

GENERAL NOTES

- INSPECT THE SITE AND VERIFY ALL CONDITIONS PRIOR TO COMMENCING WITH THE WORK. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER. BY COMMENCING WITH THE WORK, THE CONTRACTOR ACCEPTS THE EXISTING CONDITIONS AND RESPONSIBILITY FOR MAINTAINING THOSE CONDITIONS.
- THE CONTRACTOR SHALL NOT ALTER FROM THE DRAWINGS AND SPECIFICATIONS. IN THE EVENT OF ERRORS OR DISCREPANCIES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.
- THE CONTRACTOR SHALL EMPLOY THE USUAL STANDARD PRACTICE OF COORDINATING THE WORK COVERED THIS SECTION WITH THE WORK OF OTHER SECTIONS.

STREET TREE NOTES

- TREES PLANTED WITHIN THE CITY AND COUNTY ROADWAY RIGHT OF WAY ARE CONSIDERED CITY AND COUNTY STREET TREES AND ARE SUBJECT TO STREET TREE APPROVAL. STREET TREES SHALL BE PLANTED IN ACCORDANCE TO THE PARKS STANDARD DETAILS FOR PARKS AND RECREATION CONSTRUCTION.
- THE STANDARD CITY AND COUNTY OF HONOLULU, DEPARTMENT OF PARKS AND RECREATION SPECIFICATIONS FOR STREET TREE PLANTING AND LANDSCAPING AND PARKS STANDARD DETAILS SHALL BE MADE A PART OF THESE CONSTRUCTION DOCUMENTS.
- THE CONTRACTOR SHALL NOTIFY THE BEAUTIFICATION ADMINISTRATOR, DEPARTMENT OF PARKS AND RECREATION, PHONE 971-7151, AT LEAST 7 DAYS PRIOR TO PRE-MAINTENANCE AND FINAL INSPECTIONS.
- MAINTENANCE OF STREET TREES SHALL BE FOR 60 CALENDAR DAYS OR UNTIL THE PROJECT IS COMPLETED, WHICHEVER IS LONGER.

IRRIGATION NOTES

- THE EXISTENCE AND LOCATION OF EXISTING IRRIGATION SYSTEMS AS SHOWN OR NOTED ON THESE PLANS ARE FROM THE LATEST AVAILABLE RECORDS BUT ARE NOT GUARANTEED AS TO THEIR ACCURACY OR TO THE EXISTENCE OF OTHER OBSTACLES OR UTILITIES WHICH MAY BE ENCOUNTERED.
- IRRIGATION SYSTEMS SHOWN ON THE DRAWINGS ARE DIAGRAMMATIC AND SUBJECT TO MINOR ADJUSTMENTS DUE TO UNANTICIPATED FIELD CONDITIONS. INSTALL ALL VALVES, PIPING AND APPURTENANCES IN LANDSCAPED AREAS. IRRIGATION HEADS SHALL BE INSTALLED WHERE SHOWN. ADJUSTMENTS TO HEAD PLACEMENT MAY BE MADE IN THE FIELD ONLY TO AVOID OBSTACLES OR TO IMPROVE COVERAGE. HEADS SHALL NOT BE SPACED FURTHER THAN SHOWN ON THE DRAWINGS. VALVES SHALL BE INSTALLED IN THE VICINITY OF THE LOCATIONS SHOWN SO AS TO BE ACCESSIBLE FOR SERVICE AND USE. AVOID CONFLICTS WITH PLANTINGS, UTILITIES AND ARCHITECTURAL ELEMENTS.
- THE IRRIGATION SYSTEM WATER SOURCE FOR THE VILLAGE PARKWAY EXTENSION IS THE EXISTING VILLAGE PARKWAY IRRIGATION MAIN. THIS SYSTEM IS BASED ON A STATIC PRESSURE OF 55 PSI AND AN EXISTING IRRIGATION SUPPLY BOOSTER PUMP PRODUCING A 30 PSI PRESSURE INCREASE AT A DISCHARGE VOLUME OF UP TO 125 GPM.
- THE IRRIGATION SYSTEM DESIGN FOR THE EWA PARKWAY IS BASED ON A STATIC PRESSURE OF 55 PSI AT THE POINT OF CONNECTION WITH THE IRRIGATION SUPPLY BOOSTER PUMP PRODUCING A 30 PSI PRESSURE INCREASE AT A DISCHARGE VOLUME OF UP TO 125 GPM. SEE SPECIFICATIONS. VERIFY THE STATIC PRESSURE AND REPORT THE RESULTS TO THE ENGINEER.
- "OFF-PEAK HOUR" IRRIGATION WATER DEMANDS FOR THE VILLAGE PARKWAY EXTENSION WERE INCLUDED IN THE DESIGN FOR THE VILLAGE PARKWAY PHASE 1 AND ARE AS FOLLOWS:
22,440 GPD
125 GPM
- "OFF-PEAK HOUR" IRRIGATION WATER DEMANDS FOR THE EWA PARKWAY ARE AS FOLLOWS:
43,640 GPD
125 GPM
- IRRIGATION PIPES AND WIRES UNDER PAVED SURFACES SHALL BE IN A PROTECTIVE PVC SLEEVE. IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO COORDINATE WITH ALL OTHER CONTRACTORS ON THE JOB TO INSURE THEIR INSTALLATION.
- IRRIGATION SYSTEMS SHALL OPERATE AT THE PRESSURES LISTED FOR THE HEAD TYPES DESCRIBED IN THE LEGEND. ADJUST VALVES TO OBTAIN THE LISTED PRESSURE AT THE BASE OF THE LAST HEAD OF EACH CIRCUIT.
- ADJUST IRRIGATION HEADS TO INSURE PROPER COVERAGE AND DISTRIBUTION OF WATER. SPRAYING ONTO PAVEMENTS SHALL BE AVOIDED.
- INSTALL THE IRRIGATION CONTROLLERS AS NOTED ON THE DRAWINGS AND IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR, TOGETHER WITH THE OWNER'S REPRESENTATIVE, SHALL PROGRAM THE CONTROLLERS TO ACCOMMODATE THE LANDSCAPE AND SITE REQUIREMENTS. CONTROLLER CYCLES FOR THE VILLAGE PARKWAY EXTENSION SHALL BE COORDINATED WITH THE VILLAGE PARKWAY PHASE 1 IRRIGATION CYCLES TO AVOID CONFLICTS WITH DEMANDS AND EXISTING PUMP OPERATION.

PLANTING NOTES

- PLACE AND AMEND TOPSOIL AS PER APPLICABLE SECTIONS OF THE SPECIFICATIONS. CAREFULLY COORDINATE TO INSURE PROPER PLACEMENT OF SOIL AND FINISH GRADES IN ACCORDANCE WITH THE GRADING PLAN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL FINISH GRADES.
- IF DRAINAGE CONDITIONS APPEAR UNSATISFACTORY UPON EXCAVATION OF PLANT PITS, TEST PITS BY FILLING WITH WATER. CONDITIONS PERMITTING THE RETENTION OF WATER IN THE PLANTING PIT FOR AN EXCESSIVE PERIOD OF TIME SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
- ROOT BARRIER SHALL BE AN EPA REGISTERED, MULTI-YEAR TREE ROOT CONTROL MATERIAL THAT EMPLOYS A ROOT INHIBITING HERBICIDE IN A PERMEABLE, GEOTEXTILE FABRIC WITH A SLOW RELEASE TECHNOLOGY. ROOT BARRIER SHALL BE "TYPAR BWO BARRIER" IN 19 INCH WIDTH. INSTALL ROOT BARRIER FOR TREE PLANTING AS SHOWN OR NOTED IN STRICT ACCORDANCE TO THE MANUFACTURER'S INSTALLATION SPECIFICATIONS.
- PLANT QUANTITIES ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY ALL QUANTITIES AND PROVIDE THE QUANTITY OF PLANT MATERIALS REQUIRED TO FULFILL THE DESIGN INTENT OF THE PLANS AT THE SIZES AND SPACING INDICATED.

IRRIGATION EQUIPMENT LIST AND LEGEND

IRRIGATION EQUIPMENT BELOW ARE BASED UPON PRODUCTS OF SPECIFIC MANUFACTURERS FOR PURPOSES OF MATCHING THE TYPE AND QUALITY OF MATERIALS UTILIZED IN KAPOLEI VILLAGE PHASE 1 INFRASTRUCTURE. ALL REQUESTS FOR SUBSTITUTIONS SHALL BE MADE PER APPLICABLE SECTIONS OF THE SPECIFICATIONS.

SYMBOL	DESCRIPTION	NOTES
—	MAIN (PRESSURE) LINE, CLASS 200 PVC	SIZES AS NOTED
—	CLASS 160 PVC LATERAL (NON-PRESSURE LINE)	SIZES AS NOTED
—	IRRIGATION SLEEVE, SCH. 40 PVC	MIN. 2X PIPE I.D.
—	IRRIGATION CONDUIT, SCH. 40 PVC	1-1/2" SIZE
—	200# WOG GATE VALVE, NIBCO OR HAMMOND	FULL LINE SIZED, IN VALVE BOX
—	REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER, RAINBIRD RPA-250	2-1/2" SIZE
N.A.	BOOSTER PUMP STATION	SEE SPECS.
N.A.	QUICK COUPLER VALVE, RAINBIRD 44NP, W/3 EA. 44K KEYS AND SH-1 HOSE SWIVEL	1" MALE HOSE THREAD
—	REMOTE CONTROL VALVE, RAINBIRD EFA-CP SERIES	SIZES AS NOTED
—	SOLID STATE CONTROLLER, RAINBIRD ISC-24 WITH STAINLESS STEEL CONTROLLER ENCLOSURE STRONGBOX SB-18 SS WITH PED 18SS PEDESTAL	24 STATIONS, CONTROLLERS A THRU F 18" WIDE, 48" HT. 1 PER CONTROLLER
N.A.	RAIN GUARD SOLID STATE AUTOMATIC RAIN SHUT OFF	1 PER CONTROLLER
—	CONTROLLER/VALVE STATION NO.	
—	VALVE SIZE	
—	GPM THRU VALVE	

IRRIGATION HEADS	GPM-PSI	RAD.	ARC.
4" POP-UP SPRAY, RAINBIRD 1804-PRS-15Q	.83-25	14'	QUAR.
RAINBIRD 1804-PRS-15H	1.65-25	14'	HALF
RAINBIRD 1804-PRS-15F	3.30-25	14'	FULL
RAINBIRD 1804-PRS-15SST	1.11-25	4'X28" SIDE STRIP	
RAINBIRD 1804-PRS-15EST	0.65-25	4'X14" END STRIP	
SPRAY HEAD ON 12" RISER, RAINBIRD PA-8S-PRS-15Q	.83-25	14'	QUAR.
RAINBIRD PA-8S-PRS-15H	1.65-25	14'	HALF
RAINBIRD PA-8S-PRS-15F	3.30-25	14'	FULL
12" POP-UP SPRAY, RAINBIRD 1812-PRS-15Q	.83-25	14'	QUAR.
RAINBIRD 1812-PRS-15H	1.65-25	14'	HALF
POP-UP STREAM ROTOR, HUNTER PR-04-H24	1.6-35	21'	HALF
HUNTER PR-04-Q24	0.8-35	21'	HALF

PLANT LIST AND LEGEND

SYMBOL	QUANTITY	BOTANICAL NAME	COMMON NAME	ROOTBALL	HT.	SP.	CAL.
TREES							
	154	CASSIA JAVANICA X FISTULA 'WILHELMINA TENNEY'	RAINBOW SHOWER	25 GAL.	8'	5'	2"
	16	CASSIA JAVANICA X FISTULA 'WILHELMINA TENNEY'	RAINBOW SHOWER	SPECIMEN	20'	20'	12"
	175	SAMANEA SAMAN	MONKEYPOD	25 GAL.	8'	5'	2"
	49	SAMANEA SAMAN	MONKEYPOD	SPECIMEN	20'	20'	12"
	16	TABEBUIA DONNELL SMITHII	GOLD TREE	SPECIMEN	20'	10'	12"
VILLAGE 'THEME' TREES							
	31	BAUHINIA BINATA	ALIBANGBANG	25 GAL.	8'	4'	2"
	25	BAUHINIA BLAKEANA	HONG KONG ORCHID	25 GAL.	8'	5'	2"
	50	CORDIA SUBCORDATA	KOU	25 GAL.	8'	4'	2"
	40	DELONIX REGIA	ROYAL POINCIANA	25 GAL.	8'	5'	2"
	2	ERYTHRINA CRISTA GALLI	COMMON CORAL TREE	SPECIMEN	20'	20'	12"
	26	LAGERSTROEMIA SPECIOSA	GIANT CRAPE MYRTLE	25 GAL.	8'	5'	2"
	17	LAGERSTROEMIA SPECIOSA	GIANT CRAPE MYRTLE	SPECIMEN	20'	10'	12"

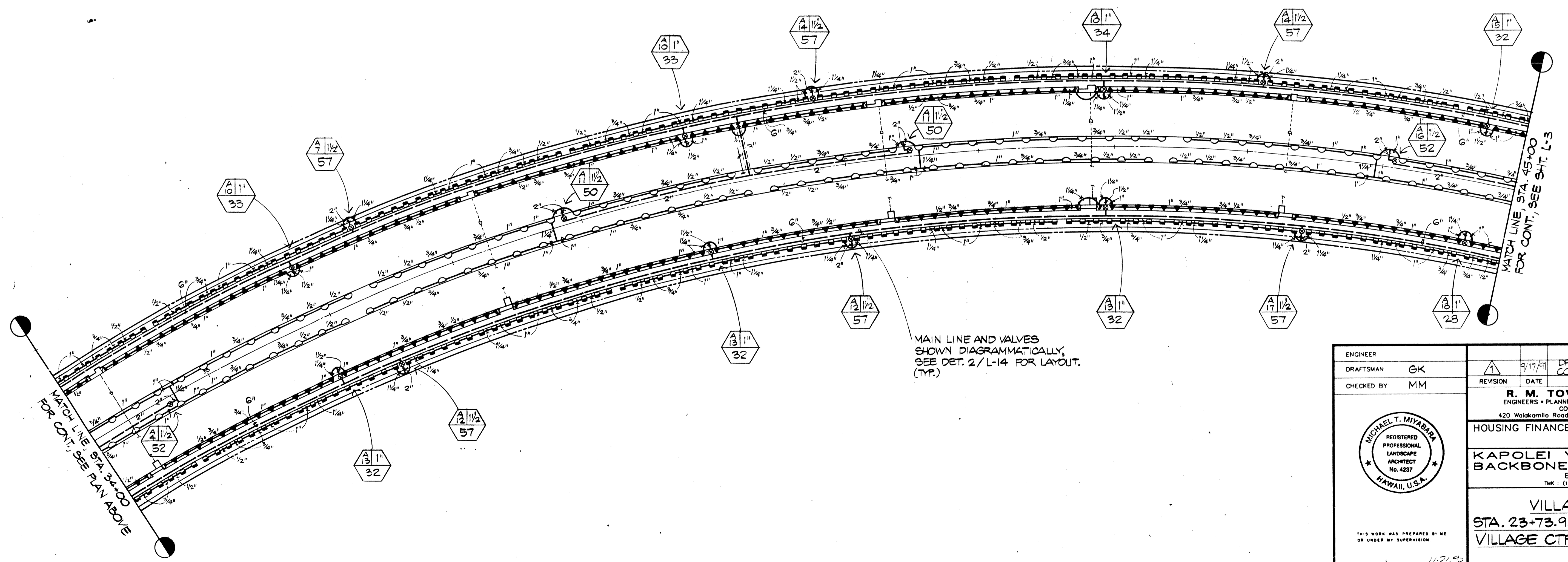
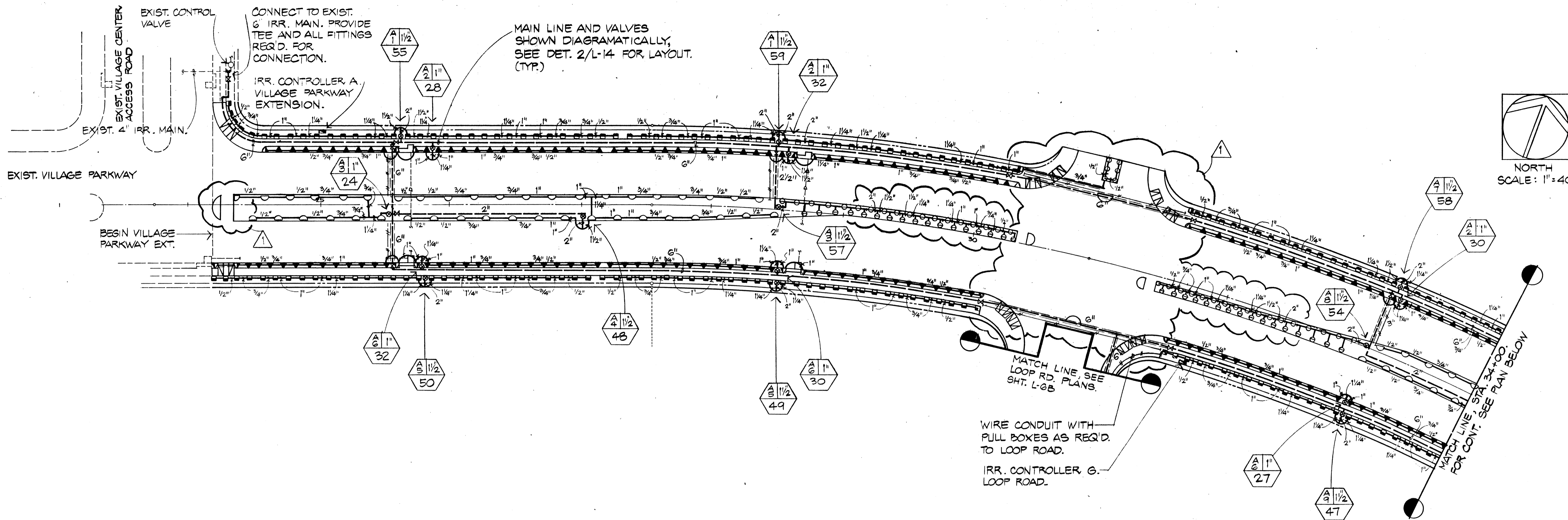
PLANT LIST AND LEGEND (CONT.)

N.A.	SHRUBS	SPACING
60	BOUGAINVILLEA 'RASPBERRY ICE'	VARIEGATED BOUGAINVILLEA 1 GAL. 8' 12' 18" O.C.
2580	HIBISCUS SP. 'HYBRID YELLOW'	YELLOW HIBISCUS 1 GAL. 16' 8' 3' O.C.
170	PLUMBAGO CAPENSIS	PLUMBAGO 1 GAL. 12' 8' 30" O.C.
LOW SHRUB MASS. LOW SHRUB MASS PLANT MATERIALS ARE DIRECTLY RELATED TO THE VILLAGE 'THEME TREE' PLANTED. THE FOLLOWING LIST DENOTES A VILLAGE 'THEME' TREE AND THE SHRUB MASS TO BE PLANTED IN CONJUNCTION WITH IT IN ACCORDANCE WITH THE DRAWINGS. (NOTE: IN SECTIONS WHERE THERE ARE NO VILLAGE THEME TREES SPECIFIED THE LOW SHRUB MASS PLANT MATERIAL SHALL BE THAT OF THE NEAREST ADJACENT SECTION.)		
2,765	'THEME' TREE - BAUHINIA BINATA. SHRUB MASS = BAUHINIA GALPINII	BAUHINIA 1 GAL. 12' 8' 30" O.C.
2,500	'THEME' TREE - BAUHINIA BLAKEANA. SHRUB MASS = PLUMBAGO CAPENSIS	PLUMBAGO 1 GAL. 12' 8' 30" O.C.
4,750	'THEME' TREE - CORDIA SUBCORDATA. SHRUB MASS = RHAPHIOLEPIS	1 GAL. 12' 8' 24" O.C.
3,590	'THEME' TREE - DELONIX REGIA. SHRUB MASS = TECOMARIA CAPENSIS	CAPE HONEYSUCKLE 1 GAL. 12' 8' 30" O.C.
140	'THEME' TREE - ERYTHRINA CRISTA GALLI. SHRUB MASS = SCAEVOLA FRUTESCENS VAR. SERICEA	BEACH NAUPAKA 1 GAL. 12' 8' 24" O.C.
2,065	'THEME' TREE - LAGERSTROEMIA SPECIOSA. SHRUB MASS = PLUMBAGO CAPENSIS	PLUMBAGO 1 GAL. 12' 8' 30" O.C.
GROUND COVER		
4,400 SF	ALTERNANTHERA SP. 'PURPLE'	LARGE LEAFED PURPLE JOYWEED 4" POT 4' 4' 8" O.C.
87,440 SF	ASYSTASIA GANGETICA	ASYSTASIA ROOTED CUTTINGS 12" O.C.
1,600 SF	LONICERA JAPONICUS	CAPE HONEYSUCKLE 4" POT 4' 6' 18" O.C.
1,100 SF	RHOEO DISCOLOR	OYSTER PLANT DIV. 6' 6' 8" O.C.
10,000 EA.	CARISSA GRANDIFLORA	CARISSA 1 GAL. 8' 12' 24" O.C.
GRASS		
11,250 SF	CYNODON DACTYLON	COMMON BERMUDA SEED
261,600 SF	STENOTAPHRUM SECUNDATUM	ST. AUGUSTINE STOLONIS

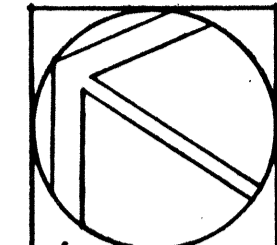
APPROVED FOR STREET TREE PLANTING:

DIRECTOR, DEPARTMENT OF PARKS AND RECREATION DATE
CITY AND COUNTY OF HONOLULU

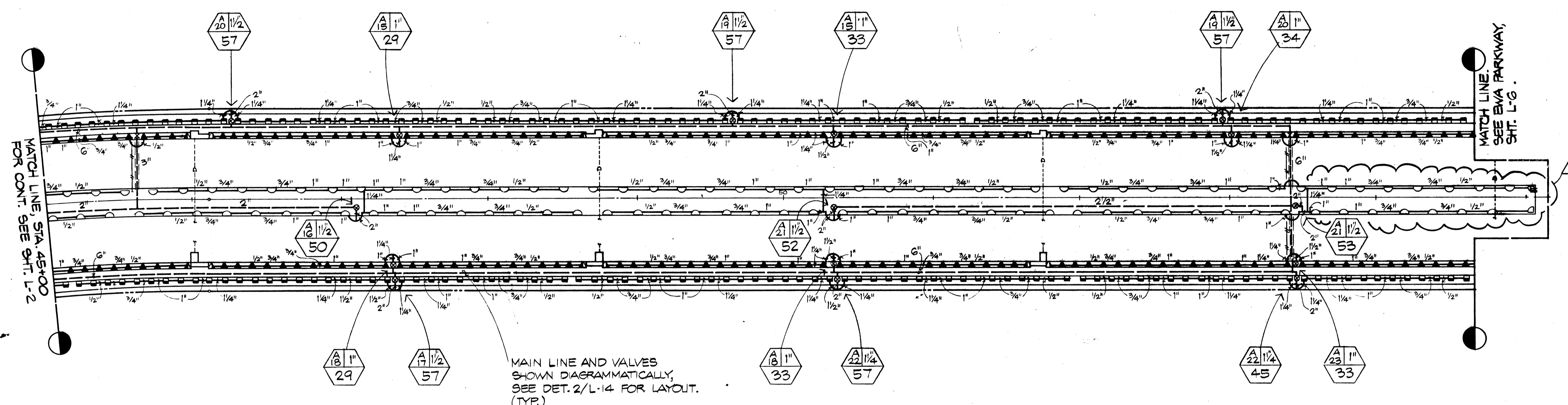
ENGINEER		10/24/11	DELETE TREES	GK
DRAFTSMAN	GK	9/17/11	DR. HFDC COMMENTS	GK
CHECKED BY	MM	REVISION	DATE	BRIEF
R. M. TOWILL CORPORATION ENGINEERS • PLANNERS • SURVEYORS • PHOTOGRAMMETRISTS CONSTRUCTION MANAGERS 420 Waiakamilo Road Honolulu, Hawaii 96817-4941				
HOUSING FINANCE DEVELOPMENT CORPORATION STATE OF HAWAII HONOLULU, HAWAII				
KAPOLEI VILLAGE PHASE 2 BACKBONE INFRASTRUCTURE EWA, OAHU, HAWAII TRK. 1 (1ST DIVISION) 8-116 PORTION 25				
LANDSCAPE NOTES				
<p>This work was prepared by me or under my supervision <i>Michael T. Miyabara</i> 11.21.10</p>				
WDC JOB NO.	2-90	SCALE	NO SCALE	DATE
				JUNE 3, 1991

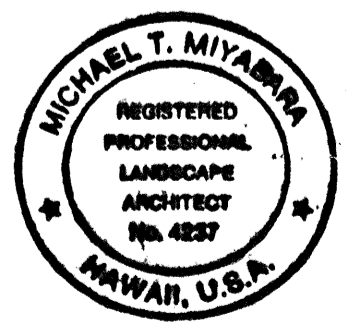


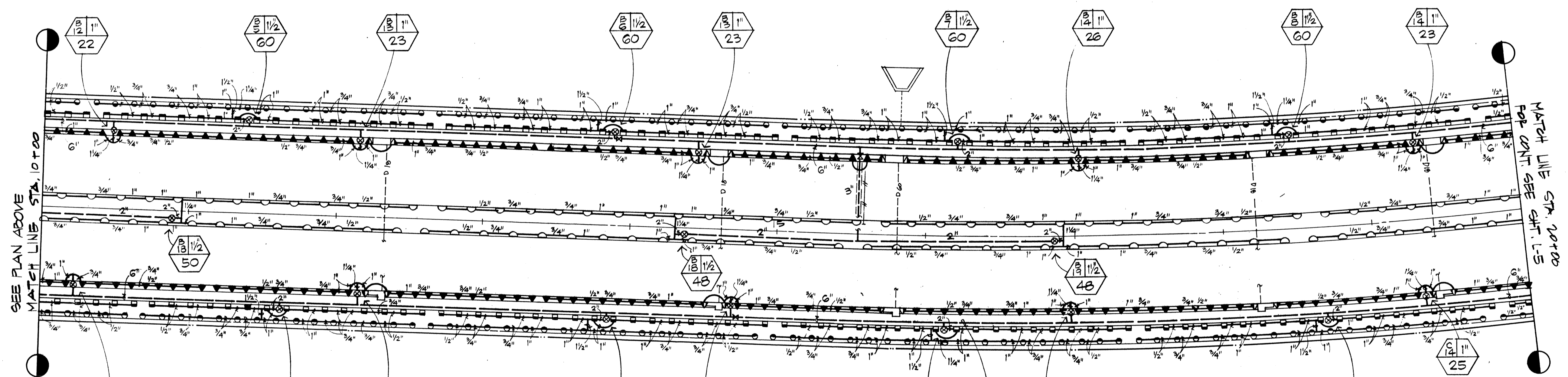
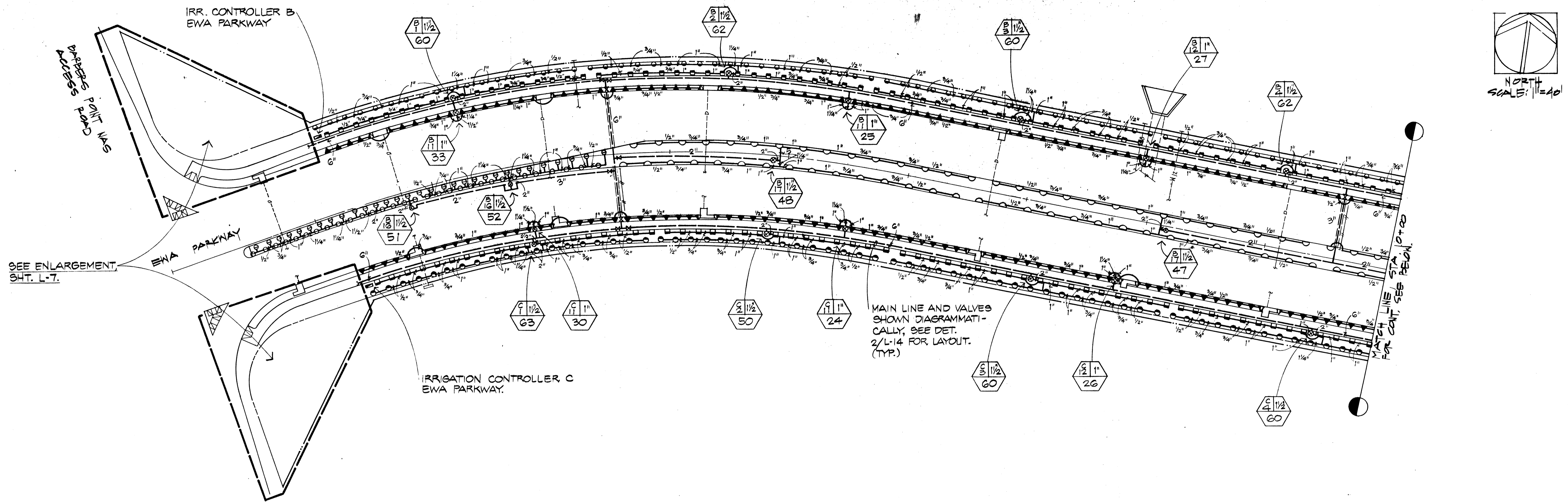
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DRAFTSMAN	GK				
CHECKED BY	MM				
REVISION	DATE	BY	APPROVED		
1	9/17/91	DPR, HFDC COMMENTS	GK		
<p>R. M. TOWILL CORPORATION ENGINEERS • PLANNERS • SURVEYORS • PHOTOGRAMMETRISTS CONSTRUCTION MANAGERS 420 Waikamilo Road Honolulu, Hawaii 96817-4941</p> <p>HOUSING FINANCE DEVELOPMENT CORPORATION STATE OF HAWAII HONOLULU, HAWAII</p> <p>KAPOLEI VILLAGE PHASE 2 BACKBONE INFRASTRUCTURE EWA, OAHU, HAWAII TRK. (1ST DIVISION) 8-1-18. pag. 25</p> <p>VILLAGE PARKWAY STA. 23+73.95 (INTER. EXIST. VILLAGE CTR. ACC. RD.) TO STA. 45+00 LANDSCAPE IRRIGATION PLAN</p>					
<p>MICHAEL T. MIYABARA REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT No. 4237 HAWAII, U.S.A.</p>		<p>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION</p> <p><i>Michael Miyabara</i> 11-21-95 SIGNATURE DATE</p>			
HFDC JOB NO. 2-90		SCALE 1" = 40'		DATE JUNE 3, 1991	



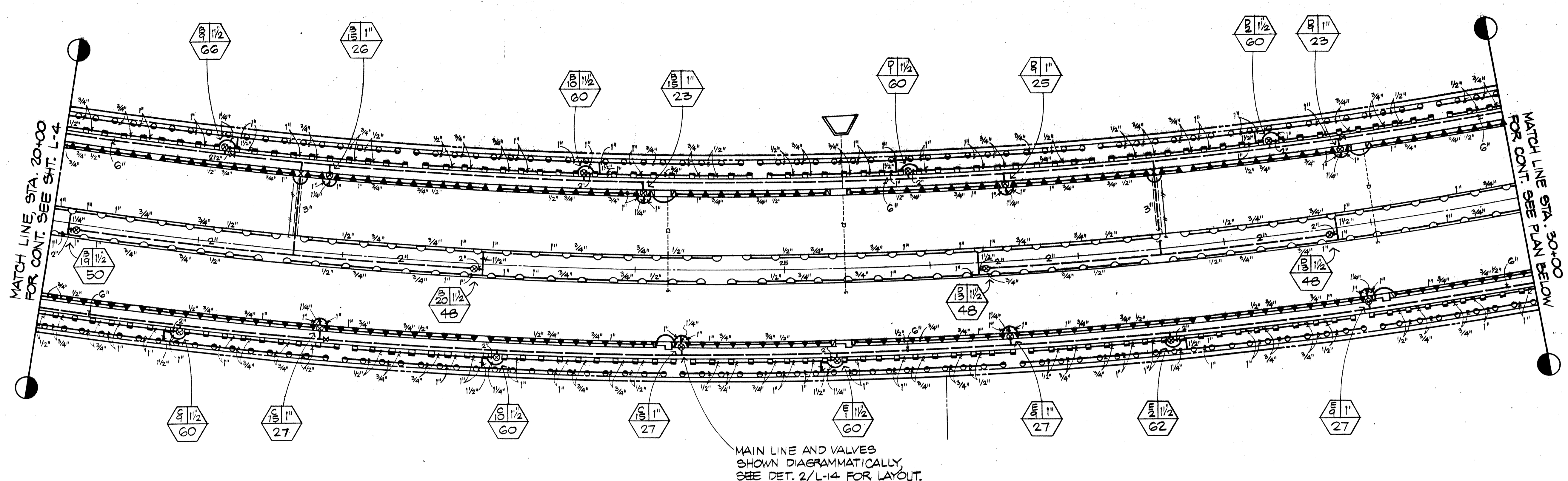
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SCALE: 1"=40'



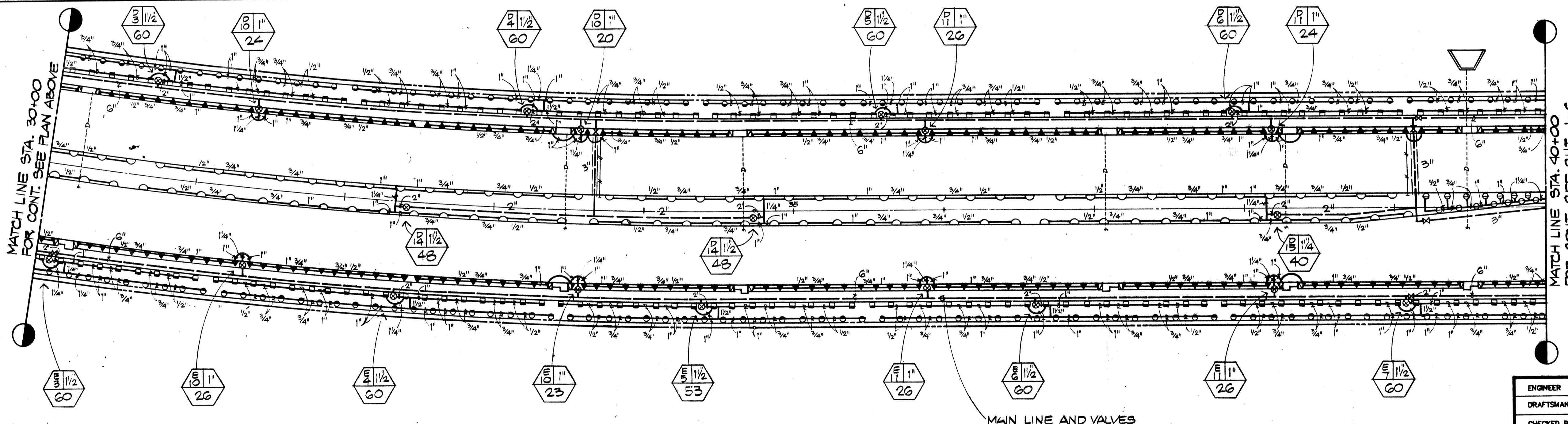
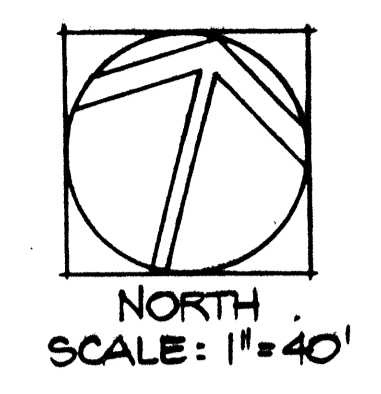
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DRAFTSMAN	GK				
CHECKED BY	MM				
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	HOUSING FINANCE DEVELOPMENT CORPORATION STATE OF HAWAII HONOLULU, HAWAII KAPOLEI VILLAGE PHASE 2 BACKBONE INFRASTRUCTURE EWA, OAHU, HAWAII THE: (1ST DIVISION) 2-1-18: PORTION 25				
VILLAGE PARKWAY STA. 45+00 TO INTERSECTION EWA PARKWAY LANDSCAPE IRRIGATION PLAN					
HPDC JOB NO.	2-90	SCALE	1"=40'	DATE	JUNE 3, 1991



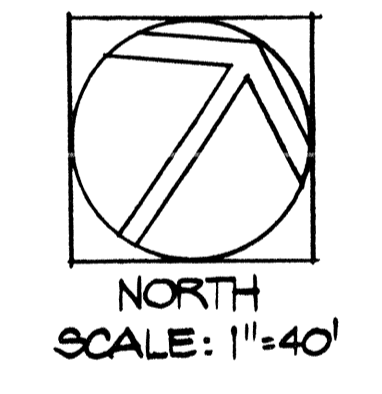
ENGINEER		REVISION	DATE	BRIEF	BY	APPROVED
DRAFTSMAN	OK	R. M. TOWILL CORPORATION ENGINEERS + PLANNERS + SURVEYORS + PHOTOGRAMMETRISTS CONSTRUCTION MANAGERS 420 Waialae Road Honolulu, Hawaii 96817-4941				
CHECKED BY	MM	HOUSING FINANCE DEVELOPMENT CORPORATION STATE OF HAWAII HONOLULU, HAWAII KAPOLEI VILLAGE PHASE 2 BACKBONE INFRASTRUCTURE EWA, OAHU, HAWAII <small>TRK : (1ST DIVISION) 9-1-18: pag. 25</small>				
		EWA PARKWAY STA. 0+05 (INTER. EXIST. BARBERS PT. NAS ACCESS RD.) TO STA. 20+00 LANDSCAPE IRRIGATION PLAN				
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION <i>Michael T. Miyabara</i> 11/21/90 SIGNATURE DATE		HFDJ JOB NO. 2-90 SCALE 1"=40' DATE JUNE 3, 1991		FILE POCKET FOLDER NO		



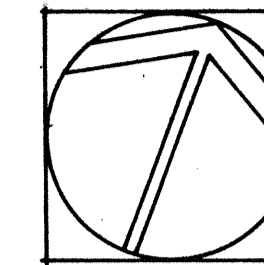
MAIN LINE AND VALVES SHOWN DIAGRAMMATICALLY, SEE DET. 2/L-14 FOR LAYOUT.



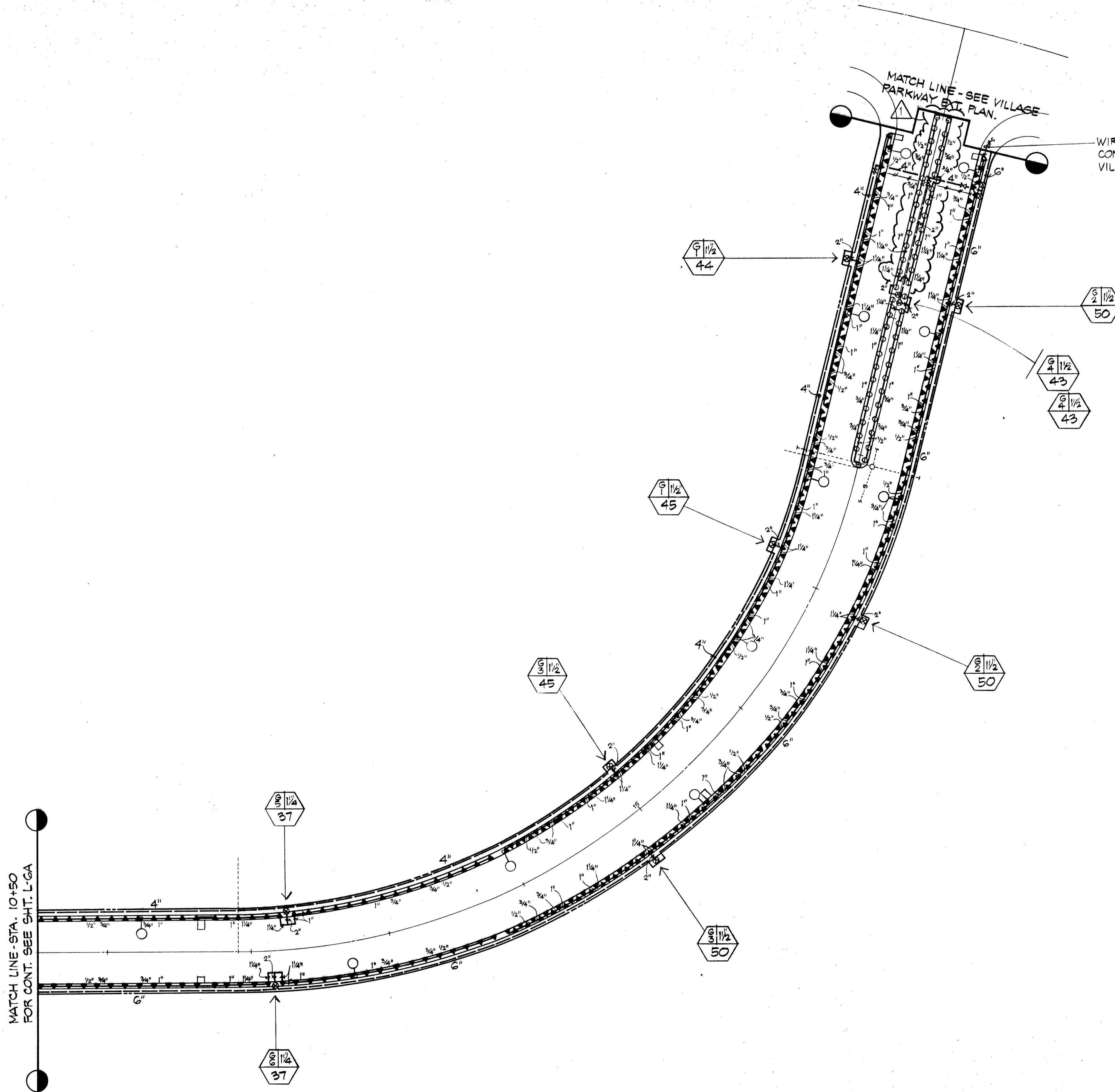
MAIN LINE AND VALVES SHOWN DIAGRAMMATICALLY, SEE DET. 2/L-14 FOR LAYOUT.



ENGINEER					
DRAFTSMAN	GK				
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	HOUSING FINANCE DEVELOPMENT CORPORATION STATE OF HAWAII HONOLULU, HAWAII				
	KAPOLEI VILLAGE PHASE 2 BACKBONE INFRASTRUCTURE EWA, OAHU, HAWAII <small>TRK : (1ST DIVISION) 2-1-18; PORTION 23</small>				
EWA PARKWAY STA. 20+00 TO STA. 40+00 LANDSCAPE IRRIGATION PLAN					
WDC JOB NO.	2-90	SCALE	1" = 40'	DATE	JUNE 3, 1991



NORTH
SCALE: 1"=40'



WIRE CONDUIT TO
CONTROLLER G AT
VILLAGE PARKWAY EXT.

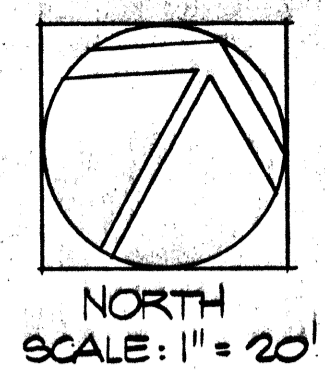
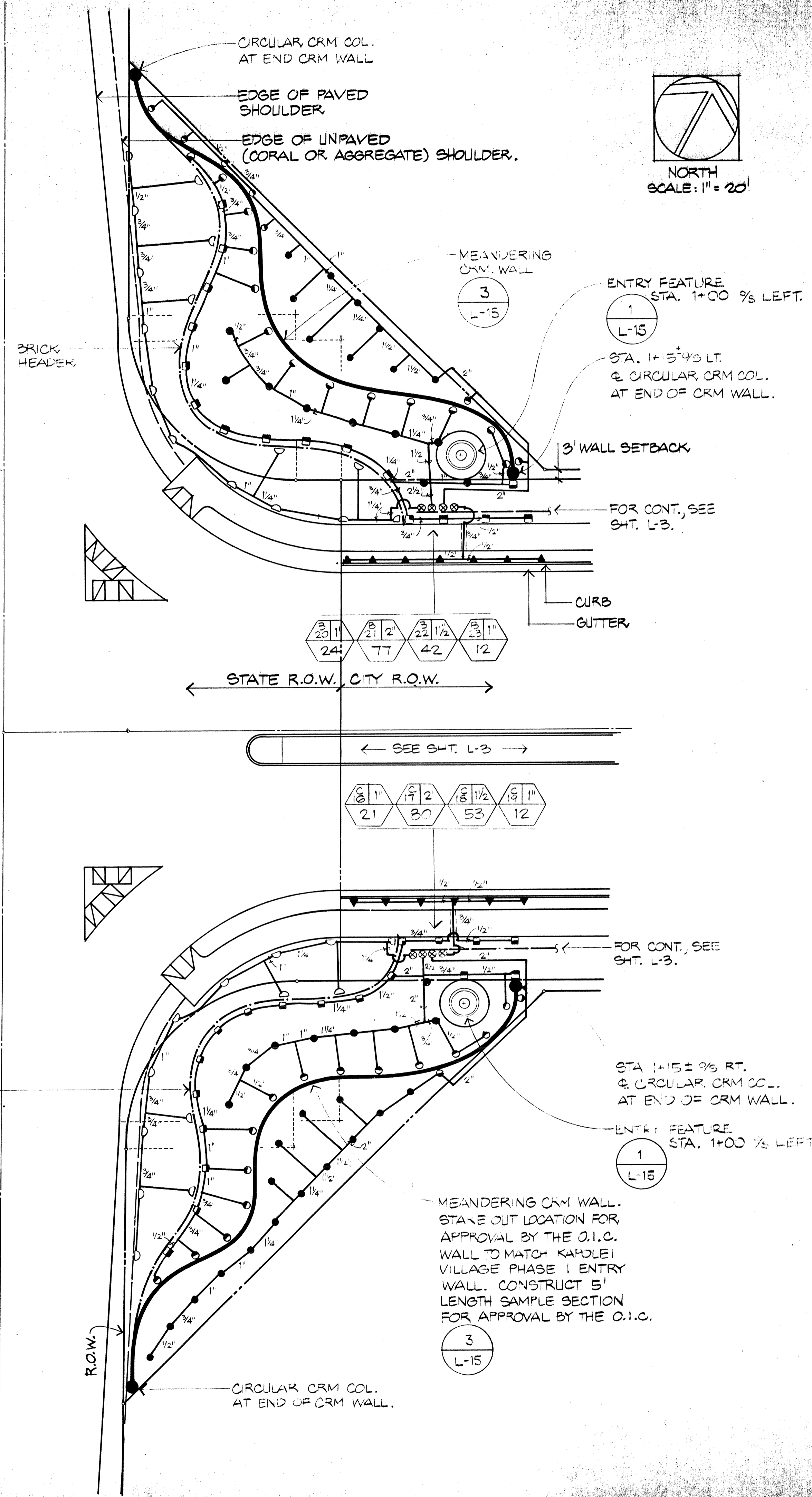
MATCH LINE - SEE VILLAGE
PARKWAY EXT. PLAN.

MATCH LINE - STA. 10+50
FOR CONT. SEE SHT. L-GA

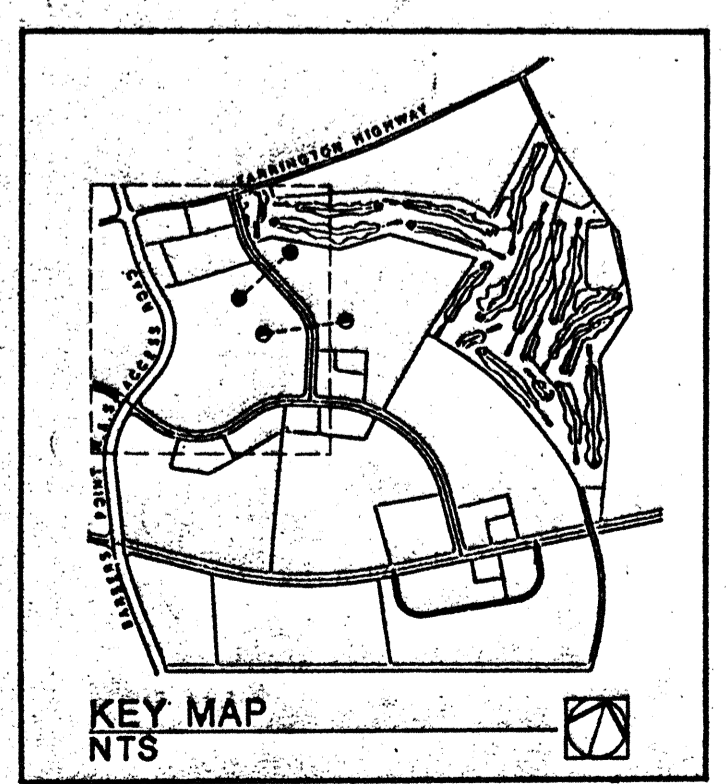
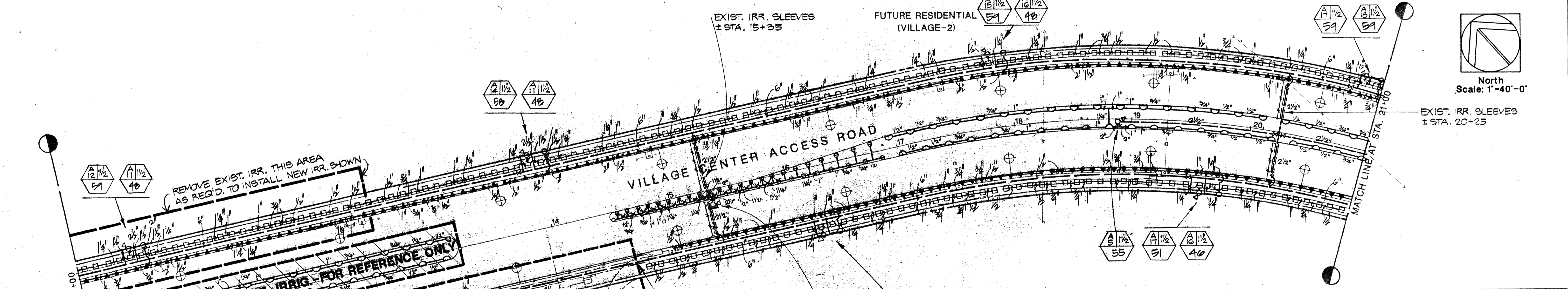
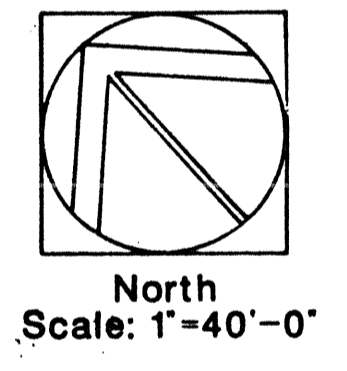
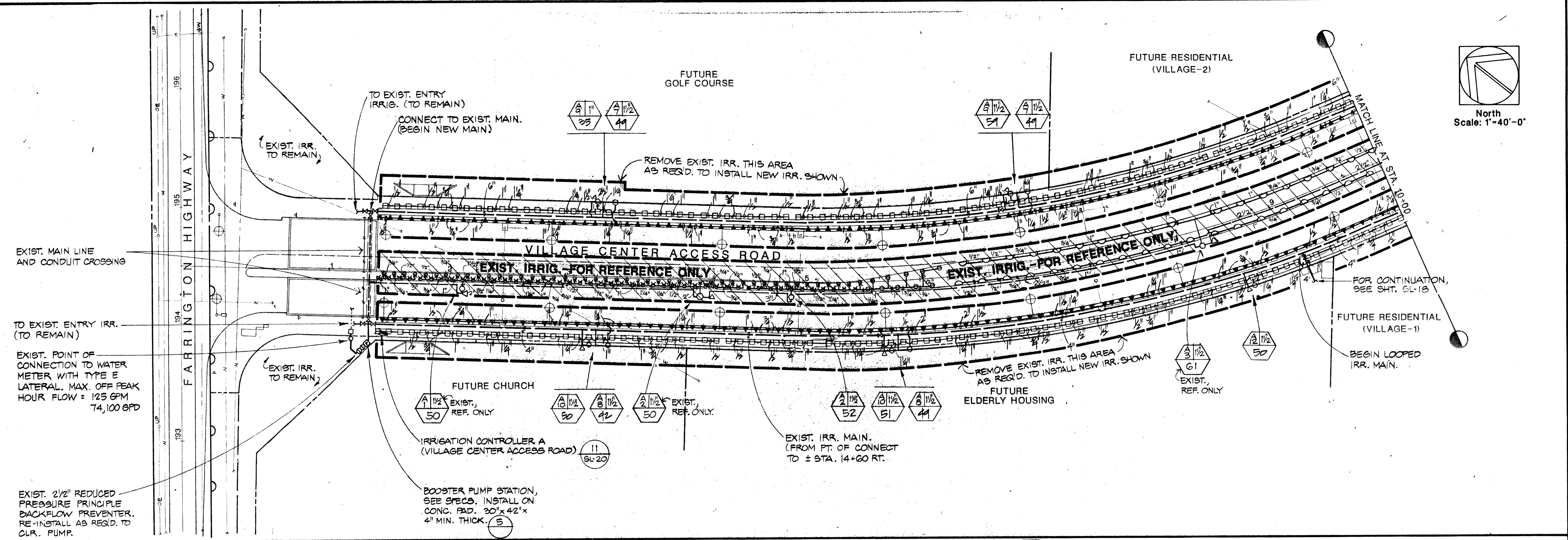
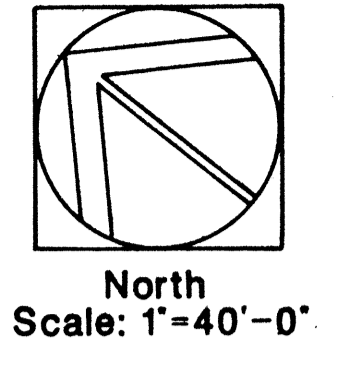
ENGINEER				
DRAFTSMAN	GK	REVISION	DATE	BY
CHECKED BY	MM		9/17/91	GK
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		<p>HOUSING FINANCE DEVELOPMENT CORPORATION STATE OF HAWAII HONOLULU, HAWAII</p>		
		<p>KAPOLEI VILLAGE PHASE 2 BACKBONE INFRASTRUCTURE EWA, OAHU, HAWAII TRK : (1ST DIVISION) 8-1-18: PORTION 25</p>		
		<p>LOOP ROAD STA. 10+50 TO STA. 21+13.51 (INTER. VILLAGE PARKWAY) LANDSCAPE IRRIGATION PLAN</p>		
<p>HWDC JOB. NO. 2-90</p>		<p>SCALE 1" = 40'</p>		<p>DATE JUNE 3, 1991</p>
FILE		POCKET		FOLDER

R.O.W.

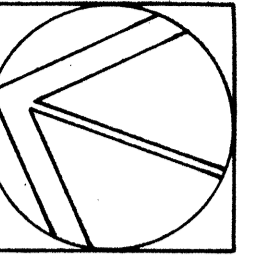
BARBERS POINT ACCESS ROAD



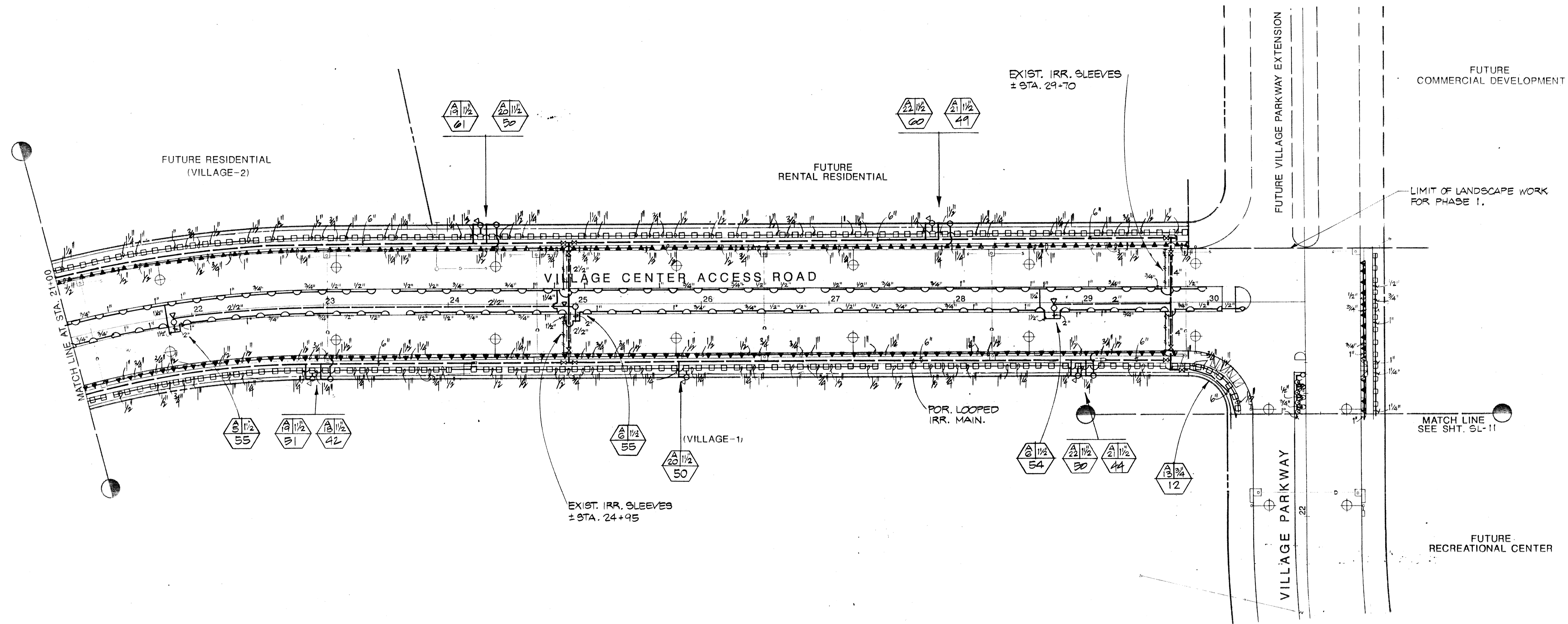
ENGINEER							
DRAFTSMAN	GK						
CHECKED BY	MM						
<p>This work was prepared by me or under my supervision.</p>		REVISION	DATE	BRIEF	BY	APPROVED	
		R. M. TOWILL CORPORATION ENGINEERS • PLANNERS • SURVEYORS • PHOTOGRAMMETRISTS CONSTRUCTION MANAGERS 420 Waiakamilo Road Honolulu, Hawaii 96817-4841					
		HOUSING FINANCE DEVELOPMENT CORPORATION STATE OF HAWAII KAPOLEI VILLAGE PHASE 2 BACKBONE INFRASTRUCTURE EWA, OAHU, HAWAII <small>TRK : (1ST DIVISION) 8-1-16: PORTION 25</small>					
		EWA PARKWAY AND BARBERS POINT N.A.S. ACCESS ROAD INTERSECTION LANDSCAPE CONSTRUCTION AND IRRIGATION PLAN					
WDC JOB NO.	2-90	SCALE	1" = 20'	DATE	JUNE 3, 1991		
SHEETS		FILE	POCKET	FOLDER	NO		



ENGINEER	MM	REVISION	DATE	BRIEF	BY	APPROVED
DRAFTSMAN	SK, LG	R. M. TOWILL CORPORATION ENGINEERS • PLANNERS • SURVEYORS • PHOTOGRAMMETRISTS 420 Waiakamā Road Honolulu, Hawaii 96817-4941 HOUSING FINANCE DEVELOPMENT CORPORATION STATE OF HAWAII HONOLULU, HAWAII KAPOLEI VILLAGE PHASE 2 BACKBONE INFRASTRUCTURE EWA, OAHU, HAWAII THIS : (1ST DIVISION) 8-11-83 & pag. 25 LANDSCAPE WORK FOR PHASE 1				
CHECKED BY	MM					
		IRRIGATION PLAN FOR VILLAGE CENTER ACCESS ROAD				
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. <i>Michael Miyake</i> SIGNATURE DATE		HFDJ JOB NO. 2-90 SCALE 1"=40' DATE 11-7-91				

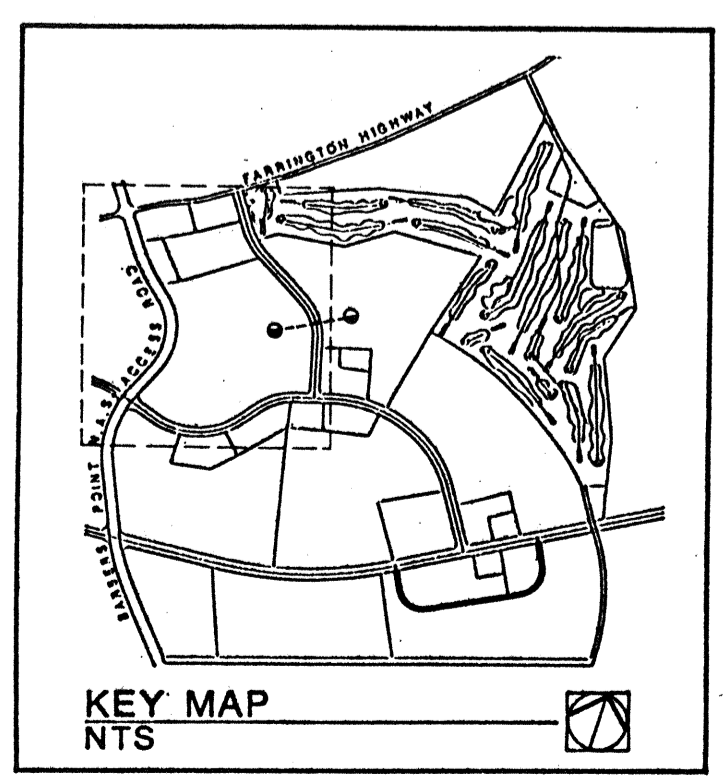


North
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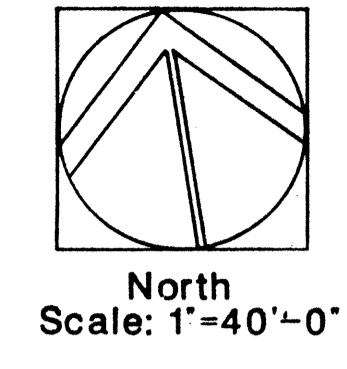
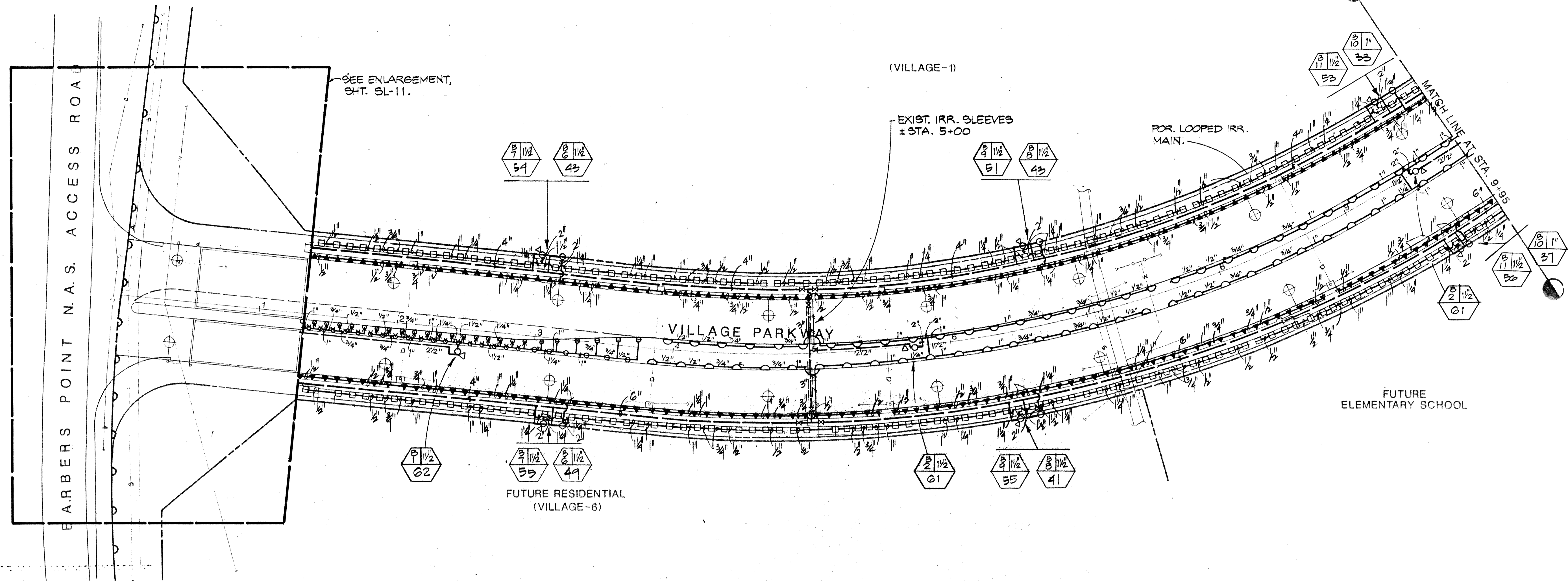


MATCH LINE AT STA. 21+00

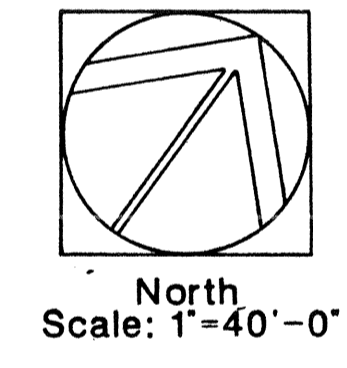
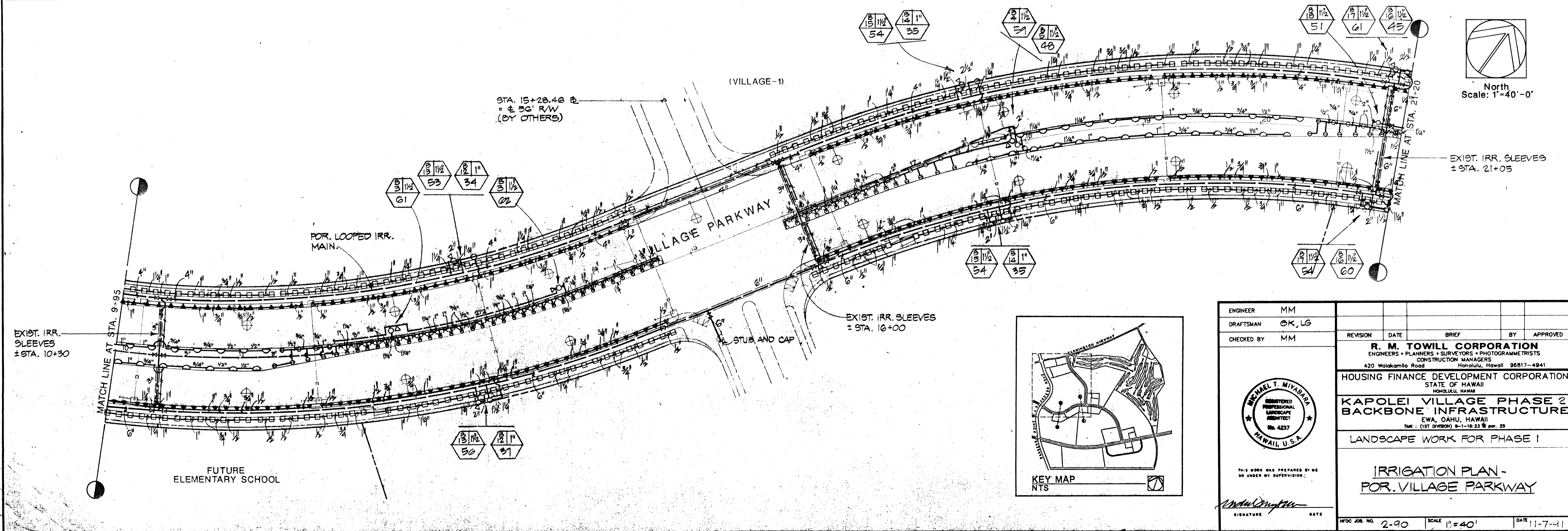
MATCH LINE SEE SHT. SL-11



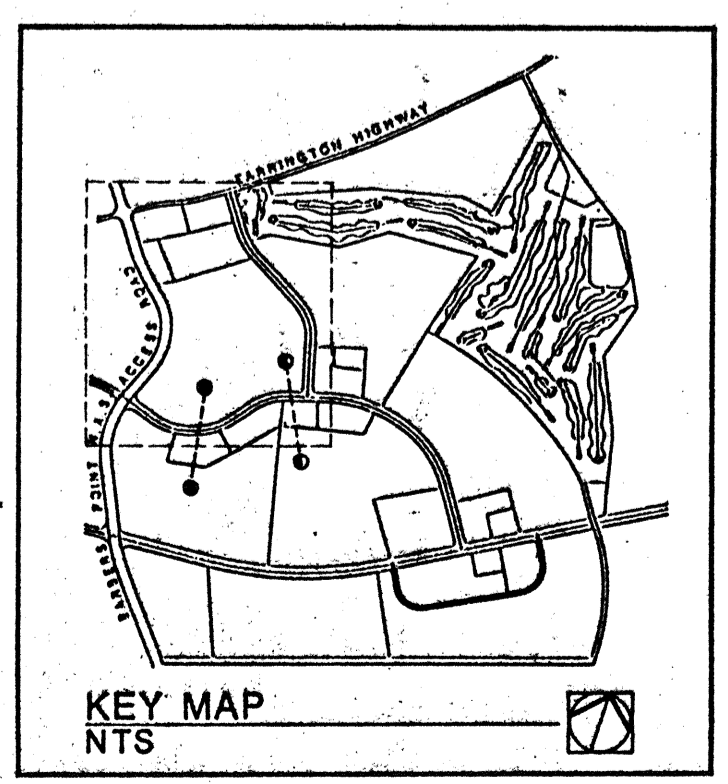
ENGINEER	MM	REVISION	DATE	BRIEF	BY	APPROVED		
DRAFTSMAN	GK, LG	R. M. TOWILL CORPORATION ENGINEERS + PLANNERS + SURVEYORS + PHOTOGRAMMETRISTS CONSTRUCTION MANAGERS 420 Waialae Road Honolulu, Hawaii 96817-4941						
CHECKED BY	MM							
		HOUSING FINANCE DEVELOPMENT CORPORATION STATE OF HAWAII HONOLULU, HAWAII KAPOLEI VILLAGE PHASE 2 BACKBONE INFRASTRUCTURE EWA, OAHU, HAWAII <small>TRK : (1ST DIVISION) B-1-16-23 & par. 25</small>						
		LANDSCAPE WORK FOR PHASE I						
		IRRIGATION PLAN FOR VILLAGE CENTER ACCESS ROAD						
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION SIGNATURE DATE		HPDC JOB. NO. 2-90	SCALE 1" = 40'	DATE 11-7-91	FILE	POCKET	FOLDER	NO



North
Scale: 1"=40'-0"

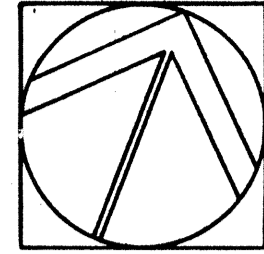


North
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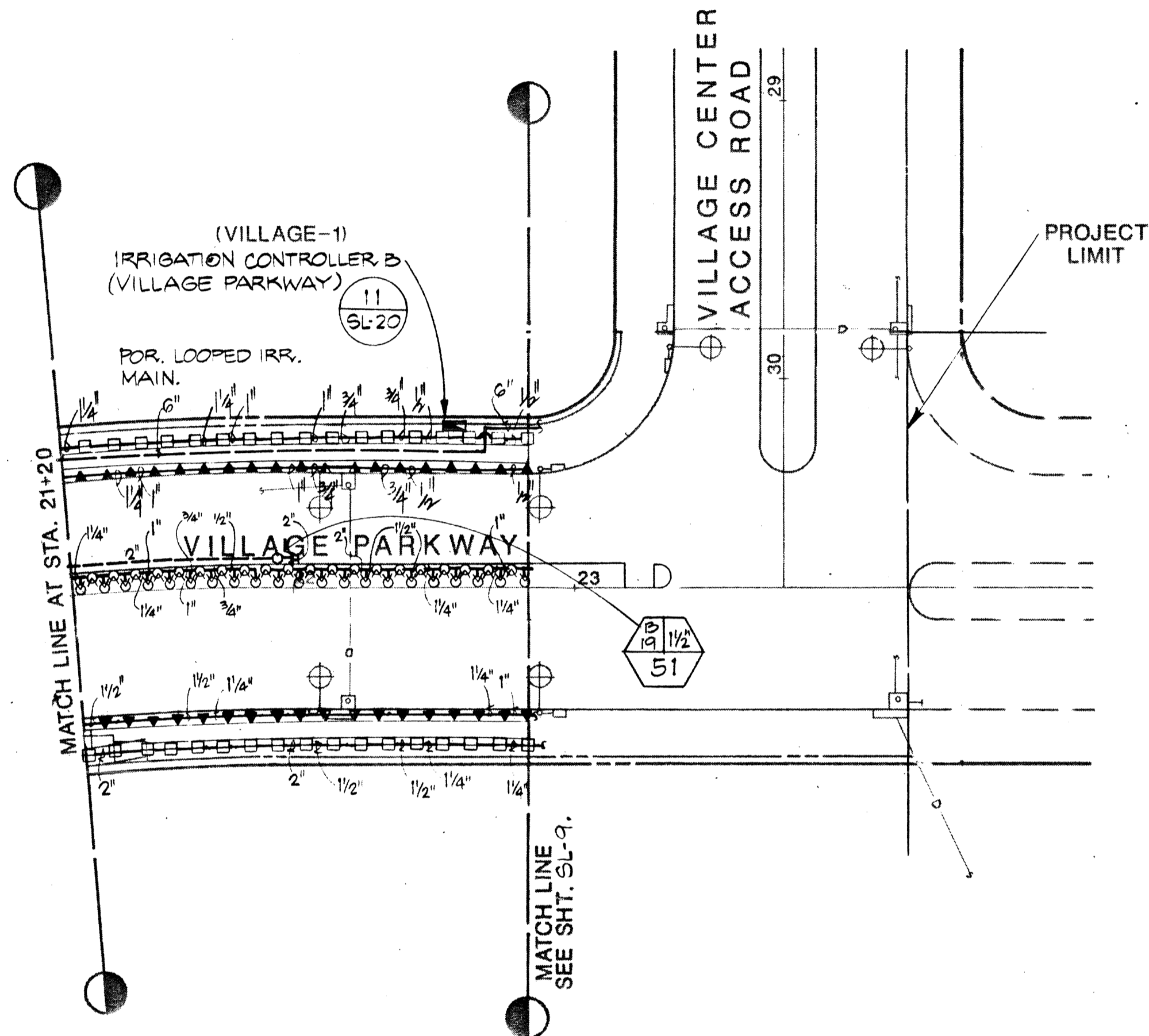


KEY MAP
NTS

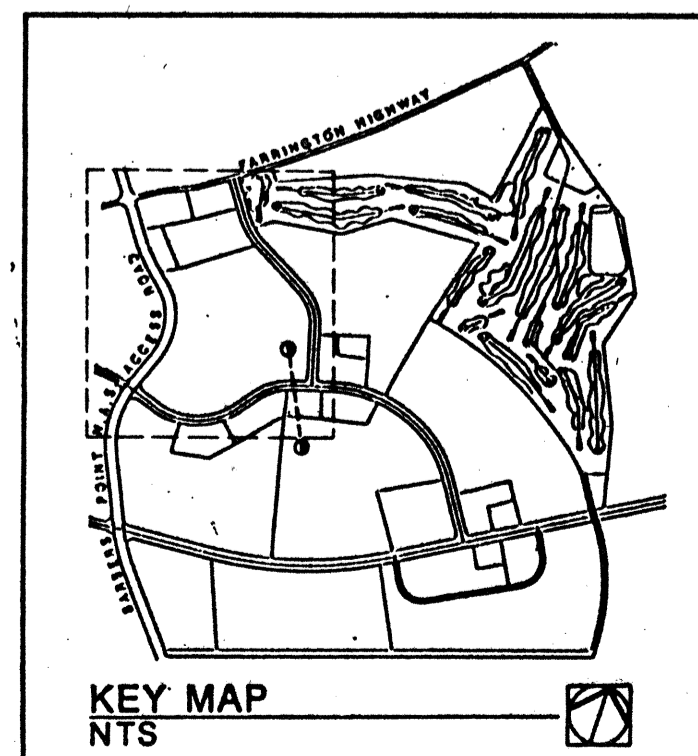
ENGINEER	MM	REVISION	DATE	BRIEF	BY	APPROVED								
DRAFTSMAN	OK, LG	R. M. TOWILL CORPORATION ENGINEERS • PLANNERS • SURVEYORS • PHOTOGRAMMETRISTS CONSTRUCTION MANAGERS 420 Waialae Road Honolulu, Hawaii 96817-4941 HONOLULU, HAWAII												
CHECKED BY	MM													
		HOUSING FINANCE DEVELOPMENT CORPORATION STATE OF HAWAII HONOLULU, HAWAII KAPOLEI VILLAGE PHASE 2 BACKBONE INFRASTRUCTURE EWA, OAHU, HAWAII <small>TMK: (1ST DIVISION) 8-1-18:23 par. 25</small>												
		LANDSCAPE WORK FOR PHASE I IRRIGATION PLAN - FOR VILLAGE PARKWAY												
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION: SIGNATURE DATE		HFDG JOB NO. 2-90	SCALE 1"=40'	DATE 11-7-11	<table border="1"> <tr> <td>FILE</td> <td>POCKET</td> <td>FOLDER</td> <td>NO.</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </table>		FILE	POCKET	FOLDER	NO.				
FILE	POCKET	FOLDER	NO.											



North
Scale: 1"=40'-0"

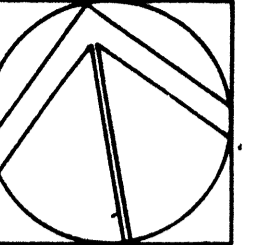


IRR. PLAN - POR. VILLAGE PARKWAY
1" = 40'

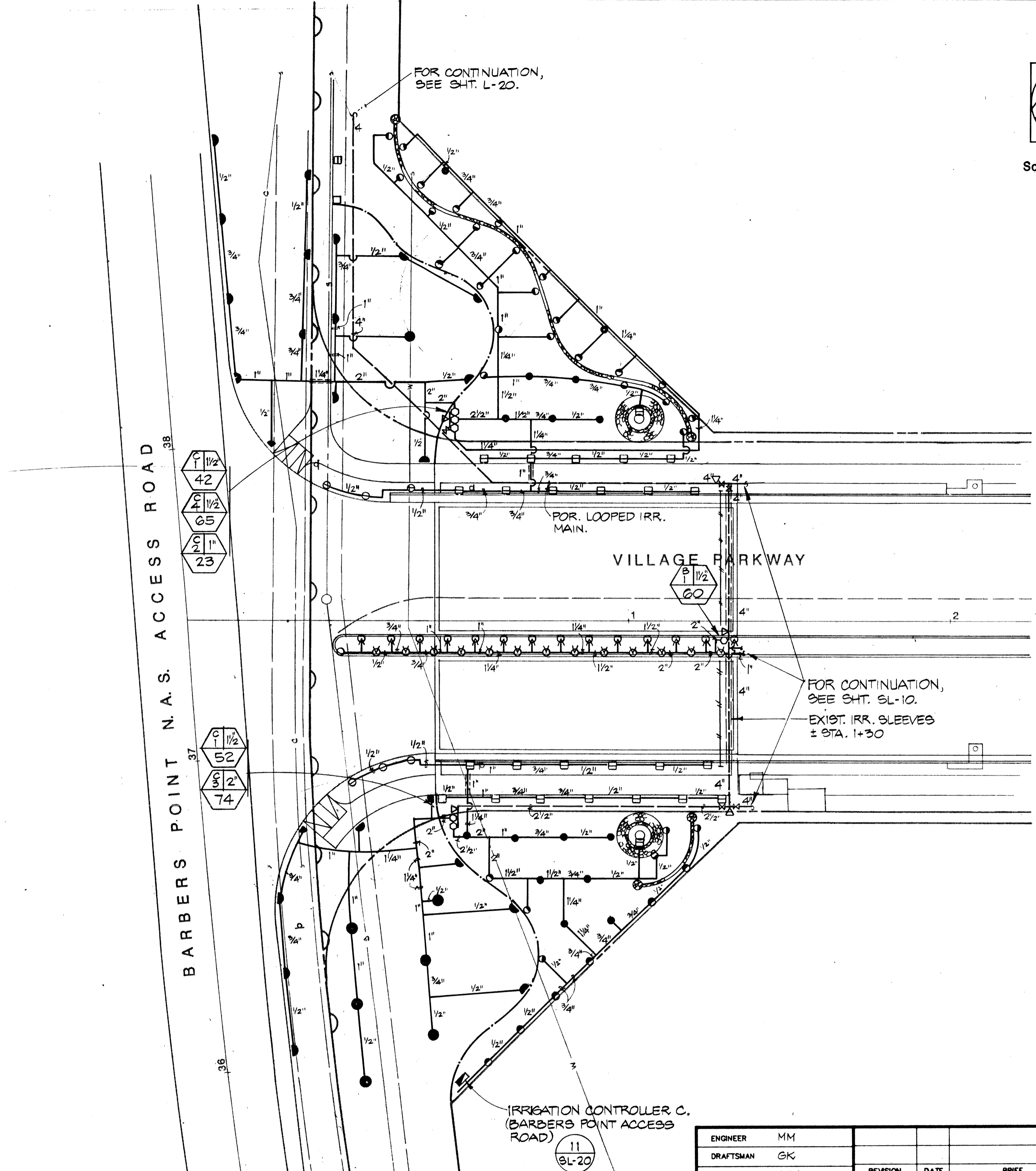


KEY MAP
NTS

STATE
RIGHT OF WAY

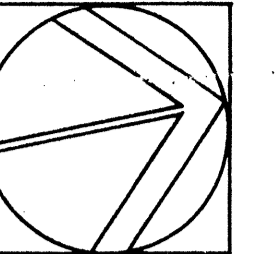


North
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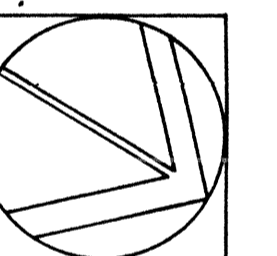
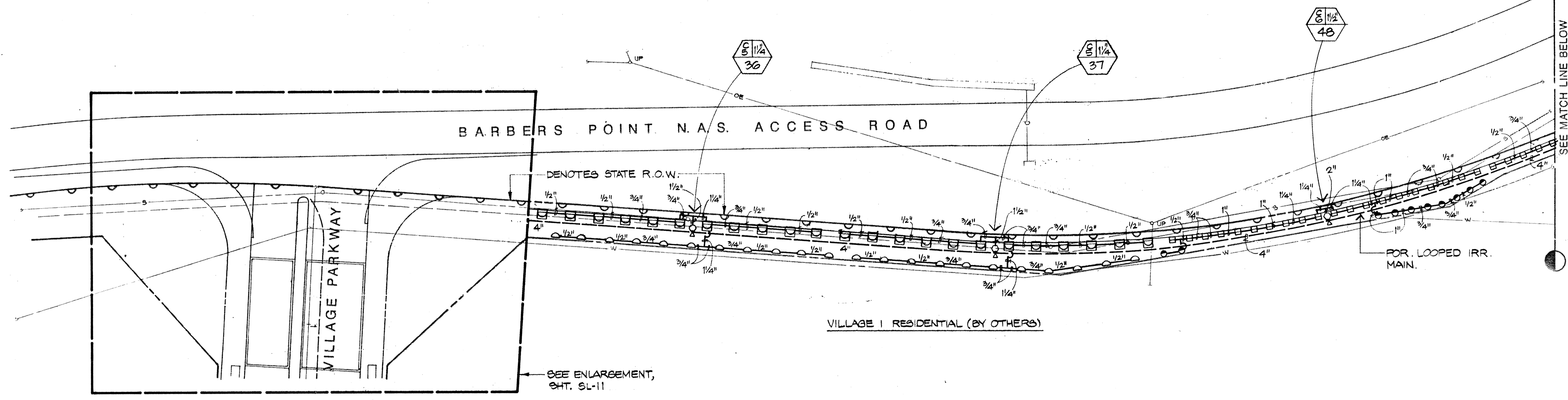


IRRIGATION PLAN - BARBERS POINT N.A.S. INTERSECTION
1" = 20'

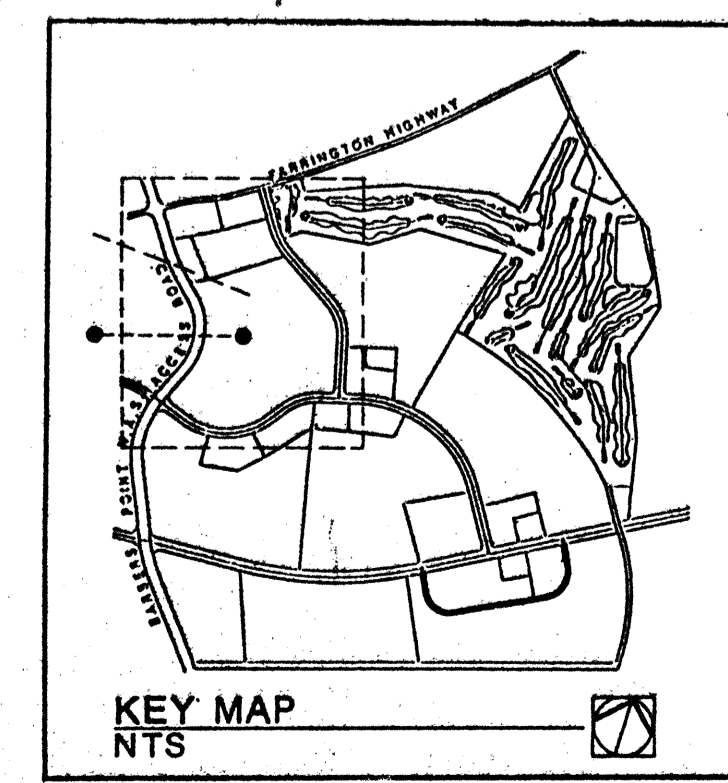
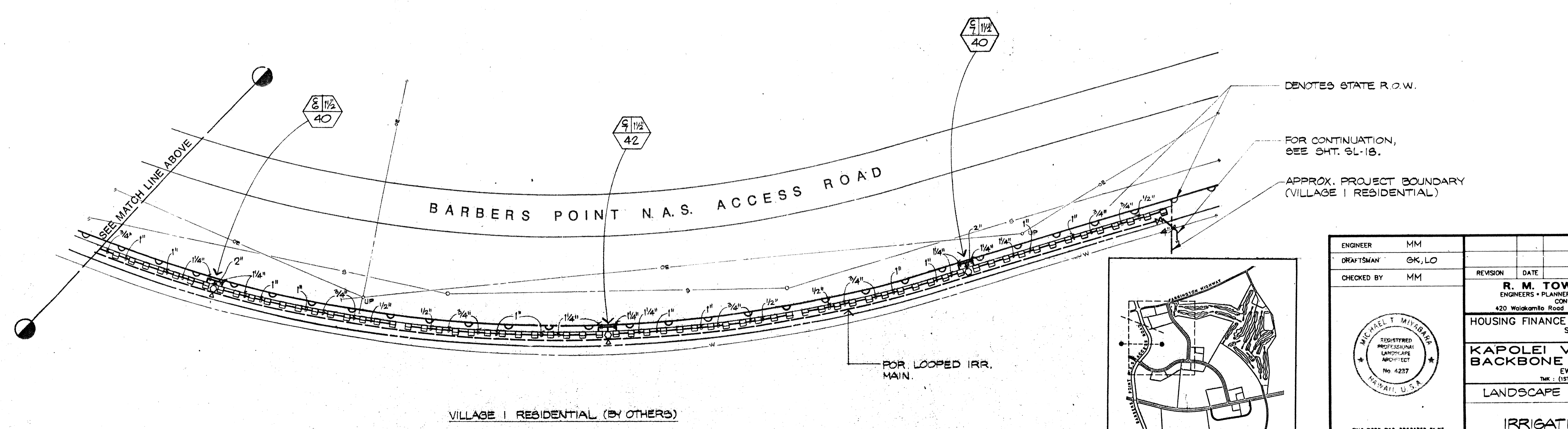
ENGINEER	MM	REVISION	DATE	BRIEF	BY	APPROVED
DRAFTSMAN	GK					
CHECKED BY	MM	R. M. TOWILL CORPORATION ENGINEERS • PLANNERS • SURVEYORS • PHOTOGRAMMETRISTS CONSTRUCTION MANAGERS 420 Waiakamilo Road Honolulu, Hawaii 96817-4941				
HOUSING FINANCE DEVELOPMENT CORPORATION STATE OF HAWAII HONOLULU, HAWAII KAPOLEI VILLAGE PHASE 2 BACKBONE INFRASTRUCTURE EWA, OAHU, HAWAII <small>TRK: (1ST DIVISION) 0-1-16-23 & 25</small>						
LANDSCAPE WORK FOR PHASE 1						
IRRIGATION PLAN - POR. VILLAGE PARKWAY AND BARBERS POINT ACCESS ROAD INTERSECTION						
 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. <i>Michael T. Miyahara</i> SIGNATURE DATE		HPDC JOB. NO. 2-90 SCALE AS NOTED DATE 11-7-91				



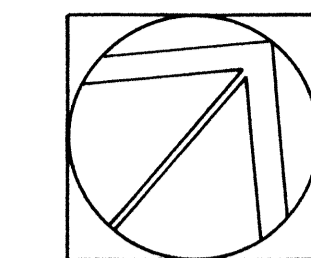
North
Scale: 1"=40'-0"



North
Scale: 1"=40'-0"

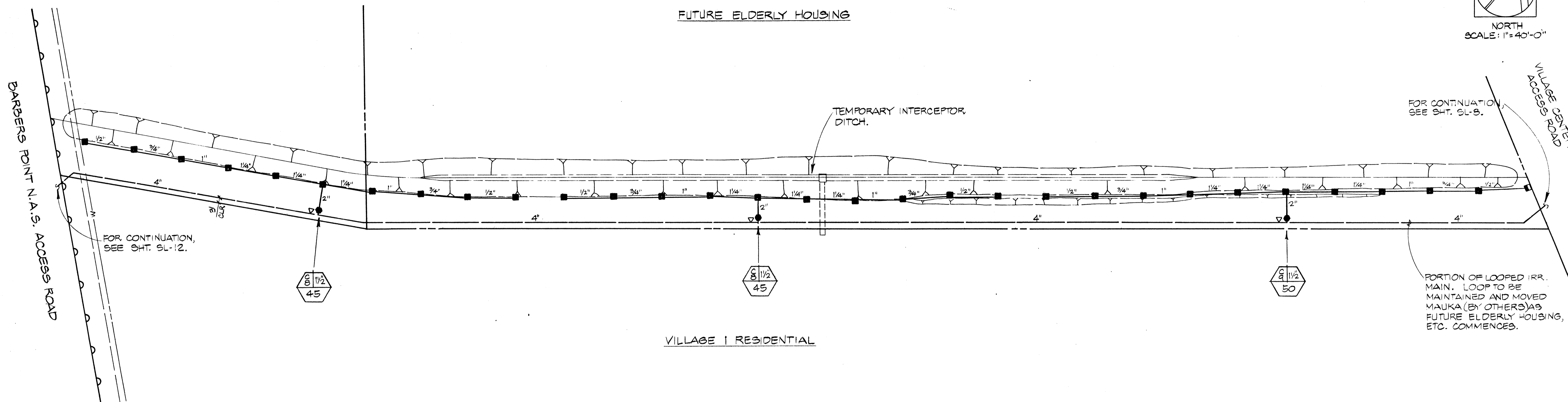


ENGINEER	MM	REVISION	DATE	BRIEF	BY	APPROVED
DRAFTSMAN	GK, LO	R. M. TOWILL CORPORATION ENGINEERS • PLANNERS • SURVEYORS • PHOTOGRAMMETRISTS CONSTRUCTION MANAGERS 420 Waiakamilo Road Honolulu, Hawaii 96817-4941				
CHECKED BY	MM					
		HOUSING FINANCE DEVELOPMENT CORPORATION STATE OF HAWAII HONOLULU, HAWAII KAPOLEI VILLAGE PHASE 2 BACKBONE INFRASTRUCTURE EWA, OAHU, HAWAII <small>TRK : (1ST DIVISION) 0-1-16:23 & por. 25</small>				
		LANDSCAPE WORK FOR PHASE I				
		IRRIGATION PLAN- BARBERS POINT N.A.S ACCESS ROAD				
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. SIGNATURE DATE		HPDC JOB. NO. 2-90	SCALE 1"=40'	DATE 11-7-91		

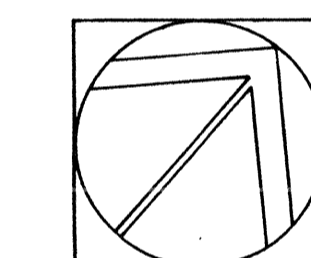


NORTH
SCALE: 1" = 40'-0"

FUTURE ELDERLY HOUSING

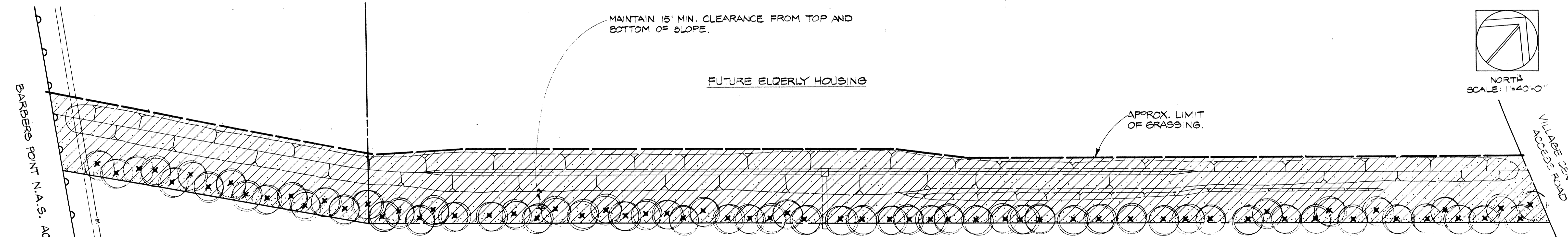


VILLAGE I RESIDENTIAL



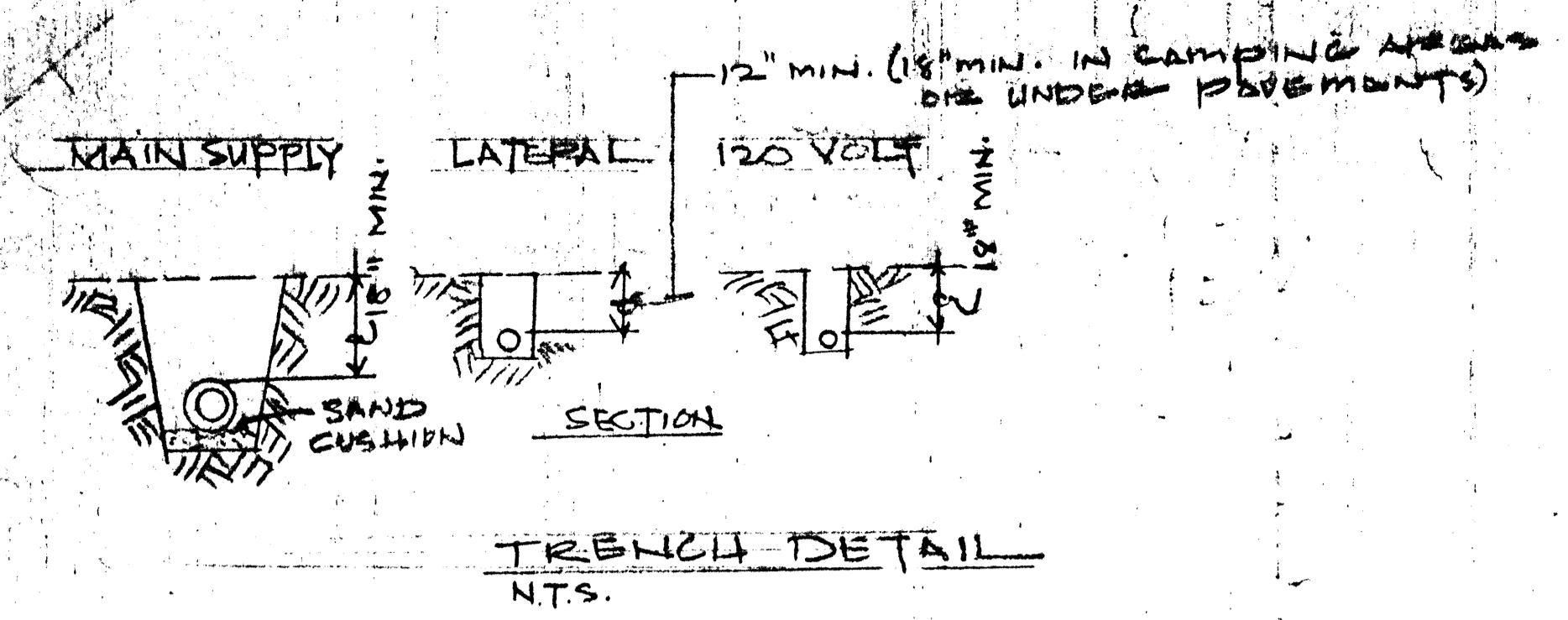
NORTH
SCALE: 1" = 40'-0"

FUTURE ELDERLY HOUSING

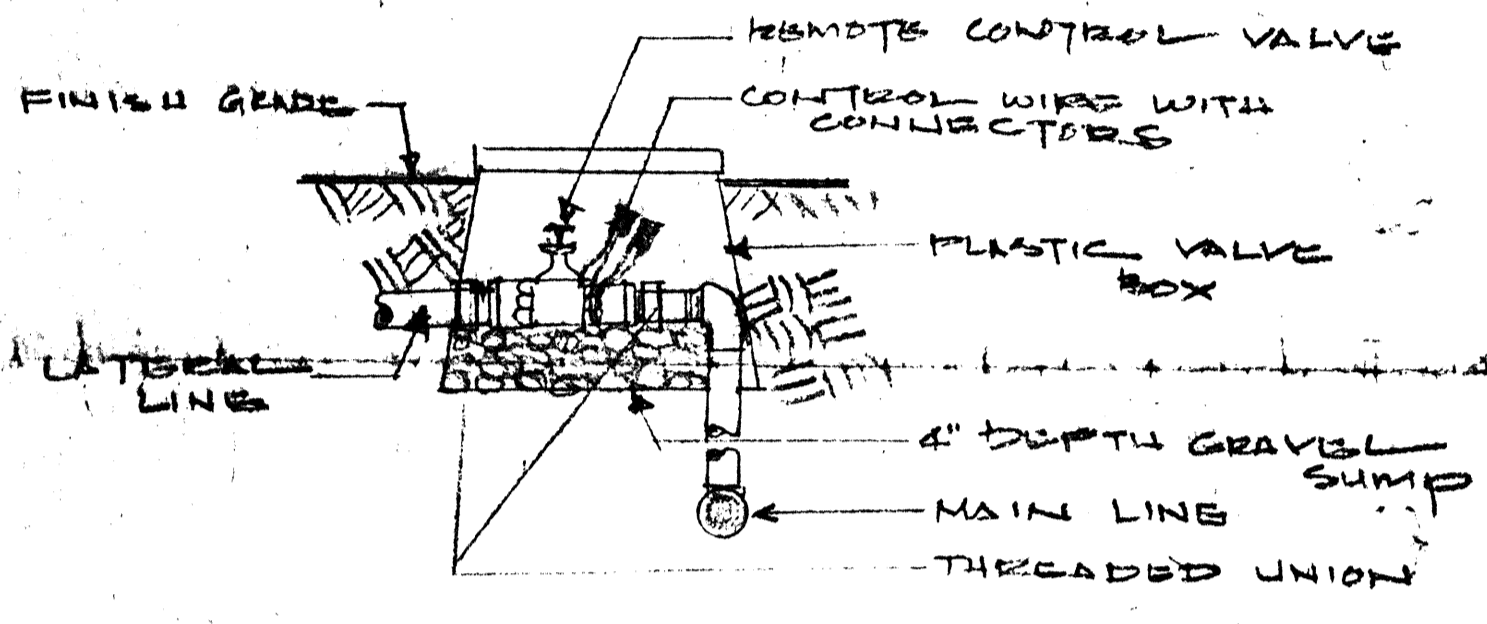


VILLAGE I RESIDENTIAL

ENGINEER	MM	REVISION	DATE	BRIEF	BY	APPROVED
DRAFTSMAN	OK					
CHECKED BY	MM	R. M. TOWILL CORPORATION ENGINEERS • PLANNERS • SURVEYORS • PHOTOGRAMMETRISTS CONSTRUCTION MANAGERS 420 Waiakamilo Road, Honolulu, Hawaii 96817-4941				
HOUSING FINANCE DEVELOPMENT CORPORATION STATE OF HAWAII HONOLULU, HAWAII						
KAPOLEI VILLAGE PHASE 2 BACKBONE INFRASTRUCTURE EWA, OAHU, HAWAII <small>TRK : (1ST DIVISION) 9-1-16:23 & por. 25</small>						
LANDSCAPE WORK FOR PHASE 1						
IRRIGATION AND PLANTING PLAN INTERCEPTOR DITCH						
<small>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION</small> <i>William D. ...</i> 2-6-89 SIGNATURE DATE						
HADC JOB NO. 2-90		SCALE 1" = 40'		DATE 11-7-91		

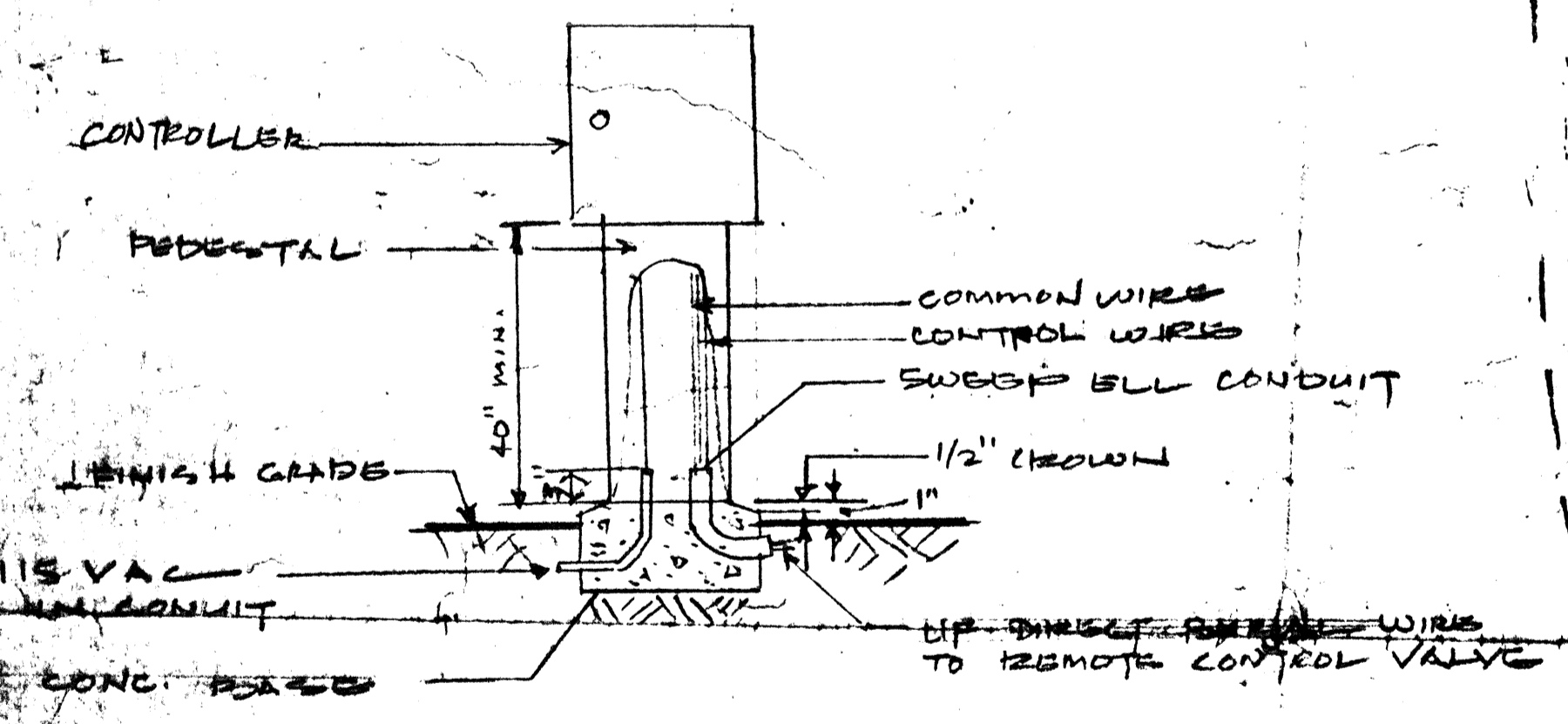


- HUNTER PGP-360 *7 NOZ ROTOR
- HUNTER PGP-ADJ *7 NOZ ROTOR
- NELSON 7951 RCV
- ▲ BUCKNER M 2400 CONTROLLER
- CLASS 200 3" PVC MAIN
- CLASS 200 LATERAL 8 HOLES 3 HOLES 1 1/4" ALL ELSE 2"



- NOTES:
1. TOP OF VALVE BOX TO 1/2" ABOVE FIN. GRADE IN GROUND, 2" IN GROUND COVER.
 2. PROVIDE REDUCER BUSHINGS AS REQ.

REMOTE CONTROL VALVE N.T.S.



- NOTES:
1. INSTALL CONTROLLER PER MANUF. INSTRUCTION.
 2. INSTALL ALL WIRING AS LOCAL CODES.
 3. PEDestal SHALL BE ANCHORED TO CONC. BASE AS RECOMMENDED BY MANUF.
 4. CONC. BASE SIZE SHALL BE AS RECOMMENDED BY MANUF.

IRRIGATION DEMAND DATA

LANDSCAPED AREA = 25 AC.

EST. DEMAND: 124,200 GPD

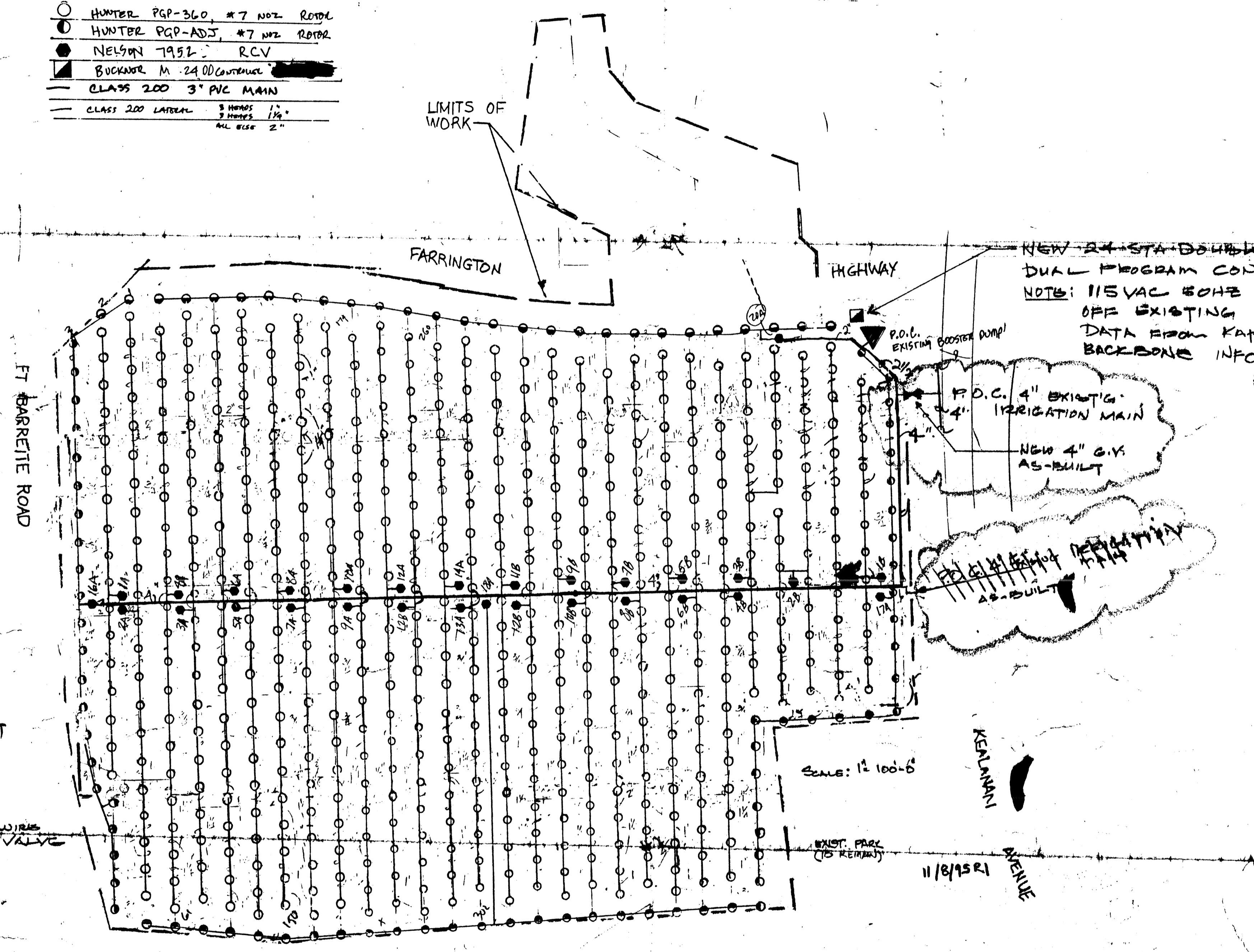
EST. WATERING TIME: 7.5 HRS (TOTAL)

36 VALVES TOTAL

4 VALVES ON TOGETHER = 0.1 HR

1 VALVE @ 60 GPM @ 1 HR = 3600 GPH

4 VALVE @ 1 HR = 14400 GPH



NEW 24\"/>

DUAL PROGRAM CONTROLLER

NOTE: 115 VAC 50HZ INPUT OFF EXISTING CONTROLLER "A" DATA FROM KAPOLOI PHASE 2 BACKLOG INFO

P.D.C. 4\"/>

NEW 4\"/>

AS-BUILT

EXISTING 4\"/>

AS-BUILT



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Signature

HOUSING FINANCE & DEVELOPMENT CORPORATION
STATE OF HAWAII

VILLAGES OF KAPOLOI
20X BY BOX CULVERT AND
NORTHWEST CORNER MASS GRADING

AS BUILT DRAWINGS

GREEN THUMB INCORPORATED

DATE: 3/25/96

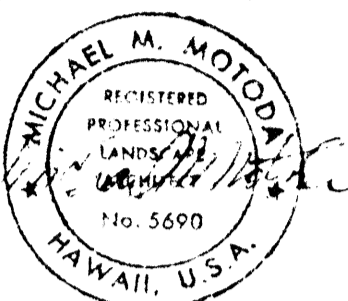
BY: *Signature*



Walters
Kimura
Miodda

landscape architecture

1148 Third Avenue
Honolulu, Hawaii 96816
Telephone (808) 739-5594
Fax (808) 739-5595



This work was prepared by me or
under my supervision.

REVISIONS

PROJECT
KAPOLEI
VILLAGE
PHASE 2

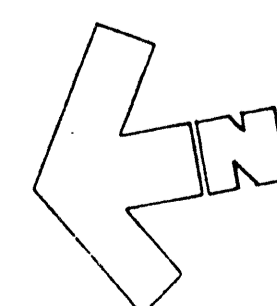
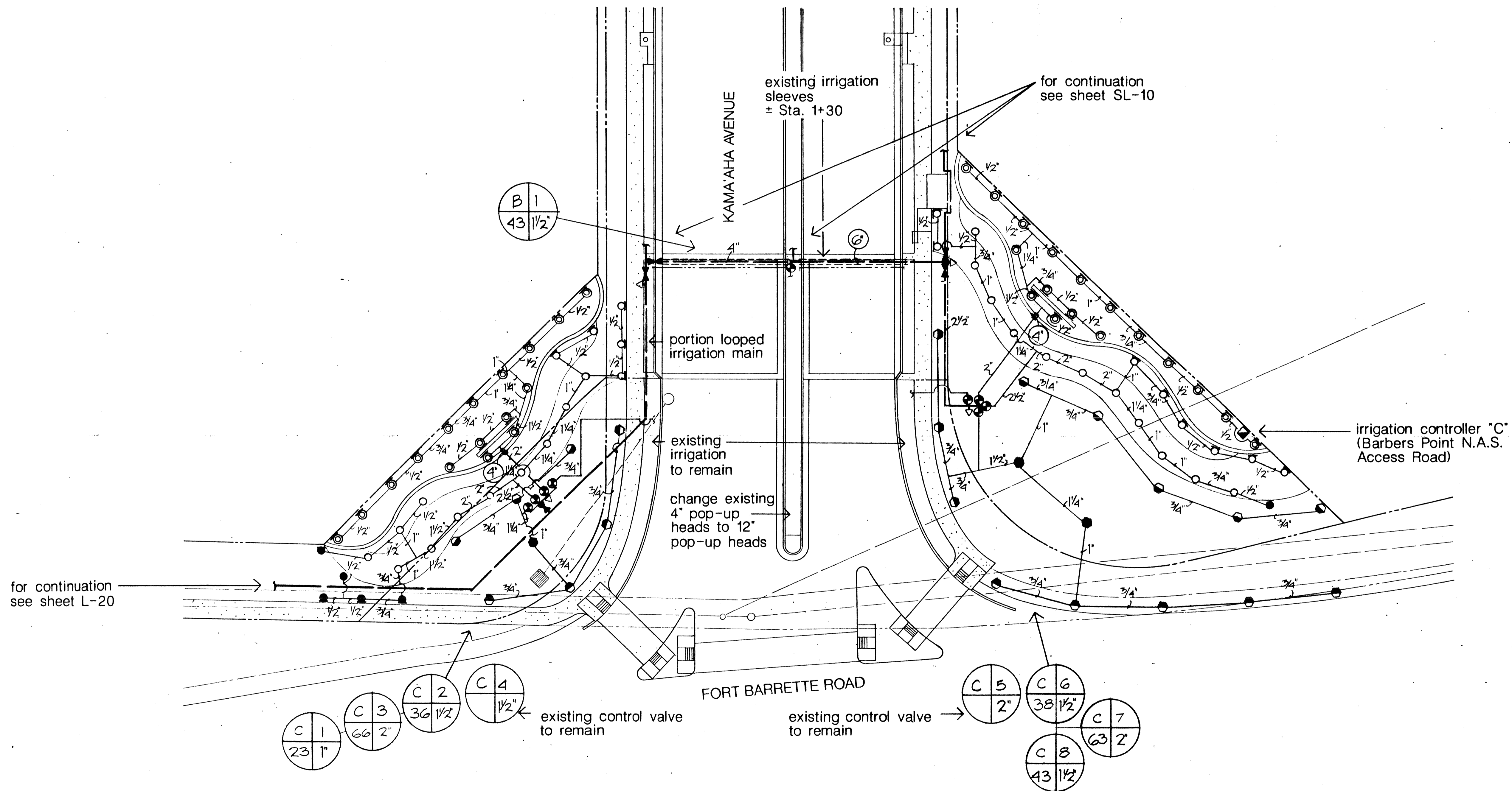
KAMA'AHA AVENUE
ENTRY AT FORT
BARRETTE ROAD

Supervision of construction will
be as defined by Chapter 82 (16-
82-2) in the Rules and regula-
tions of the Board of Registra-
tions of Professional Engineers,
Architects, Land Surveyors and
Landscape Architects, STATE OF
HAWAII

DESIGN _____
DRAWN _____
DATE 29 SEPT 1993
SCALE 1" = 20'-0"
SHEET _____ OF _____

Contractor to check and verify
all dimensions and conditions on
project site prior to construction

L-2



LANDSCAPE IRRIGATION PLAN

scale: 1" = 20'-0"