVELING, AND BACKFILLING SHALL BE DETERMINED SUBSEQUENT.
4. NON-UTILITY FACILITIES ARE NOT ALLOWED IN ANY JOINT TRENCH, ETC. IRRIGATION LINES, PRIVATE PHONE, ETC.
5. WHEN COMMUNICATION DUCTS ARE INSTALLED, A MINIMUM OF 12" RADIAL SEPARATION SHALL BE MAINTAINED FROM GAS FACILITIES.
6. PROVIDE SEPARATION FROM TRENCH WALL AND OTHER FACILITIES SUFFICIENT TO ENSURE PROPER COMPACTION.
7. MAINTAIN PROPER SEPARATION BETWEEN PG&E FACILITIES AND "WET" UTILITY LINES AS DESCRIBED IN UO STANDARD S5453. THE MINIMUM ALLOWABLE HORIZONTAL SEPARATION BETWEEN COMPANY FACILITIES AND "WET" FACILITIES IS 3' WITH A MINIMUM 1' OF UNDISTURBED EARTH OR THE INSTALLATION OF A SUITABLE BARRIER BETWEEN . IF A 3' HORIZONTAL SEPARATION CANNOT BE ATTAINED BETWEEN "WET" UTILITIES AND COMPANY FACILITIES A VARIANCE MAY BE APPROVED BY THE LOCAL INSPECTION SUPERVISOR AND SUBMITTED TO THE SERVICE PLANNING SUPPORT PROGRAM MANAGER FOR APPROVAL. SEPARATIONS OF 1' OR LESS ARE NOT PERMISSIBLE AND WILL NOT BE ALLOWED.
8. SEPARATIONS SHALL BE MAINTAINED AT ABOVE GROUND TERMINATION POINTS.
9. PROCEDURES FOR APPROVING NATIVE BACKFILL FOR SHADING AT PG&E FACILITIES:
   - -RANDOM SOIL SAMPLES SHALL BE TAKEN FROM A MINIMUM OF 3 LOCATIONS PER 1000' OF TRENCH. ADDITIONAL SAMPLES MUST BE TAKEN IF EXISTING SOIL CONDITIONS CHANGE AND ARE TO BE TAKEN AT THE DISCRETION OF THE PG&E REPRESENTATIVE ON SITE.
   - -SHADING MATERIAL CONTAINING LARGE ROCK, PAVING MATERIAL, CINDERS, SHARPLY ANGULAR SUBSTANCES, OR CORROSIVE MATERIAL SHALL NOT BE PLACED IN THE TRENCH WHERE SUCH MATERIAL MAY DAMMAGE THE CONDUITS AND/OR PREVENT PROPER COMPACTION OVER AND AROUND CONDUITS.
   - – NATIVE SOILS CONTAINING CLODS NOT TO EXCEED 6" IN DIAMETER MAY BE INCLUDED IN THE SHADING MATERIAL PROVIDED THE CLODS ARE READILY BREAKABLE BY HAND.
   - -AT NO TIME SHALL THE OVER SATURATION OF NATIVE SOILS BE USED TO ACHIEVE THESE REQUIREMENTS.
10. SEPERATION BETWEEN GAS FACILITIES AND ELECTRIC FACILITIES MAY BE REDUCED TO 6" WHEN CROSSING.

NOTES:

- -APPLICANT TO DO ALL TRENCHING AND BACKFILLING
- -APPLICANT TO INSTALL ALL SUBSTRUCTURES
- -APPLICANT TO PROVIDE SAND ON-SITE
- -APPLICANT TO PERFORM 1899' OF TRENCHING AND BACKFILLING. SEE DRAWINGS FOR DETAILS.
- -APPLICANT MUST SCHEDULE A PRECONSTRUCTION CONSULTATION WITH THE PG&E TRENCH INSPECTION DESK AND SECOND APPOINTMENT FOR TRENCH INSPECTION
- – APPLICANT TO NOTIFY PG&E TRENCH INSPECTION DESK FOR APPOINTMENT. 7 BUSINESS DAYS MINIMUM NOTICE IS REQUIRED.
- -GUIDELINES AND STANDARDS FOR PG&E FACILITIES CAN BE FOUND AT PGE.COM/GREENBOOK

MINIMUM SEPARATION AND CLEARANCE REQUIREMENTS (INCHES)

		G	DUCT T	DB T	C	S	P	SL	MINIMUM COVER
G	(GAS) SEE NOTES 4,7, & 13	–	12	12	12	6	12	6	24, 30 STREET
T	(TELEPHONE) DUCT	12	–	1	1	12	12	12	18, 30 STREET
T	(TELEPHONE) DIRECT BURY	12	1	–	1	12	12	12	18, 30 STREET
C	(CATV)	12	1	1	–	12	12	12	18, 30 STREET
S	(ELECTRIC SECONDARY)	6	12	12	12	1.5	3	1.5	24, 30 STREET
P	(ELECTRIC PRIMARY)	12	12	12	12	3	3	2	28, 36 STREET
SL	(STREETLIGHT) SEE NOTE 12	6	12	12	12	1.5	3	1.5	24, 30 STREET
FE*	(FOREIGN ELECTRIC SOURCE, NON-PG&E*) SEE NOTE 8	12	12**	12**	12**	12	12	12	

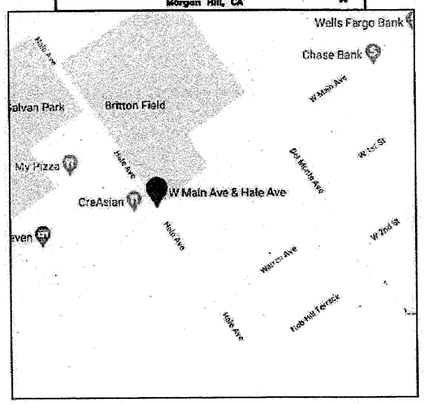
*Must be considered a "Utility" as defined in Utility Standard S5453, "Joint Trench."
Notes 4, 5, 7, and 13 are located in Utility Standard S5453, Exhibit B, "Joint Trench Configurations and Occupancy Guide."
**For exceptions, refer to G.O. 128 rule, Section B, Items (1) and (2).

JT OCCUPANT GUIDE

TRENCH SECTION	LENGTH	DIMENSION	ELECTRIC 6" P	5" S	2" GAS	3" GA	4" TEL
A	66'	18"x33"	1				
A1	801'	18"x33"	2				
A2	20'	18"x44"	3				
A3	57'	18"x44"	4				
B	1220'	18"x61"	1				2
B1	221'	18"x61"	2				2
C	248'	18"x50"	2			1	2
C1	56'	18"x50"	2			2	2
C2	32'	24"x50"	3			2	2
C3	67'	24"x50"	2			2	1
D	8'	18"x34"		1			
E	48'	18"x34"					1
G	54'	18"x45"	2			2	
G3	12'	18"x45"	1			2	
H	56'	30"x57"	3		1	2	
H1	32'	30"x57"	4		1	2	

VICINITY SKETCH

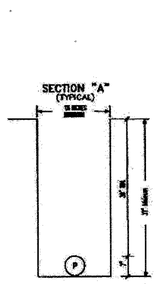
Morgan Hill, CA



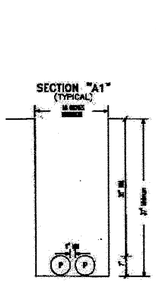
LEGEND

- EXISTING GAS MAIN
- FACE OF CURB
- PROPOSED JOINT TRENCH
- EXISTING WATER LINE
- PROPERTY LINE (P/L)
- EXISTING SEWER LINE
- EXISTING STORM DRAIN
- [T3] PROPOSED 24"x36" PHONE BOX
- [C1] PROPOSED 24"x36" CABLE BOX
- [5] EXISTING #5 BOX
- [7] PROPOSED #7 BOX
- [2] PROPOSED #2 BOX
- EXISTING JOINT UTILITY POLE
- EXISTING PG&E UTILITY POLE
- PROPOSED UTILITY POLE

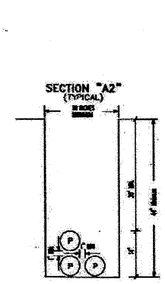
SECTION "A" (TYPICAL)



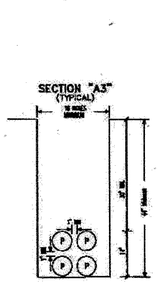
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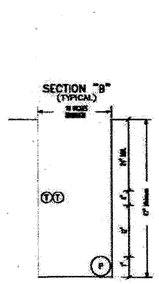
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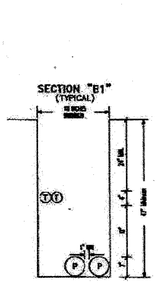
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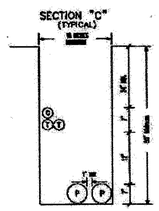
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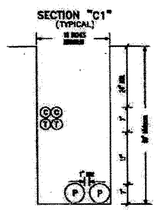
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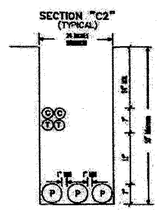
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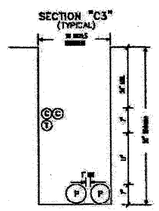
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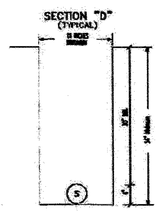
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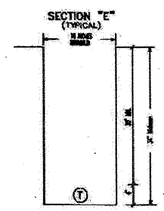
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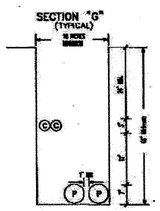
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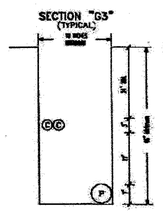
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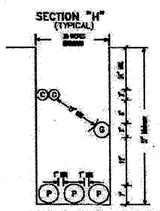
SECTION "G" (TYPICAL)



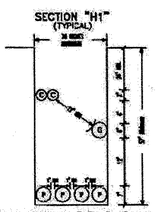
SECTION "G3" (TYPICAL)



SECTION "H" (TYPICAL)



SECTION "H1" (TYPICAL)



GAS SHOWN IN JOINT TRENCH SECTIONS "H" & "H1" FOR REFRENCE ONLY. ALL GAS RELOCATION WORK TO BE DONE UNDER PM# 35162180

LAND RIGHTS NOTES:

APPLICANT TO PROVIDE ADEQUATE P.U.E.'S AND/OR R.O.W. FOR PG&E FACILITIES. ANY ADDITIONAL REQUIRED RIGHTS OF WAY ARE TO BE SURVEYED AND DOCUMENTED BY PG&E AT THE APPLICANT'S EXPENSE.

Underground Service Alert

Call: TOLL FREE 811

TWO WORKING DAYS BEFORE YOU DIG

NOTIFIED U.S.A.
DATE:
TICKET #
BY:

COMPOSITE DRAWING
W. MAIN AVE. & HALE AVE.
MORGAN HILL
SANTA CLARA COUNTY

REVISIONS

NO.	DATE	DESCRIPTION

ORDER # | DWN | CK'D | SUPV | APV'D

PACIFIC GAS AND ELECTRIC COMPANY
ENGINEERING AND PLANNING DEPT.
401 WORK ST.
SALINAS, CA

811 Please notify Before You Call Before you dig.

EST.: RYAN SHELUTO 831-784-3361
ARE: RYAN SHELUTO 831-784-3361
SUPR: DAVID TIGERINO 925-328-5572
REP: CA NORRI 408-268-1000

NOTIF: 114983900
PM: 31438229

SCALE: 1"=40'
DATE: 4/20/2023
SHEET: 1 OF 2 REV.

SHEET 2 OF 12

RULE 20B: OH TO UG CONVERSION FOR THE CITY OF MORGAN HILL

NOTES:

1. APPLICANT TO TRENCH JOINT WITH ELECTRIC, PHONE, & CATV
2. APPLICANT TO PROVIDE ALL ELECTRIC SUBSTRUCTURES AS SHOWN.
3. APPLICANT TO PROVIDE MULE TAPE IN ALL ELECTRIC CONDUITS.
4. APPLICANT "TO PROVIDE MANDREL" AND PROVING OF ALL ELECTRIC CONDUIT FACILITIES WITH PG&E INSPECTOR STANDBY.
5. THE TOTAL NUMBER OF BENDS INSTALLED IN ANY PRIMARY DUCT RUN SHALL NOT EXCEED 300 DEGREES. THE TOTAL NUMBER OF BENDS IN ANY SECONDARY DUCT RUN IN EXCESS OF 200 FEET SHALL NOT EXCEED 300 DEGREES. ANY SECONDARY DUCT RUN EQUAL TO OR LESS THAN 200 FEET IN LENGTH MAY CONTAIN UP TO A TOTAL OF 315 DEGREES IN BENDS.
6. PG&E INSPECTOR'S PHONE # (408) 299-1024
7. APPLICANT IS RESPONSIBLE TO ENSURE TRENCHING AND SUBSTRUCTURE INSTALLATION MEET PG&E GREENBOOK STANDARDS. GREENBOOKS ARE AVAILABLE AT YOUR LOCAL PG&E HEADQUARTERS OR CAN BE FOUND ON THE INTERNET @ WWW.PGE.COM/GREENBOOK
8. A 3' SEPARATION IS REQUIRED BETWEEN JOINT TRENCH AND WET FACILITIES.
9. APPLICANT TO FOLLOW CLEARANCE REQUIREMENTS FOR ALL NEW EQUIPMENT PER DOCUMENT 051122.
10. FLAME RESISTANT (FR) CLOTHING IS REQUIRED WHEN WORKING ON OR AROUND PG&E FACILITIES AND EQUIPMENT. SEE PG&E GREENBOOK FOR ADDITIONAL DETAILS
11. MINIMUM OF SCHEDULE 40 CONDUIT TO BE INSTALLED

LEGEND

- [7] = PG&E TO INSTALL 600A 3-WAY, 3-WAY SS SWITCH IN 4'6"X8'6"X 6' (IVT) PRIMARY ENCLOSURE BY APPLICANT AS SHOWN
- [7] = PG&E TO INSTALL 600A PRIMARY SPLICES IN 4'6"X8'6"X 6' (IVT) PRIMARY ENCLOSURE BY APPLICANT AS SHOWN
- [2] = APPLICANT TO INSTALL 17"X30"X26" (IVT) SECONDARY ENCLOSURE
- —P—P—P— = PG&E TO INSTALL 3 1100A EPR UG PRIMARY CABLE IN EXISTING 6" PVC CONDUIT
- —P2—P2—P2— = PG&E TO RE-ROUTE EXISTING UG PRIMARY CABLE IN (1)-6" PVC (MINIMUM SCHEDULE 40) PRIMARY CONDU T BY APPLICANT
- —P6—P6—P6— = PG&E TO INSTALL 3-1100A EPR UG PRIMARY CABLE IN (1)-6" PVC (MINIMUM SCHEDULE 40) PRIMARY CONDU T BY APPLICANT
- —P7—P7—P7— = PG&E TO INSTALL 3-1100A EPR UG PRIMARY CABLE IN (1)-6" PVC (MINIMUM SCHEDULE 40) PRIMARY CONDUIT IN (1)-12" STEEL CASING FOR CULVERT CROSSING CONDUIT & CASING BY APPLICANT
- —D6—D6—D6— = (1)-6" PVC (MINIMUM SCHEDULE 40) SPARE PRIMARY CONDUIT BY APPLICANT
- —S—S—S— = PG&E TO INSTALL 4/0A TPX(600V) UG SECONDARY CABLE IN (1)-3" PVC (MINIMUM SCHEDULE 40) SECONDARY CONDUIT BY APPLICANT
- —SV1—SV1—SV1— = PG&E TO INSTALL 1/0 TPX ACSR OH SECONDARY - SLACKSPAN
- [7] = EXISTING 4'6"X8'6"X6' PRIMARY SPLICE BOX
- = PG&E TO SET POLES, AS SHOWN
- = PG&E TO SET JT ANCHORS AS SHOWN
- = PG&E TO SET SOLELY OWNED ANCHORS AS SHOWN
- = PG&E TO RELINQUISH JOINT POLE AS SHOWN
- = PG&E TO REMOVE JOINT POLES AS SHOWN
- = PG&E TO REMOVE SOLELY OWNED POLES
- = PG&E TO REMOVE SOLELY OWNED ANCHORS AS SHOWN
- = PG&E TO REMOVE JT ANCHORS AS SHOWN
- = PG&E TO INSTALL 50 KVA 1ø OH TRANSFORMER
- = REMOVE 50 KVA 1ø OH TRANSFORMER
- = REMOVE 397A &1-1/0A(CN) OH PRIMARY CONDUCTOR
- = REMOVE 3-1/0A OH SECONDARY CONDUCTOR
- = REMOVE 3-1000A EPR UG PRIMARY CABLE
- = PG&E TO REMOVE OH SWITCHES AS SHOWN
- = PG&E TO INSTALL 900 AMP RISER SWITCHES AS SHOWN.

GLUED RIGID CAPS TO BE INSTALLED ON ENDS OF ALL SPARE CONDUITS. BALL MARKERS (PG&E CODE M374947) TO BE PLACED AT CONDUIT STUBS

UNDERGROUND SERVICE ALERT

CONTACT U.S.A. AT LEAST 48 HOURS IN ADVANCE OF TRENCHING OR EXCAVATING. CONTACT PG&E INSPECTOR AT LEAST 48 HOURS IN ADVANCE TO MAKE STANDBY ARRANGEMENTS WHEN WORKING WITHIN 5' OF ENERGIZED FACILITIES.

DEVELOPER NOTES

BEFORE BEGINNING SUBSTRUCTURE WORK, PLEASE CALL THE UNDERGROUND INSPECTOR AT LEAST 48 HOURS IN ADVANCE AT (408)365-2166. (WORK NOT PROPERLY INSPECTED MAY BE REJECTED) IF THERE ARE ANY CONFLICTS BETWEEN SUBSTRUCTURES INSTALLATIONS AND LANDSCAPING CONTACT THE INSPECTOR PRIOR TO INSTALLATION.

Underground Service Alert

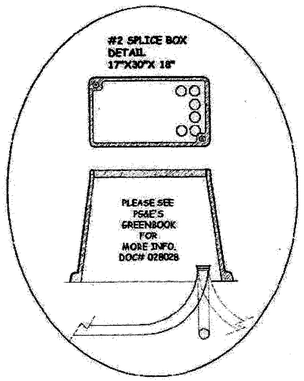
Call: TOLL FREE 811

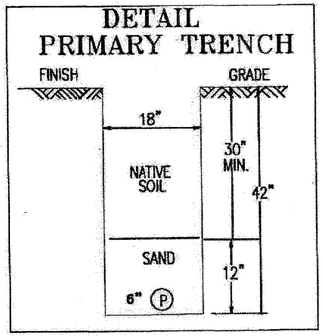
TWO WORKING DAYS BEFORE YOU DIG

NO APPARENT PG&E GAS CONFLICTS FOR THIS PROJECT
GAS PLATS: Map#3541-G1

PG&E TRENCH COVER:
24" ON PRIVATE PROPERTY.
30" MIN IN P.U.E. / DRIVEWAY & /OR STREET TO FINAL GRADE.

PLEASE REFER TO PG&E'S GREENBOOK FOR MORE INFO. SECTION 3 OR DOC# S5453, EXHIBIT B.





ENGINEERING AND PLANNING DEPT.
10900 N. BLANEY AVE.
CUPERTINO, CA. 95014

EST: ROBIN WIBETO 408-725-2070
ADE: GREG ELDER 408-725-2051
SUPV: DAVID T. MIRANDA 925-328-5572
REP: CA HUYNH 408-299-1040
PLNR: MIKE TEKLE 408-365-2162

NOTIF: 1149939000 JPM: PG2000386VP
SCALE: 1"=30' DATE: 4/30/20
PM: 31438229 SHEET: 1 OF 4 REV: 0

NO ENVIRONMENTAL ISSUES
NEAR LOC: NONE
GAS CONFLICT:

Know what's below. Call before you dig.

PRIMARY VOLTAGE: 21 kV | VOLTAGE AREA: 1
LATITUDE: 37.127638 | LONGITUDE: -121.659088
SOURCE SIDE DEVICE: 5041 | SUB & CIRCUIT: MORGAN HILL 2104,06,09,10, 11
DSCN SAG: SSU | RAPTOR ZONE: YES
LOADING AREA: LIGHT | ARRESTER DIST: 3
CORROSION AREA: NON | INSULATION DIST: B
EXEMPT EQUIP.INST.: | FIRE AREA:

DETAILS CONSTRUCTION SKETCH

W. MAIN AVE. & HALE AVE.
MORGAN HILL
SANTA CLARA COUNTY

N

RULE 20B: OH TO UG CONVERSION FOR THE CITY OF MORGAN HILL

CIRCLE OF SAFETY

LEGEND

- [7] = APPLICANT TO INSTALL 4'6"X8'6"X 6' (IVT) PRIMARY ENCLOSURE
- —P2—P2—P2— = PG&E TO RE-ROUTE EXISTING UG PRIMARY CABLE IN (1)-6" PVC (MINIMUM SCHEDULE 40) PRIMARY CONDUIT BY APPLICANT
- —P6— = PG&E TO INSTALL 3-1100A EPR UG PRIMARY CABLE IN (1)-6" PVC (MINIMUM SCHEDULE 40) PRIMARY CONDUIT BY APPLICANT
- —P6—P6—P6— = INSTALL (1)-6" PVC (MINIMUM SCHEDULE 40) PRIMARY CONDUIT BY APPLICANT
- S1 S1 S1 = PG&E TO INSTALL 1/0 TPX ACSR OH SECONDARY – SLACKSPAN
- = PG&E TO INSTALL NEW JOINT ANCHOR AND DOWN GUYS
- [7] = EXISTING 4'6"X8'6"X6' PRIMARY SPLICE BOX
- X = PG&E TO INSTALL NEW POLES
- = PG&E TO INSTALL 900 AMP RISER SWICHES AS SHOWN

MATCHLINE SEE SHT 3

155 | 165 | 175 A&B | 185 | 90 | 210 | 220

X17/06

3-1/0A

1/0 ACSR 1-4AR

3-715A & 1-397A(CN) 21KV @ 124'

SEE LOC. 35 OH REMOVAL SKETCH FOR POLE & TX INSTALLATION

100000050853

980491

SEE LOC. 36 OH REMOVAL SKETCH

1/0AC

PULLING TENSION LOC. 68 TO LOC. 73
1355 LBS ACTUAL=
ACTUAL ALLOWABLE TENSION=8,000 LBS

278'/348'

120'/197'

LOC. 78 TO LOC. 84
PULLING TENSION
1355 LBS. ACTUAL=
ACTUAL ALLOWABLE TENSION=8,000 LBS.

LOC. 74
4190926 433384
305398

LOC.S 75 & 76
APPLICANT TO EXPOSE UNDERGROUND PRIMARY CABLE.

REMOVED ON OH REMOVAL DWG

3-1000A XLPJ 21KV

3-715A 1-4/0A 21KV

2110 | 2106 | 2109 | 332005

LOCATIONS 75 & 76
- APPLICANT TO EXPOSE EXISTING UG CABLE AS SHOWN.
- APPLICANT TO PROVIDE ALL CONDUIT FOR RE-ROUTE OF EXISTING UG CABLE
- PG&E TO RE-ROUTE EXISTING UG CABLE INTO THE NEW BOX
- APPLICANT TO BACKFILL TRENCH AFTER PG&E RE-ROUTES THE UG CABLE INTO THE BOX.

LOC.72 PROPOSED RISER QUADRANT

LOC.77 PROPOSED RISER QUADRANT

LOC.85 PROPOSED RISER QUADRANT

LOC.88 PROPOSED RISER QUADRANT

140'/187'

136'

268'/338'

268'

210'/280'

210'

40'/117'

LOC. 81 TO LOC. 88
PULLING TENSION
857 LBS. ACTJAL=
ACTUAL ALLOWABLE TENSION=8,000 LBS.

6A DPX

UNK

6305-2996

3-715A& 1-397A(CN)21KV

937001

922663

3-3/0CU 21KV

Contract Work

LOC.74
DETAIL: NEW BOX
3-WAY 3-WAY SWITCH
419092 433384
305398
TO SW 906380 LOC. 69
TO RISER PG LOC. 72
TO EX. 6" DUCT LOC. 75

LOC. 78
DETAIL: NEW BOX
PRIMARY SPLICE BOX
TO EX 6" DUCT LOC. 76
TO PRIMARY BOX LOC. 84

LOC. 81
DETAIL: NEW BOX
PRIMARY SPLICE BOX
TO RISER LOC. 77
TO PRI BOX LOC. 86

LOC. 84
DETAIL: NEW BOX
PRIMARY SPLICE BOX
TO PRI BOX LOC. 78
TO RISER POLE LOC. 85

LOC. 86
DETAIL: NEW BOX
PRIMARY SPLICE BOX
TO PRI BOX LOC. 81
TO RISER POLE LOC. 88

N

NO.	DATE	REVISIONS DESCRIPTION

PRIMARY VOLTAGE: 21 kV | VOLTAGE AREA:
LATITUDE: 37.127638 | LONGITUDE: -121.659088
SOURCE SIDE DEVICE: 5041
SUB & CIRCUIT: MORGAN HILL, 2104,06,09,10,11
DSGN. SAC: SSU | RAPTOR ZONE: YES
LOADING AREA: LIGHT | ARRESTER DIST: 3
CORROSION AREA: NON | INSULATION DIST: B
VEGET. EQUIPMENT: | FIRE AREA:

EST: ROBIN WIBETO 408-725-2070
ADE: GREG ELDER 408-725-2051
SUPV: DAVID T. MIRANDA 925-328-5572
REP: CA HUYNH 408-299-1040
PLNR: MIKE TEKLE 408-365-2162
NOTIF: 114983900 | JPM: PG2000039MP
SCALE: 1"=30' | DATE: 4/30/20
PM: 314.383229 | SHEET: 4 OF 4 REV: 0

ENGINEERING AND PLANNING DEPT.
16900 N. BLANEY AVE.
CUPERTINO, Ca. 95014

NO ENVIRONMENTAL ISSUES

GAS CONFLICT: | NEAR LOCKNINE

CONSTRUCTION SKETCH INSTALL
W. MAIN AVE & W. HALE AVE
MORGAN HILL
SANTA CLARA COUNTY

PACIFIC GAS & ELECTRIC COMPANY

SHEET 7 OF 12

INCH 1 0

DRY UTILITIES

PG&E SPECIFICATIONS

TYPICAL DISTRIBUTION TRENCH

Joint Trench – Franchise Area or P.U.E.

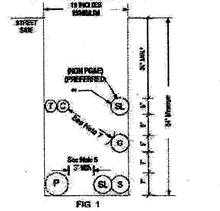


FIG 1

Placement of this Distribution Trench within a P.U.E. is the preferred method. Trenching in the 5' exclusive Area should only be used where a P.U.E. is unobtainable or otherwise infeasible.

* Increase cover to 30" in the street area (see Note 3).

** Separation must be 12" unless a reduction (R') is mutually agreed upon by affected utilities.

TYPICAL SERVICE TRENCH

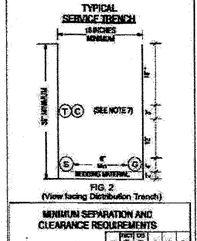
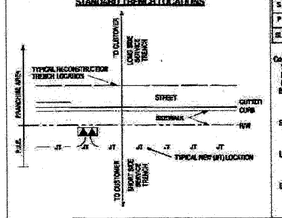


FIG. 2
(View facing Distribution Trench)

MINIMUM SEPARATION AND CLEARANCE REQUIREMENTS

		G	T	T	C	S	P
			DUCT	DB			
G	(GAS) SEE NOTES 4, 7 & 13	—	12"	12"	12"*	6"	12"
T	(TELEPHONE) DUCT	12"	—	1"	1"	12"	12"
T	(TELEPHONE) DIRECT BURY	12"	1"	—	1"	12"	12"
C	(CATV)	12"	1"	1"	—	12"	12"
S	(ELECTRIC SECONDARY)	6"	12"	12"	12"*	—	3"
P	(ELECTRIC PRIMARY)	12"	12"	12"	12"*	3"	—
SL	(STREETLIGHT)	SEE NOTE 5	6"	12"	12"	12"*	1"	3"

STANDARD TRENCH LOCATIONS



SEPARATION AND CLEARANCE DEFINITIONS

Cover:
The term "cover" means the radial distance between the surface of an underground cable, conduit, pipe, or other structure and the surface elevation (grade).

Backfill:
The term "backfill" refers to the materials used to refill a cut or other excavation, or the act of such refilling after any needed shading is performed.

Shading:
The term "shading" refers to the materials used to provide a minimum of separation between facilities installed at different levels within an excavation or cut.

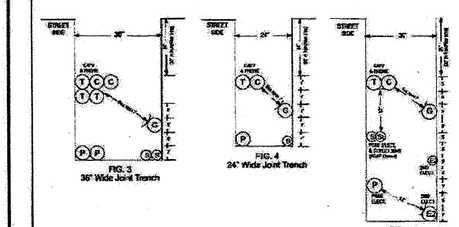
Lift:
The term "lift" is a layer of fill as spread or as compacted or a measurement of material depth that is the ideal thickness to lift depth a compaction unit achieves.

Bedding:
The term "bedding" refers to the materials installed beneath facilities at the bottom of a cut or other excavation and intended to provide support and/or protection for those facilities.

JOINT TRENCH CONFIGURATIONS & OCCUPANCY GUIDE 09-27-06

S5453, Exhibit B — PACIFIC GAS AND ELECTRIC COMPANY — Page 1 of 4

OTHER TYPICAL PG&E DISTRIBUTION JOINT TRENCH CONFIGURATIONS



Trench Configuration Notes

The trench configurations shown in this guide are to be considered "typical" only and that either trench widths, depths, as well as utility configurations (placement) may be used, provided all minimum requirements for separation, clearances, and cover are observed. In no case shall electric primary or secondary (excluding street lighting) be placed at a level higher than that of the gas and communications level. Gas shall be placed at the same level or below communications when gas is placed above the electric facilities.

Special Notes for Joint Trench With Second Electric Utility

A. Refer to Sheet 3 for General Notes.

B. A red 3-inch wide "PG&E Electric Line in Conduit" plastic marking tape, Code 370054, shall be installed, typical around in a manner that allows for the tape to be readily visible every 3 feet, with each conduit intended to be used by PG&E electric facilities. An additional red tape marked to identify the cables shall be installed with the conduit intended to be used for the second electric facility.

C. Each utility shall ensure adequate grounding between electric facilities is provided (See UO Standard S5453, "Joint Trench").

D. Provide a minimum of 2 inches of compacted PG&E approved bedding material as a trench leveling enhancer, where required. See General Notes items 11 and 12 (on Page 3), in order to obtain proper compaction.

JOINT TRENCH CONFIGURATIONS & OCCUPANCY GUIDE 09-27-06

S5453, Exhibit B — PACIFIC GAS AND ELECTRIC COMPANY — Page 2 of 4

General Notes

1. The preferred trench location is in a Public Utility easement (PUE).
2. All depths and resulting cover requirements are measured from final grade.
3. Cover, clearances, and separation shall be as great as practicable under the circumstances, but under no circumstances shall be less than the minimum cover, clearance, and separation requirements set forth in General Order (GO) 128 and 49CFR 192.327. 49CFR 192.325, and 49CFR 192.327. All facilities shall be anchored in place prior to compaction, or other means shall be taken to ensure no motion of the facilities. Dimensional requirements for shading, leveling, and backfilling shall be determined subsequent to compaction.
4. Trench dimensions shown are typical. Trench sizes and configurations may vary depending upon occupancy and/or field conditions. Trench size and configuration must at all times be constructed in a manner that ensures proper clearances and cover requirements are met. Any "changes" to the trench width and configurations as shown in this exhibit must be designed to assure this requirement.
5. It is preferred to have non-PG&E owned streetlights at a level other than the gas or electric level. Non-PG&E owned streetlights may be at the electric level of the trench as long as minimum clearances are provided and comply with all special notes for a joint trench with a second electric utility.
6. Non-Utility facilities are not allowed in any Joint Utility trench e.g., irrigation control lines, building fire alarm systems, private telephone systems, outdoor electrical outlet, etc.
7. When communication ducts are installed, a minimum of 12" radial separation shall be maintained from gas facilities. Exception: With mutual agreement, when 4-inch diameter or greater gas pipe is installed, the separation may be reduced to not less than 6 inches.
8. Provide separation from trench wall and other backfills sufficient to ensure proper compaction.
9. Maintain proper separation between PG&E facilities and "non" utility lines as described in UO Standard S5453. The minimum allowable horizontal separation between Company facilities and "non" facilities is 6" with a minimum 1" of undisturbed earth or the installation of a suitable barrier between the facilities.
   If a 3' horizontal separation cannot be obtained between "non" utilities and Company dry facilities, a variance may be approved by the local Inspection Supervisor and submitted to the Service Planning Support Program Manager for approval. Separations of 1" or less are not permissible and will not be allowed. The Company may agree to waive the minimum 3" separation requirement at the request of an applicant if warranted and the need is justified. The request for a waiver must:
   - Be made in writing and submitted to the Company ADE during the planning and design phase of the project,
   - Clearly describe the conditions necessitating the waiver.
   - Include a proposed design,
   - And, include a design for a barrier between the "non" utilities and Company dry facilities in the event 1" of undisturbed earth cannot be maintained.

   Note: Drain lines connected to downspouts on buildings are considered a "non" utility for the purposes of this standard.
10. Separations shall be maintained at aboveground termination points.
11. Procedures for approving native backfill for shading of PG&E gas facilities:
    - Random soil samples shall be taken from a minimum of 3 locations per 1,000' of trench. 100% of the sample must pass through a 1/2" sieve and 75% must pass through a #4 screen. Additional samples must be taken if existing soil conditions change and are to be taken at the discretion of the PG&E representative on site.
    - The soils must not contain any rocks that have sharp edges or that may otherwise be abrasive.
    - The soils must not contain clods larger than 1/2" if to be used as shading, bedding, or leveling materials.
    - Compaction requirements must meet any applicable PG&E, Federal, State, County, or local requirements.
    - At no time shall the over saturation of native soils be used to achieve these requirements.

    The sieves and screens shall be:
    - 1/2" Sieve: 6" diameter by 2" deep, stainless steel mesh screen.
    - #4 Screen: 6" diameter by 2" deep, stainless steel mesh screen.

Notes continued on the next page

JOINT TRENCH CONFIGURATIONS & OCCUPANCY GUIDE 09-27-06

S5453, Exhibit B — PACIFIC GAS AND ELECTRIC COMPANY — Page 3 of 4

General Notes, continued

12. Procedures for approving native backfill for shading at PG&E electric facilities:
    - Random soil samples shall be taken from a minimum of 3 locations per 1,000' of trench. Additional samples must be taken if existing soil conditions change and are to be taken at the discretion of the PG&E representative on site.
    - Shading material containing large rock, paving material, cinders, chemically angular substances, or corrosive material shall not be placed in the trench where such material may damage the conduits and/or prevent proper compaction over or around the conduits.
    - Native soils containing clods not to exceed 6" in diameter may be included in the shading material provided the clods are readily breakable by hand.

      Note: Soils consisting primarily of adobe, hard compact (dense) clay, and bay muds shall not be used as shading material.
    - At no time shall the over saturation of native soils be used to achieve these requirements.
    - Refer to Engineering Document 062288, Item 13 on Page 2.
13. Competent native soils are preferred to be used for shading, bedding, and backfilling throughout the trench.
    - Where native soils exceed 1/2" sieve and/or where gas is to be placed at the bottom of a trench to areas that exceed 1/2" minus soil conditions, or where the bottom of a trench is considered to consist of bad part, PG&E approved 1/2" sieve (import material) shall be used for shading and/or bedding of gas facilities.
    - PG&E approved import material is per CBT Engineering Guideline 4123.
    - If a bedding course is required for gas facilities, the use of native soils is preferred, but if 1/2" sieve conditions are not obtainable with the native soils, then the use of PG&E approved import materials is required. Bedding under gas facilities will be a minimum of 2" of compacted 1/2" sieve native soils or PG&E approved import material.
    - For electric facilities, refer to Note 12. This applies to leveling courses as well as shading.
    - The minimum PG&E approved bedding material may be increased at the discretion of PG&E when warranted by existing field conditions (e.g., rocky soils, hard pan, etc.).
    - The use of any imported materials for backfilling purposes shall be limited to those situations where native soils do not allow for required compaction.
14. The applicant is responsible for the removal of excess spoil and associated costs.
15. Separation between gas facilities and electric facilities may be reduced to 6" when crossing.
16. Service saddles are the preferred service fittings for use throughout the joint trench project. All projects will be designed and estimated using service saddles. However, service tees may be used if all clearances, separation, and coverage requirements are maintained.

Revision Notes

1. Revised Note 9 to clarify the minimum allowable horizontal separations requirements.
2. This document was revised on 09-27-2020.

JOINT TRENCH CONFIGURATIONS & OCCUPANCY GUIDE 09-27-06

S5453, Exhibit B — PACIFIC GAS AND ELECTRIC COMPANY — Page 4 of 4

PG&E Typical Standards For Joint Trench

Pacific Gas and Electric Company

Utility Bulletin: TD-5453B-002
Publication Date: 07/10/2015 Effective Date: 07/31/2015 Rev. 1

Updated Separation Requirements For Conduit in Joint Trench

WHAT YOU NEED TO KNOW

Utility Standard S5453, "Joint Trench," Exhibit B, currently shows:

MINIMUM SEPARATION AND CLEARANCE REQUIREMENTS

		G	T DUCT	T DB	C	S	P
G	(GAS) SEE NOTES 4, 7 & 13	—	12"	12"	12"*	6"	12"
T	(TELEPHONE) DUCT	12"	—	1"	1"	12"	12"
T	(TELEPHONE) DIRECT BURY	12"	1"	—	1"	12"	12"
C	(CATV)	12"	1"	1"	—	12"	12"
S	(ELECTRIC SECONDARY)	6"	12"	12"	12"*	—	3"
P	(ELECTRIC PRIMARY)	12"	12"	12"	12"*	3"	—
SL	(STREETLIGHT)	SEE NOTE 5	6"	12"	12"	12"*	1"	3"

Utility Standard S5453, "Joint Trench," Exhibit B, is updated per this bulletin as follows:

MINIMUM SEPARATION AND CLEARANCE REQUIREMENTS (Inches)

		G	DUCT T	DB T	C	S	P	SL
G	(GAS) SEE NOTES 4,7, & 13	-	12	12	12	6	12	6
T	(TELEPHONE) DUCT	12	-	1	1	12	12	12
T	(TELEPHONE) DIRECT BURY	12	1	-	1	12	12	12
C	(CATV)	12	1	1	-	12	12	12
S	(ELECTRIC SECONDARY)	6	12	12	12	1.5	3	1.5
P	(ELECTRIC PRIMARY)	12	12	12	12	3	3	3
SL	(STREETLIGHT) SEE NOTE 5	6	12	12	12	1.5	3	1.5
FE*	(FOREIGN ELECTRIC SOURCES: NON-PG&E*) SEE NOTE 5	12	12**	12**	12**	12	12	12

*Must be considered a "Utility" as defined in Utility Standard S5453, "Joint Trench."

Notes 4, 5, 7, and 13 are located in Utility Standard S5453, Exhibit B, "Joint Trench Configurations and Occupancy Guide."

**For exceptions, refer to G.O. 128 rule, Section B. Items (1) and (2).

PG&E Internal — ©2015 Pacific Gas and Electric Company. All rights reserved. — Page 2 of 3

GAS PIPELINE UNDERGROUND WARNING TAPE NOTES:

1. A warning tape is to be installed in open trench installation over gas pipelines in both Transmission and Distribution facilities. This includes trenches, bell holes, excavations for repair purposes and riser replacements. The warning tape is intended for excavator digging in the "clearance zone" to strike the warning tape prior than the pipeline. When the warning tape is exposed and grabbed with excavating equipment, it stretches without breaking, thus alerting the excavator of the gas facility below.
2. Install 6" wide warning tape above the gas pipeline at least 12" below grade, and no closer than 12" from the pipe. Installation should provide the greatest distance between the pipeline and the tape as possible. Install the tape along the length of the excavation. Ensure that the tape overlaps when two or more pieces of tape are used.

EXCEPTION: Where a joint trench design does not allow for installment of warning tape within the "warning tape installation zone", install the warning tape a minimum of 6" above the gas pipeline, and below the facility above the pipe.

3. Warning tape shall be brightly colored yellow and marked "Caution: Gas Line Buried Below" or marked with a similar notification.
4. Warning tape shall be stored in such a manner that limits Ultraviolet (UV) exposure.

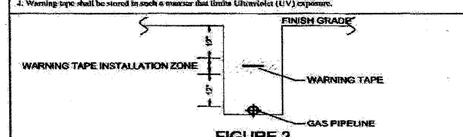
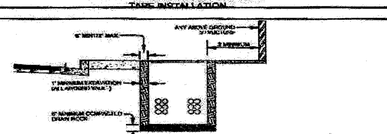
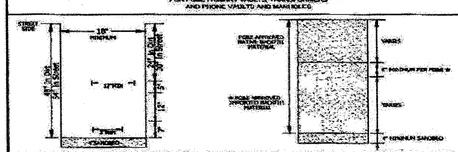


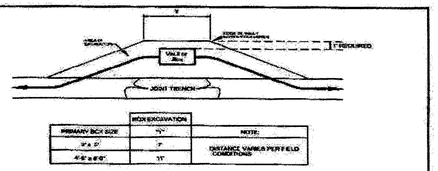
FIGURE 2
GAS PIPELINE UNDERGROUND WARNING TAPE INSTALLATION



TYPICAL EXCAVATION
FOR PG&E PRIMARY VAULTS, TRANSFORMERS, AND PHONE VAULTS AND MANHOLES

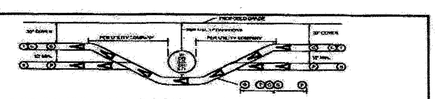


TYPICAL JOINT TRENCH MINIMUM BACKFILL REQUIREMENTS
* CHECK WITH LOCAL GOVERNING AGENCIES FOR POSSIBLE VARIATIONS



PRIMARY BOX SIZE	BOX EXCAVATION	NOTE:
3' x 5'	7'*	DISTANCE VARIES PER FIELD CONDITIONS
4'-6" x 8'-6"	11'	

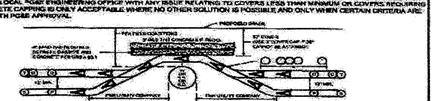
TYPICAL PG&E PRIMARY BOX EXCAVATION DETAIL



JOINT TRENCH UNDER WATER & S.S. & S.D.

* WIDTH PER SIZE & NUMBER OF EACH UTILITY. PG&E AND CITY INSPECTOR TO DETERMINE METHOD OF CROSSING.

TRENCHING CONTRACTOR SHALL NOT ASSUME THAT EITHER OF THE BELOW DETAILS WILL BE ACCEPTABLE TO PG&E YOU ARE REQUIRED TO CONTACT THE LOCAL PG&E ENGINEERING OFFICE WITH ANY INQUIRY RELATING TO COVERS LESS THAN MINIMUM OR CENTER, REQUIRING SHORING. CONCRETE CAPPING IS ONLY ACCEPTABLE WHERE NO OTHER SOLUTION IS POSSIBLE AND ONLY WHEN CERTAIN CRITERIA ARE MET AND ONLY WITH PG&E APPROVAL.



JOINT TRENCH OVER WATER & S.S. & S.D.

* WIDTH PER SIZE & NUMBER OF EACH UTILITY. PG&E AND CITY INSPECTOR TO DETERMINE METHOD OF CROSSING.

NOTE: MAXIMUM DEPTH ON PLASTIC PIPE TO BE 10'

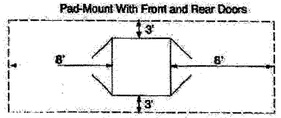
Electric Conduit
Minimum Bend Radius for New Construction

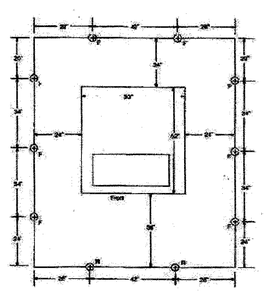
Conduit Diameter	Vertical Radius	Horizontal
2"	24"	36"
3"	24"	36"
4"	36"	36"
5"	36"	60"

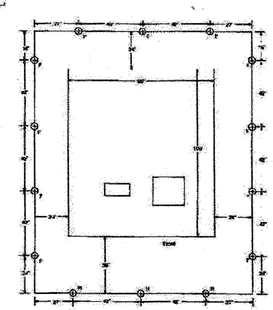
NOTE:
300° DEGREES MAX BENDS IN ANY CONDUIT RUN

Primary Enclosures	Required Clearances
Round or Square 3' x 5' (interior dimensions)	3' From Outside Edges
4' 6" x 8' 6" (interior dimensions)	3' From the Outside Edge of the Long Side / 5' From the Outside Edge of the Short Side
J-Box in 3' x 5'	3' on short sides, 2' on long side adjacent to the junction bars (the non-operable side), 5' on the long side opposite the junction bars (the operable side)
J-Box in 4' 6" x 8' 6"	5' on short sides, 2' on long side adjacent to the junction bars (the non-operable side), 5' on the long side opposite the junction bars (the operable side)

Pad-Mount With Front and Rear Doors







PENNINO MANAGEMENT GROUP
PHONE #: (209) 370-1908 FAX #: (209) 751-1698
PENNINO MANAGEMENT GROUP

CUST #:
Other:
SHT: SHEETS REV.
JN:

NO.	DATE	DESCRIPTION	ORDER #	DWN	CHKD	SUPV	APVD
		REVISIONS					

DWN: CHK: SUPV: SCALE: NO SCALE DATE: 06/30/2020

HALE AVE. EXT. R20
HALE AVE AND MAIN AVE
MORGAN HILL, CA

SPECS

SHEET 12 OF 12