POOR LEGIBILITY

ONE OR MORE PAGES IN THIS DOCUMENT ARE DIFFICULT TO READ
DUE TO THE QUALITY OF THE ORIGINAL

SEMS-RM DOCID # 1165026

TITLE SHEET OF IMPROVEMENT PLANS
WHISMAN ROAD IMPROVEMENT PROJECT
PROJECT AD 66-09
CITY OF MOUNTAIN VIEW
SANTA CLARA COUNTY, CALIFORNIA

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		Property Line
		Curb, Gutter and Sidewalk
		Centerline
		Sanitary Sewer and Manhole
		Water Main
		Storm Sewer and Manhole
		Storm Inlet and Inlet Run
		Fire Hydrant
		Gate Valve
		Blow-off or air relief
		Tee
		Cross
E P.B.	E P.B.	Electrolier, Conduit & Pull Box
		Gas Line
		Telephone Duct
P.P.	P.P.	Telephone or Power Pole
S.S.	S.S.	Street Sign
S.S.	S.S.	Stop Sign
S.&S.	S.&S.	Street Sign & Stop Sign
		Electrolier & Street Sign
		Future Electrolier
		Existing Tree
		Tree to be Removed.
		Existing Edge of Pavement
M	M	Standard City Monument

ABBREVIATIONS

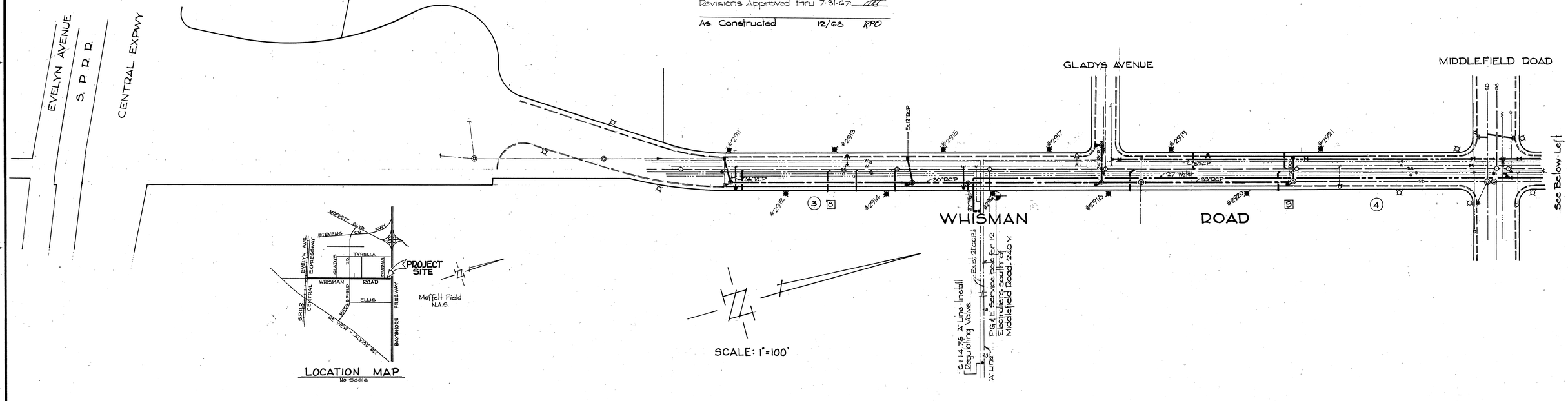
RCP	Reinforced Concrete Pipe
VCP	Vitrified Clay Pipe
CIP	Cast Iron Pipe
ACP	Asbestos Cement Pipe
WM	Water Meter
FH	Fire Hydrant
MH	Manhole
PB	Pull Box
WV	Water Valve
PP	Power Pole
GP	Guy Pole
TP	Telephone Pole
℄	Centerline
⅊	Property Line
⊤	Top of Curb
EP	Edge of Pavement
CO	Cleanout
S	Standard Single Driveway Opening
D	Standard Double Driveway Opening
[6]	Improvement Plan Sheet Number
(3)	Clearing Plan Sheet Number
c.p.r.W.S.	Copper Water Service

MARK THOMAS & Co., Inc.
CIVIL ENGINEERS & SURVEYORS
SAN JOSE CALIFORNIA

By: Harry T. Cumack Jr. CE 8533
Date: 6-2-67
Revisions Approved thru 7-31-67: [illegible]
As Constructed 12/68 RPO

INDEX TO PLANS

Sheet No.	Description
1	Title Sheet
2	Typical Details & Gen. Notes
3-7	Clearing Plans
8-12	Plan-Profile Sheets
13,14,15	Water Transmission Main Details & Notes
16	Middlefield Road Signal System
17	Dump Site Excavated Material



BENCH MARKS - 1965 datum

BM III-17	El. 73.70	Brass disk in ⊤ at NW return, Gladys & James
BM III-5	El. 61.834	Brass disk in ⊤ at NE return, Middlefield & Whisman
BM "A"	El. 73.415	"a" in ⊤ at SW return, Whisman & Gladys
BM "B"	El. 52.06	"a" in ⊤ at NW corner of valve & meter vault enclosure in Hetch-Hetchy R/W, East side of Whisman Road.
BM "C"	El. 42.72	"A" @ NW corner of meter box near Fairchild fire hydrant yard and Grinnell valves.
BM "D"	El. 40.63	Top concrete post (yellow) P.G.&E. gas barricade N. side Fairchild Drive & Whisman.
BM "E"	El. 79.06	"a" in existing ⊤. West side Whisman Road, opposite sta. 18+00±

A.M. McKINNON
Engineer of Work
A.M. McKinnon 11/9/67
R.E. 6726

Approval Recommended: Allen Shelley 11-7-67
Asst. Director of Public Works

Reviewed by: R.J. Leach

MICROFILMED OCT70

EDA Project No. 07-1-00323 (PW-1)

SHEET 1 OF 17 SHEETS

Job No. 66065
I.P. G11

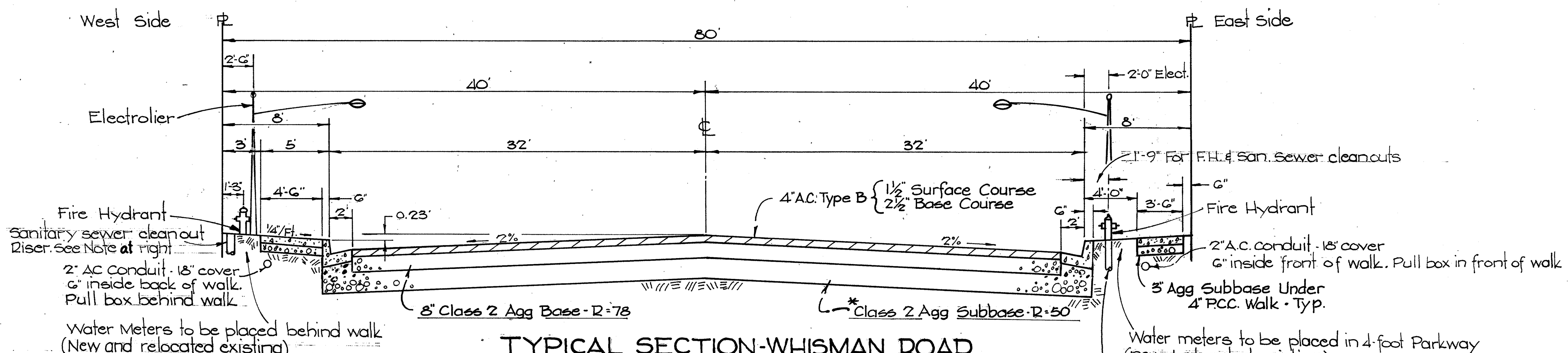
FILE NO. 5368-1

GENERAL CLEARING NOTES

1. Existing surface improvements noted to remain shall be protected from damage at all times. Improvements, including lawns, gardens trees, etc. beyond the clearing limits or outside the street right-of-way shall also be protected from damage. It shall be the Contractor's responsibility to repair or replace in kind any such improvements which become damaged during the course of work.
2. All other existing surface improvements with-in the right-of-way to be improved shall be removed, relocated, salvaged or reconstructed as herein specified or as directed by the Engineer.
   - a.) All utility poles in conflict with the proposed work shall be relocated by utility companies as directed by the Engineer. The Contractor shall notify said companies regarding any required relocations and he shall coordinate his operations so as to facilitate such relocation.
   - b.) Elevations of existing fire hydrants are to be adjusted to finish grade as shown on the plans.
   - c.) Trees, shrubs, bushes, etc., shall be removed and disposed of by the Contractor.
   - d.) All fences shall be removed, salvaged and delivered to appropriate property owner for his disposal or relocation. Any unsalvageable materials shall be disposed of by the Contractor.
   - e.) All brick, stone, or concrete walls or posts shall be removed and disposed of by the Contractor.
   - f.) All mailboxes shall be maintained until the completion of the improvements, by placing them in 5 gal. tin with concrete.
   - g.) Traffic and street signs shall be salvaged and delivered to City Corporation Yard on Whisman Road.
   - h.) Rings, frames, grates, covers, etc. of existing manholes, cleanouts, inlets, valve boxes, monument boxes, and appurtenances to underground facilities shall be adjusted to new finish grade, relocated or salvaged as directed by the Engineer.
   - j.) Access to all parcels shall be maintained at all times. Temporary driveways shall be provided to all parcels.
   - k.) The Contractor shall not be responsible for replacing lawns, gardens, etc., between the new back of sidewalk and new property line. However, he shall leave this area free of debris and uniformly graded, all to the satisfaction of the Engineer.
   - m.) All existing P.C.C. or A.C. driveways, walkways, or curb and gutter to be removed shall first be cut with a concrete cutting saw or other means as approved by the Engineer.
   - n.) Buildings and structural appurtenances thereto which are within the new right-of-way and are noted to remain; shall be protected at all times. Sidewalk improvements adjacent thereto shall be restored as delineated on the plans.
   - o.) Water meters which are in conflict with the work shall be relocated or salvaged as outlined in the specifications.
   - p.) Existing sprinkler or piping systems for landscape irrigation found to exist within the right of way shall be removed and delivered to the Owner of the property. Pipes shall be cut-off and capped at the **property** line.

GENERAL CONSTRUCTION NOTES

1.) All work not specifically covered in the Specifications for Whisman Road Improvement Project and the Standard Details & Specifications of the City of Mountain View shall be done in accordance with the State of California Specifications dated July 1964.
2.) Contractors shall notify the Director of Public Works at least two working days prior to commencing work.
3.) Contractors shall keep the City Police and Fire Departments informed daily regarding excavations, barricades, and detours.
4.) The Contractors shall leave an emergency phone number with the above mentioned departments.
5.) The Contractor shall give 24 hour notice to the City's Water Division Foreman when making connections to existing water facilities. At all times the manipulation of existing valves shall be done by Water Division Personnel.
6.) The City of Mountain View Standard Monuments to be placed as shown on the plans.
7.) All underground utilities to be completed before placing of base rock unless otherwise noted.
8.) Concrete Contractor shall verify location of driveways, sewer laterals and water services before pouring curbs and shall mark face of curbs with a letter "S" for sewer laterals and a letter "W" for water services. Use 1/2 pound lampblack per cubic yard of concrete.
9.) Reinforced concrete pipe shall be Class III as designated by ASTM Specification C-76 as amended, unless otherwise noted. Pipe 21" or larger shall have self-centering type joints.
10.) Cap or plug new sanitary and storm laterals at property line.
11.) Electrolier and signal conduits are 2" unless otherwise noted. All electroliers shall be Type III distribution with 8' mast arm, pole type X except as noted. All luminairs are 400 Watt M.V. unless otherwise noted. See Typical Sections for Electrolier locations.
12.) All copper water services shall terminate in a curb stop in a meter box. Exist. meters and boxes to be relocated by Contractor.
13.) Contractor to reset manhole rims and valve boxes to grade after placing the base, and immediately prior to the last lift of paving.
14.) Pavement section for Whisman Road shall be constructed to the ends of the curb returns on intersecting streets.
15.) Existing sanitary sewer laterals found to have less than 1 foot of cover to subgrade at the new curb line shall be relaid to provide 4'-0" cover to new ℄ grade. Provide standard cleanout to grade as detailed on typical Street section for new sanitary laterals and existing laterals found to have a cleanout. Connect rebuilt laterals to existing building lateral.
16.) At the existing unimproved side streets - Sherland Ave., Murlagan Ave., Evandale Ave. - grade to accept or release roadside drainage as shown on the plans or directed by the Engineer. Resurface with 2" A.C. on 6" Agg Base or overlay with A.C. to construct conforms or transitions as required by the Engineer.
17.) Overlay exist. permanent pavement in Vicinity of Middlefield Road Crossing and at other locations as may be ordered by the Engineer with 1½" A.C., Type B, Medium Gradation, 1/2" max. size aggregate.
18.) All water facility control valves on this project shall be readily available for operation at all times during construction.
19.) No water system construction shall begin until a sequence and schedule of such construction has been submitted to the Engineer and approved by him.
20.) Sanitary sewer laterals exist. to nearly all residences. Precise location is now unknown. Contractor to protect or relay those existing laterals encountered. Relay existing laterals as required to provide 2% min. slope and 4" min. cover at ℄, protect laterals with 12" or more cover to subgrade
21.) Remove existing 2" wat. main on Whisman Road within limits of this project. Water services to be replaced or transferred shall be from the new 8" ACP main to be installed as noted on the plans. Exist. 2" water main may be abandoned where it does not conflict with proposed improvements.
22.) Exact locations for installation of standard street name signs will be determined by the Engineer in the field. Contractor shall verify sign legend with Engineer before ordering signs.
23.) Contractor to paint numbers on poles (street side) at 7' level in 2½" high x 1¼" wide stencil. Numbers are indicated at each electrolier location on title sheet.
24.) Locate traffic signal and street lighting pull boxes outside of sidewalk areas as indicated on typical street section.
25.) Street name signs, without mounting hardware, will be furnished to the Contractor by the City at no cost; the Contractor shall furnish and install the sign post (and R12 sign, if required) complete as shown on the Standard Street Sign Detail, and mount the City furnished name sign.
26.) Some of the existing drainage structures on this project are "bubbler type" and may be full of water. The existing manhole at Sta. 26+86 receives the discharge of the underdrain system at the City's Whisman Reservoir.

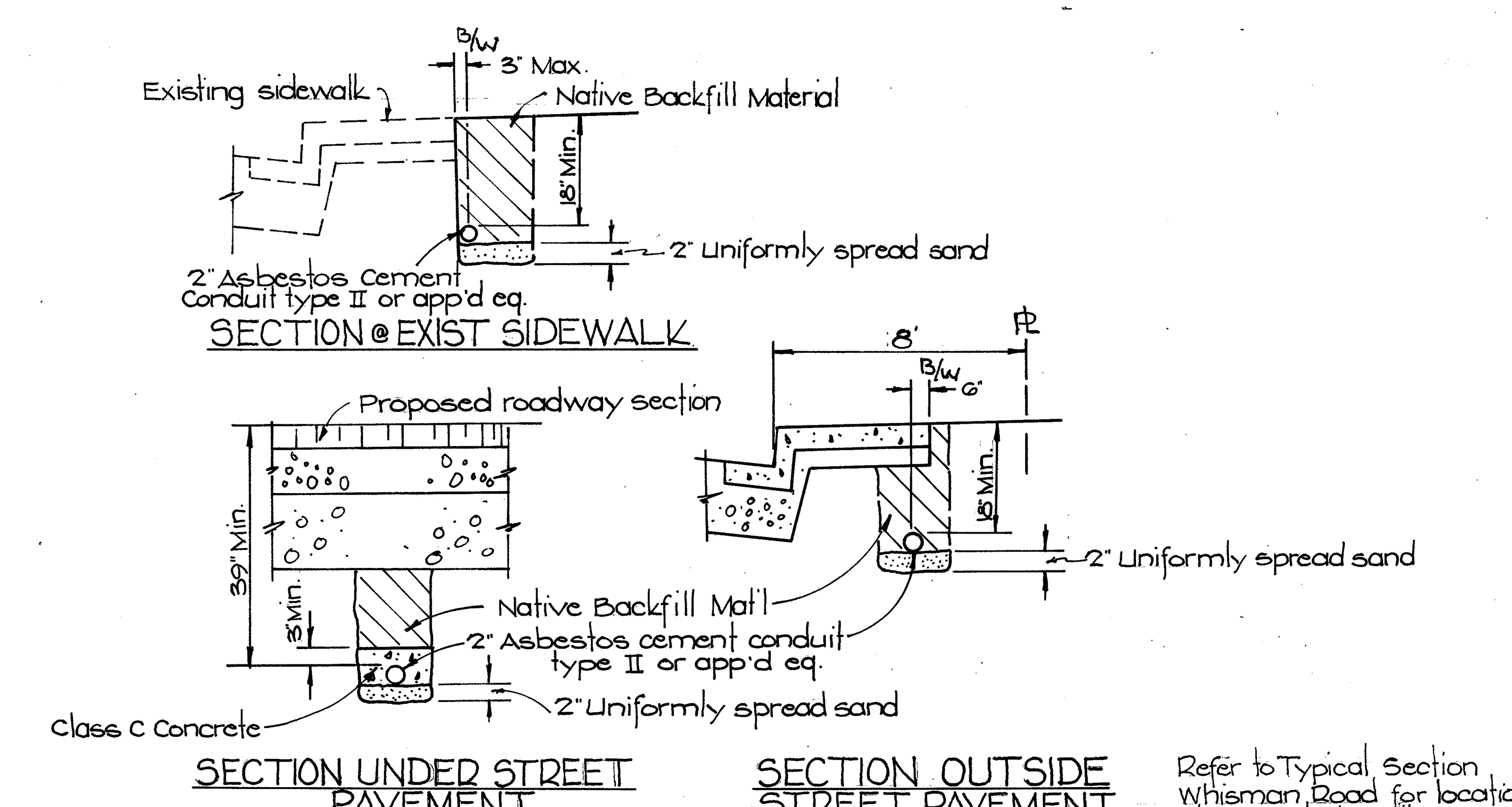


TYPICAL SECTION-WHISMAN ROAD
NO SCALE

Design T.I. = 8
Subgrade R-Value = 20 (Sta. 18+00 to Sta. 36+00)
Subgrade R-Value = 5 (Sta. 36+00 to Sta. 64+78)

*8" Class 2 Agg. Subbase - Sta. 18+00 to sta. 31+81
*13" Class 2 Agg. sub-base - Sta. 35+40 to sta. 64+78

1.) Electrolier conduit layout on plans is schematic only. Refer to typical street section for specific location.
2.) Construct roadway subgrade to back of curb as shown on typical street section. For additional details refer to standard cross-section for curb, gutter, sidewalk, and driveway.



Refer to Typical Section Whisman Road for location at separated walk.

LIGHTING & SIGNAL CONDUIT INSTALLATION
NO SCALE

MICROFILMED OCT70

A. M. McKINNON
ENGINEER OF WORK
AMMcKinnon RE 6726 11-9-67

EDA Project No. 07-1-00323 (PW-1)

TYPICAL DETAILS & GENERAL NOTES
WHISMAN-ROAD IMPROVEMENTS
PROJECT AD 66-09
MOUNTAIN VIEW CALIFORNIA

MARK THOMAS & CO. INC.
CONSULTING CIVIL ENGINEERS
18 NO. SAN PEDRO ST., SAN JOSE CUPERTINO

DR. BY EPK DATE 10/66	APPROVED ON 6-2-67	JOB NO. 66065	SHEET 2 OF 17
CKD. BY RPO DATE: 4/67	BY Harry F. Aumack Jr.	FILE NO. G11	
SCALE: HORIZ: 1" =	RE NO. 8533		

FILE NO. 5368-2

CLEARING PLAN

WHISMAN ROAD IMPROVEMENT
PROJECT ADGG-9
MOUNTAIN VIEW CALIFORNIA

MARK THOMAS & CO. INC.
CONSULTING CIVIL ENGINEERS
18 NO. SAN PEDRO ST., SAN JOSE CUPERTINO

A.M. McKINNON
ENGINEER OF WORK
A.M. McKinnon
REG 726 11-9-67

DR. BY: AEF DATE: 5/66	APPROVED ON 12-67	JOB NO. 66065	SHEET 3 OF 17
CKD. BY: RPO DATE: 4/67	BY Harry J. Kennedy Jr.		
SCALE: HORIZ: 1" = 40'	RE NO. 8533	FILE NO. G11	

EDA PROJECT No. 07-1-00323 (PW-1)

Flown: 4-14-66

FILE NO. 5368-3

MICROFILMED OCT70

CLEARING PLAN

WHISMAN ROAD IMPROVEMENT
PROJECT AD GG-9
MOUNTAIN VIEW CALIFORNIA

MARK THOMAS & CO. INC.
CONSULTING CIVIL ENGINEERS
18 NO. SAN PEDRO ST., SAN JOSE CUPERTINO

A. M. McKINNON
ENGINEER OF WORK
AMMcKinnon
RE 8726 11-9-67

DR. BY: AEF DATE: 5/66	APPROVED ON 6-2-67	JOB NO. GG065	SHEET 4 OF 17
CKD. BY: RPO DATE: 1/67	BY Harry F. Cunnach	FILE NO. G11	
SCALE: HORIZ: 1" = 40'	RE NO. 5533		

EDA PROJECT No. 07-1-00323 (PW-1)

Flown: 4-14-65

FILE NO. 5368-4

MICROFILMED OCT 70

Flown : 4-14-66

CLEARING PLAN

WHISMAN ROAD IMPROVEMENT
PROJECT AD66-9
MOUNTAIN VIEW CALIFORNIA

MARK THOMAS & CO. INC.
CONSULTING CIVIL ENGINEERS
18 NO. SAN PEDRO ST., SAN JOSE CUPERTINO

A. M. McKINNON
ENGINEER OF WORK
RE 6722 11-9-67

DR. BY: AEF DATE: 5/66	APPROVED ON 6-2-67	JOB NO.	SHEET
CKD. BY: RPC DATE: 1/67	BY	66065	5 OF 17
SCALE: HORIZ: 1" = 40'	RE NO. 8533	FILE NO. G11	

EDA PROJECT NO. 07-1-00323 (PW-1)

MICROFILMED OCT 70

FILE NO. 5368-5

CLEARING PLAN

WHISMAN ROAD IMPROVEMENT
PROJECT AD66-9
MOUNTAIN VIEW CALIFORNIA

MARK THOMAS & CO. INC.
CONSULTING CIVIL ENGINEERS
18 NO. SAN PEDRO ST., SAN JOSE CUPERTINO

A. M. McKINNON
ENGINEER OF WORK
A.M. McKinnon
RE 6776 11-9-67

DR. BY: AEF DATE: 5/66	APPROVED ON 6-21-67	JOB NO. 66065	SHEET 6
CKD. BY: RPO DATE: 4/67	BY Henry L. Quinnell	FILE NO. 611	OF 17
SCALE: HORIZ: 1" = 40'	RE NO. 2533		

EDA PROJECT No. 07-1-00323 (PW-1)

MICROFILMED OCT 70

FLOWD: 4-12-66

FILE NO. 5368-6

CLEARING PLAN

WHISMAN ROAD IMPROVEMENT
PROJECT AD66-9
MOUNTAIN VIEW CALIFORNIA

MARK THOMAS & CO. INC.
CONSULTING CIVIL ENGINEERS
18 NO. SAN PEDRO ST., SAN JOSE
CUPERTINO

DR. BY: ACF DATE: 5/66 CKD. BY: RPO DATE: 4/67 SCALE: HORIZ: 1" = 40'	APPROVED ON 6-2-67 BY [signature] RE NO. 8533	JOB NO. 66065 FILE NO. G11	SHEET 7 OF 17

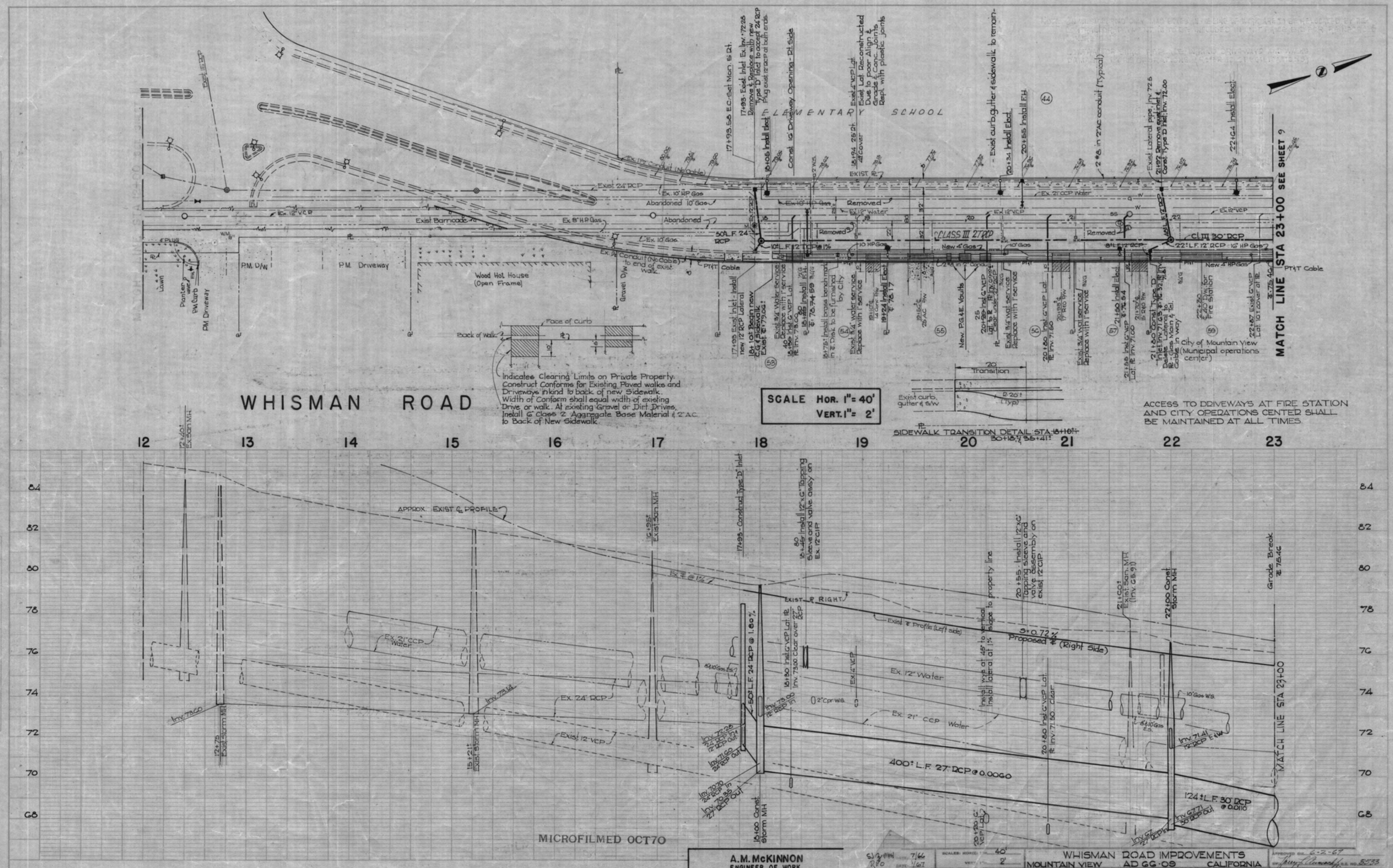
A. M. McKINNON
ENGINEER OF WORK
[signature]
RE 6726 11-9-67

EDA PROJECT No. 07-1-00323 (PW-1)

Flown: 4-14-66

MICROFILMED OCT70

FILE NO. 5368-7

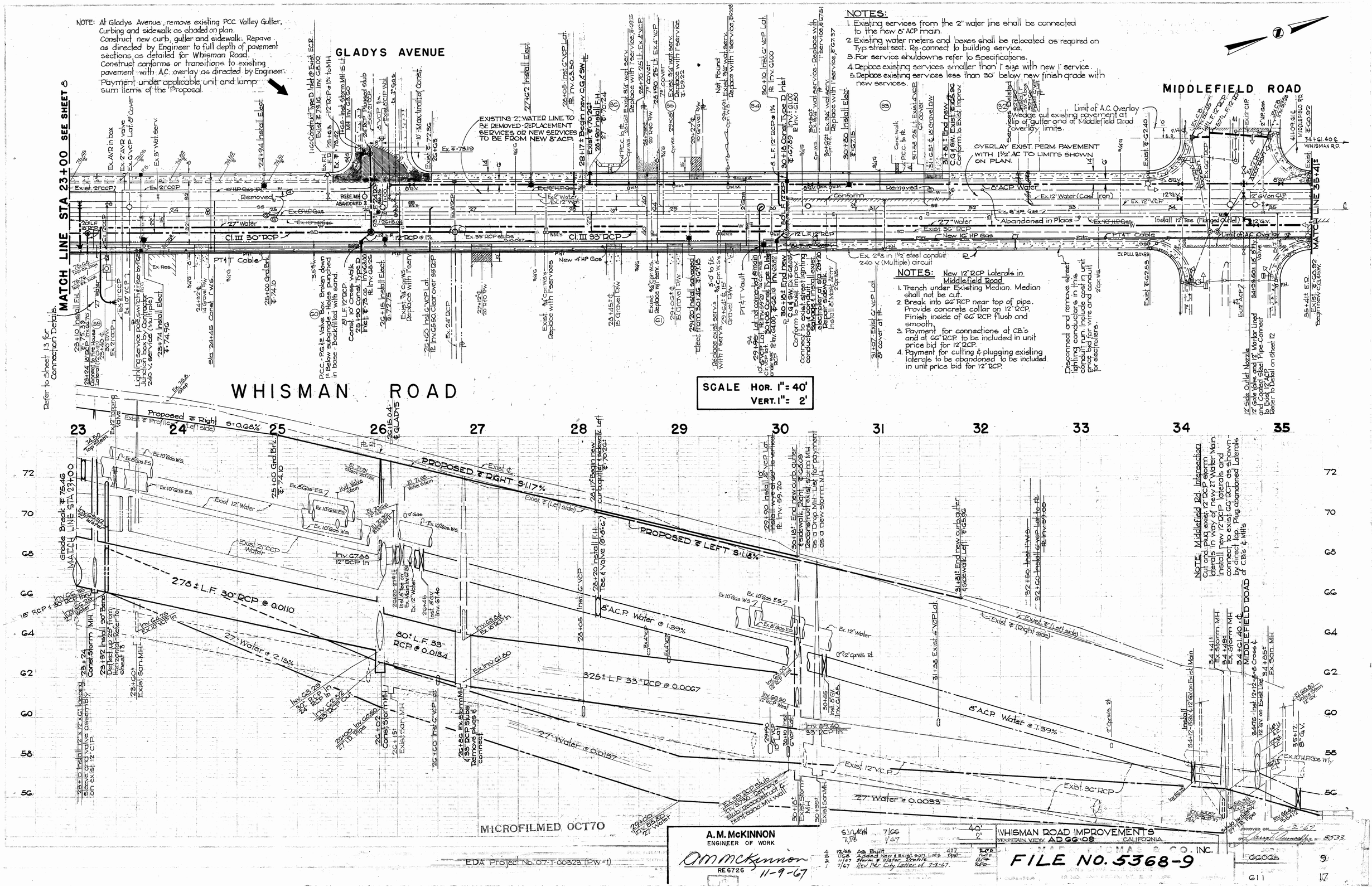


A.M. McKINNON
ENGINEER OF WORK
RE 6726
11-9-67

WHISMAN ROAD IMPROVEMENTS
MOUNTAIN VIEW AD GG-09 CALIFORNIA
MARK THOMAS & CO. INC.
FILE NO. 5368-8

JOB NO. GG065 | SHEET 8 OF 17 | FILE NO. G11

EDA Project No. 07-1-00323 (PW-1)



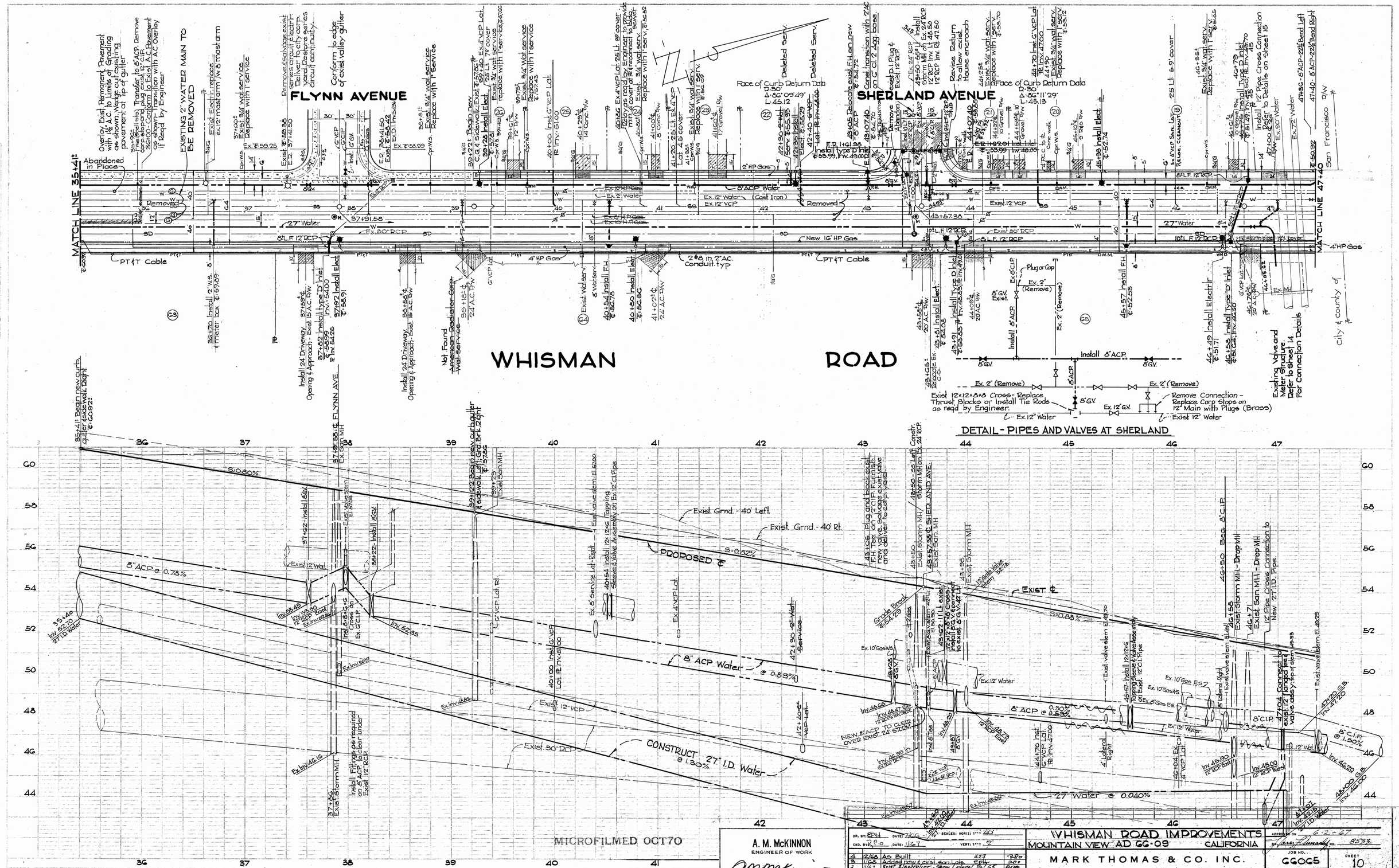
NOTES:

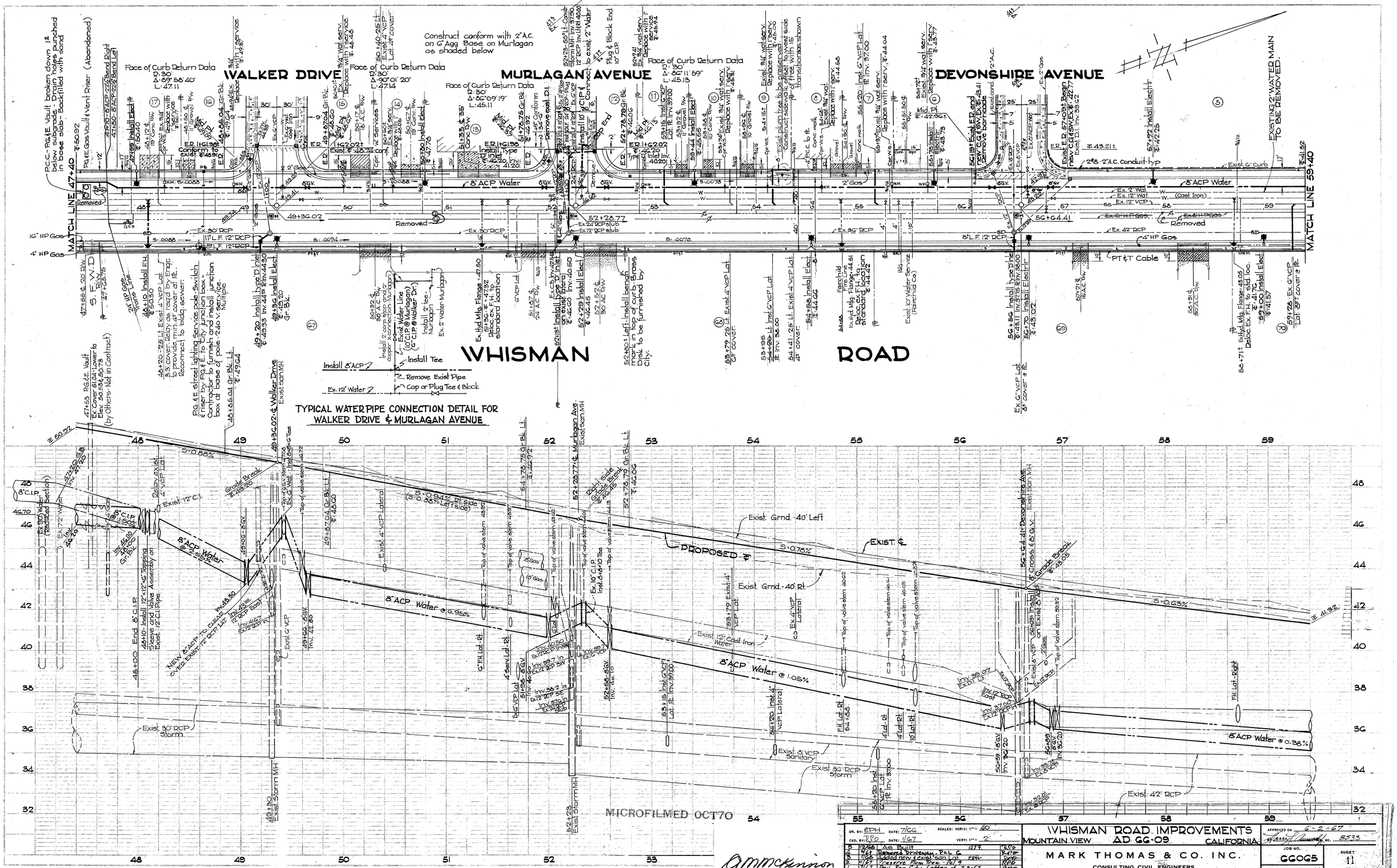
1. Existing services from the 2" water line shall be connected to the new 8" ACP main.
2. Existing water meters and boxes shall be relocated as required on Typ. street sect. Re-connect to building service.
3. For service shutdowns refer to Specifications.
4. Replace existing services smaller than 1" size with new 1" service.
5. Replace existing services less than 30" below new finish grade with new services.

NOTES: New 12" RCP Laterals in Middlefield Road

1. Trench under Existing Median. Median shall not be cut.
2. Break into 66" RCP near top of pipe. Provide concrete collar on 12" RCP. Finish inside of 66" RCP flush and smooth.
3. Payment for connections at CB's and at 66" RCP. to be included in unit price bid for 12" RCP.
4. Payment for cutting & plugging existing laterals to be abandoned to be included in unit price bid for 12" RCP.

NOTE: Middlefield Rd. Intersection
Cut and plug exist. 12" DCP storm laterals in way of new 21" Water Main. Install new 12" DCP laterals and connect to exist. 66" RCP as shown by direct tap. Plug abandoned Laterals of CB's & MH's


FLYNN AVENUE
SHERLAND AVENUE
WHISMAN ROAD
MATCH LINE 35+41
MATCH LINE 47+40
EXISTING 2" WATER MAIN TO BE REMOVED
DETAIL - PIPES AND VALVES AT SHERLAND
PROPOSED ℄
EXIST. ℄
CONSTRUCT 27" I.D. Water @ 1.30%
8" ACP Water @ 0.83%
27" Water @ 0.040%
MICROFILMED OCT70
A. M. McKINNON
ENGINEER OF WORK
RE 6728
11-16-67
WHISMAN ROAD IMPROVEMENTS
MOUNTAIN VIEW AD GG-09
CALIFORNIA
MARK THOMAS & CO. INC.
CONSULTING CIVIL ENGINEERS
SAN JOSE
18 NO. SAN PEDRO ST., SAN JOSE
CUPERTINO
JOB NO. GG005
FILE NO. G11
SHEET 10 OF 17
REVISIONS
EDA Project No. 07-1-00323 (PW-1)
FILE NO. 5368-10



NO.	DATE	DESCRIPTION	APP'D
5	12/66	As Built	RDD
4	7/67	Removed Driveway - Rel. 6	RDD
3	1/66	Added new & exist. San Lat.	RDD
2	1/67	Preserve Plum Tree - 12/9	RDD
1	1/67	Rev. Per City Letter of 7-3-67	RDD

REVISIONS

DR. BY: EPH DATE: 7/66 SCALES: HORIZ: 1" = 40' VERT: 1" = 2'
CKD. BY: RDD DATE: 1/67

WHISMAN ROAD IMPROVEMENTS
MOUNTAIN VIEW AD 66-09 CALIFORNIA

APPROVED ON 6-2-67
Harry J. Kennedy No. 8333

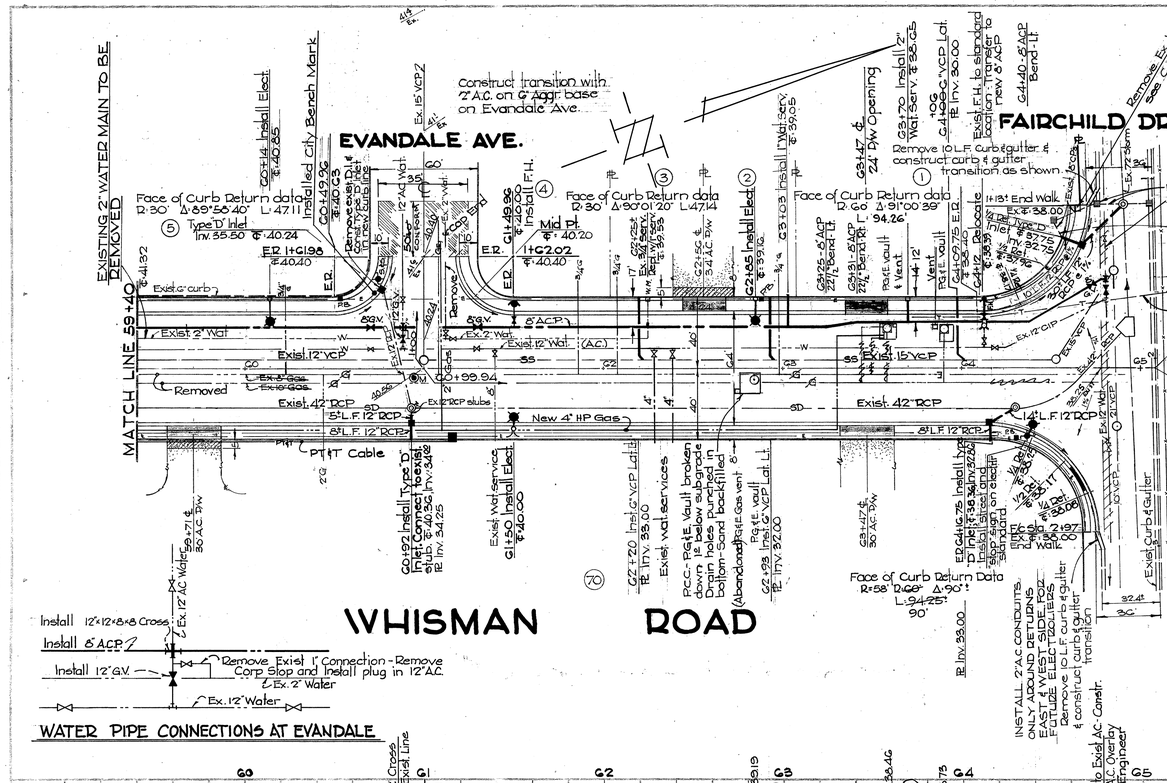
MARK THOMAS & CO. INC.
CONSULTING CIVIL ENGINEERS
SAN JOSE 18 NO. SAN PEDRO ST. SAN JOSE CUPERTINO

JOB NO. 66065
FILE NO. G11
SHEET 11 OF 17

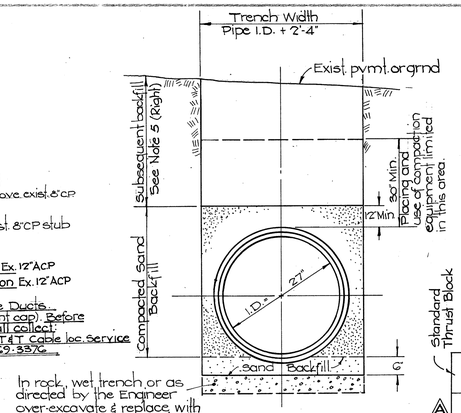
amnckinnon 11-16-67

E.D.A. Project No. 07-1-00323 (P.W.-1)

FILE NO. 5368-11



WATER PIPE CONNECTIONS AT EVANDALE

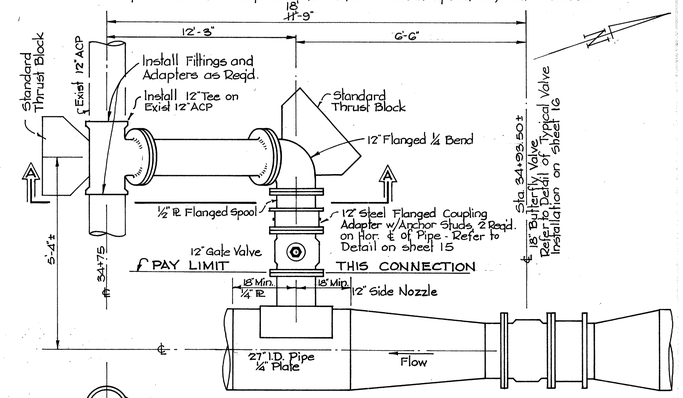


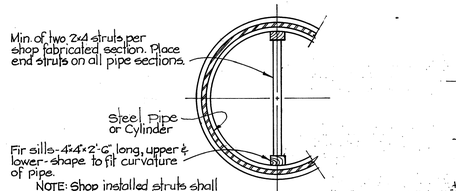
In rock, wet trench or as directed by the Engineer over-excavate & replace with pea gravel or compacted sand backfill.

TRANSMISSION MAIN TRENCH SECTION
No Scale

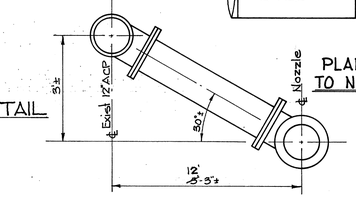
27" I.D. PIPE
GENERAL NOTES TRENCH EXCAVATION AND BACKFILL

1. All disturbed native material shall be removed from the excavation
2. Backfill placed within 30 inches of the outside of pipe shall be compacted with equipment subject to the approval of the Engineer.
3. Refer to Specifications for backfill requirements.
4. 6 inches of sand bedding required. Shape bedding to conform to contour of pipe before laying. Minimum thickness between outside of pipe and bottom of trench is 4 inches.
5. "Subsequent Backfill" Requirements: Refer to Detail Specif. 41, Par. 4103.1Gb



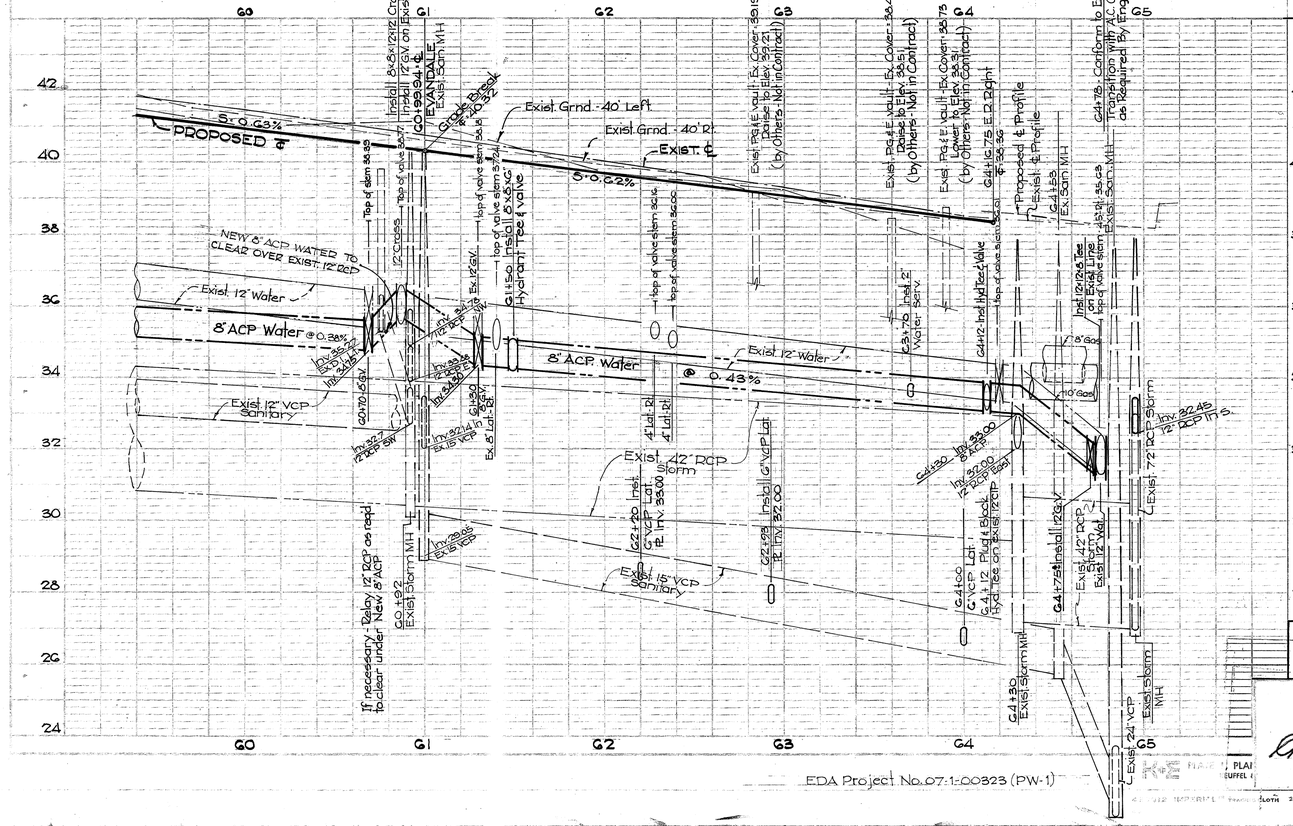


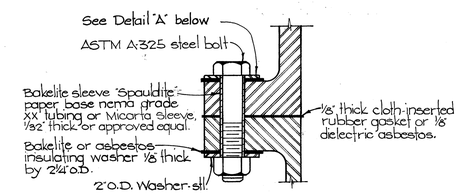
PIPE STRUTTING DETAIL
No SCALE



VIEW A-A

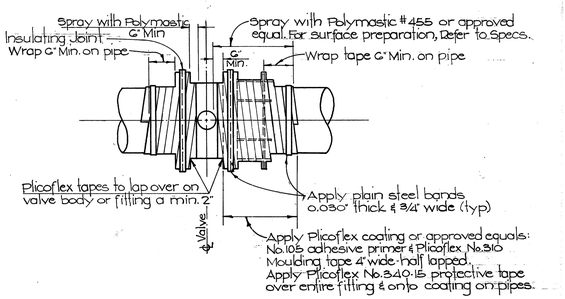
PLAN OF CONNECTION - EXIST. 12" ACP TO NEW 27" PIPE AT MIDDLEFIELD RD.
SCALE: 1/2" = 1'-0"



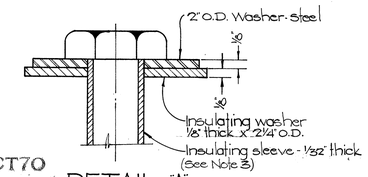


FLANGED INSULATING JOINT

Install at Sta. 46+85± Whisman Rd. Payment included in Lump Sum Price for Cross-Connection.



PROTECTION FOR BURIED COUPLINGS AND INSULATING JOINTS



DETAIL "A"
No SCALE

GENERAL NOTES

1. Install insulating joints at the locations designated on the plans, or as ordered by the Engineer.
2. Insulating joints that are to be buried shall be wrapped in moulding tape & sealed water tight.
3. All bolt holes shall be reamed after fitting flanges together but before inserting insulating sleeves.
4. Protection shown is typical for buried flanged coupling adapters, straight couplings, and tension tie bolts and lugs installed across buried couplings.

MICROFILMED OCT70

INSULATING JOINT DETAILS
No Scale

A. M. McKinnon
11-16-67

	EPH	DATE 7/66	40'	
	RPO	DATE 4/67	2'	
3	12/68	As Built		RPO
2	11/67	Driveway Tol. &		RPO
1	7/67	Rev. Per Only Letter of 7-3-67		RPO

WHISMAN ROAD IMPROVEMENTS
MOUNTAIN VIEW AD GG-09 CALIFORNIA

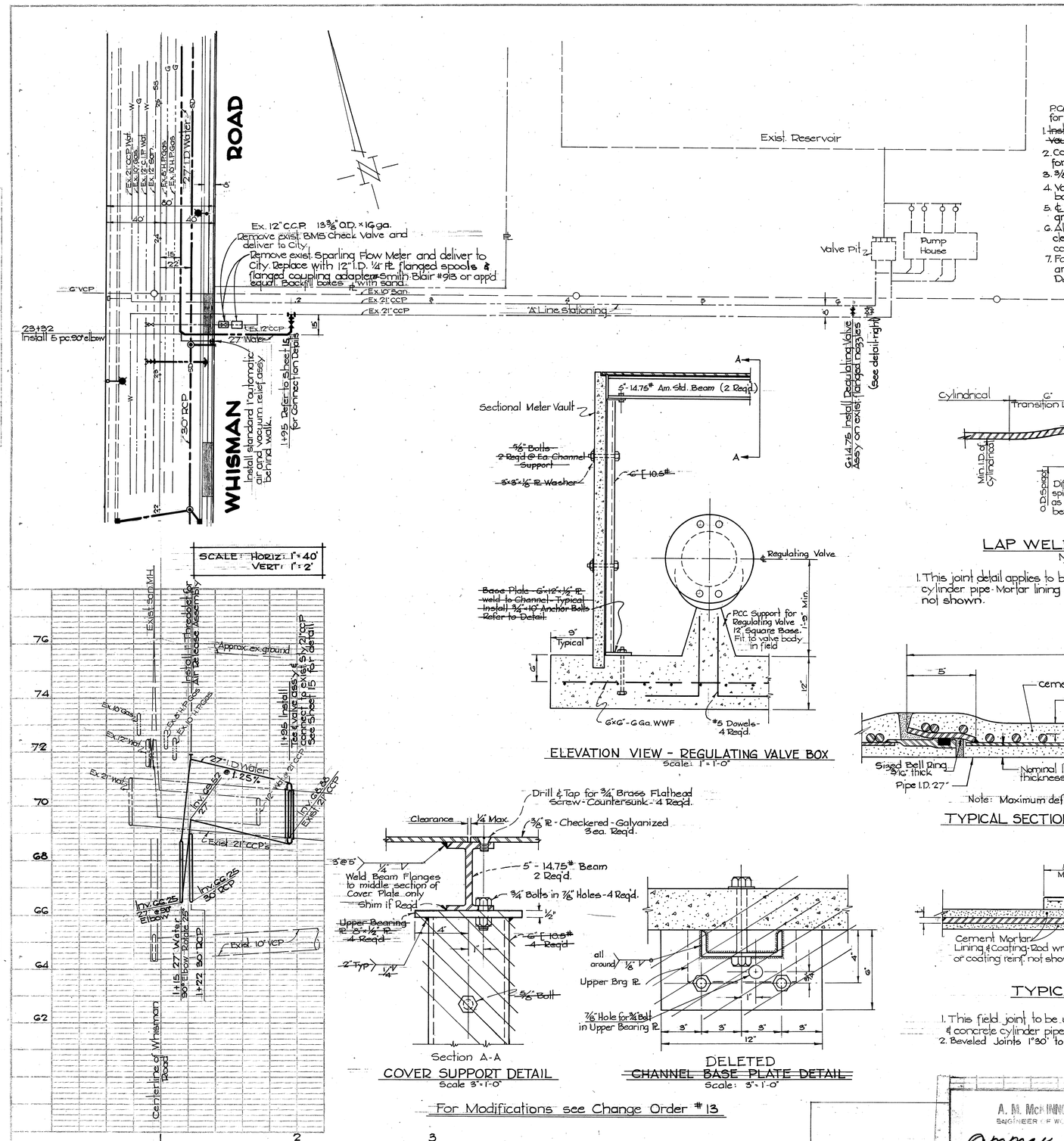
APPROVED ON 6-2-67
Alfred J. Clements 8533

MARK THOMAS & CO. INC.
CONSULTING CIVIL ENGINEERS
MIND ON FIRST ST., SAN JOSE CONCORD

GG0G5 | 12
FILE NO. G11 | 17

EDA Project No. 07-1-00323 (PW-1)

FILE NO. 5368-12

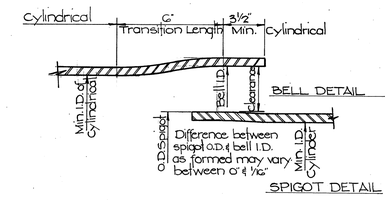


ELEVATION VIEW - REGULATING VALVE BOX
Scale: 1" = 1'-0"

COVER SUPPORT DETAIL
Scale 3" = 1'-0"

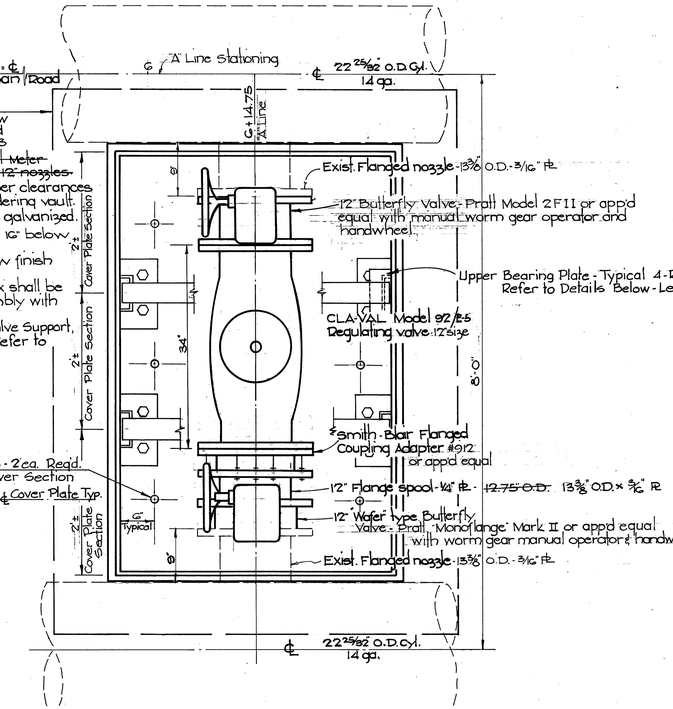
DELETED
~~CHANNEL BASE PLATE DETAIL~~
Scale: 3" = 1'-0"

For Modifications see Change Order #13



LAP WELD JOINT DETAIL
No Scale

1. This joint detail applies to both steel pipe and concrete cylinder pipe - Mortar lining and coating and rod wrap not shown.

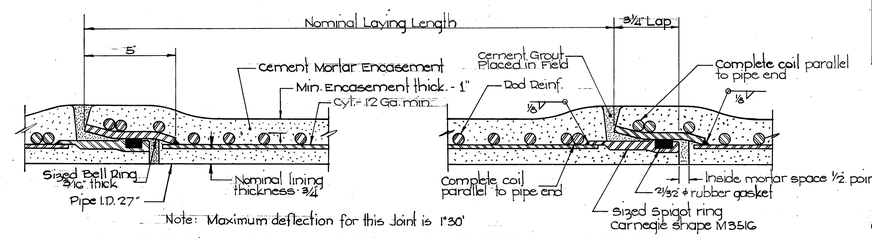


REGULATING VALVE INSTALLATION DETAIL (BID AS LUMP SUM)
Scale: 1" = 1'-0"

TENSION ANCHORAGE REQUIREMENTS

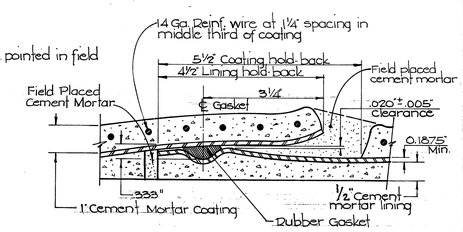
All 27" I.D. Pipeline field Joints shall be lap welded as detailed below or utilize welded butt-strap joints between the following locations:

1. Sta. 1+95 (21" CCP Connection) to Sta. 25+92 Whisman Rd.
2. Sta. 33+40 Whisman Rd. to Sta. 36+40 Whisman Rd.
3. Sta. 44+40 Whisman Rd. to S.F.W.D. Connection

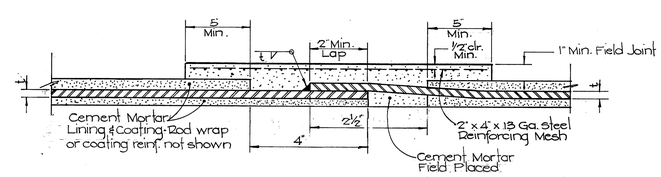


Note: Maximum deflection for this Joint is 1°30'

TYPICAL SECTIONAL DETAIL - CONCRETE CYLINDER PIPE
No Scale



TYPICAL PIPE JOINT DETAIL FOR STEEL PIPE
No Scale



TYPICAL LAP WELD FIELD JOINT
No Scale

1. This field joint to be used in reaches of tension anchorage for both steel pipe & concrete cylinder pipe options.
2. Beveled Joints 1°30' to 10" inclusive shall use this Lap Weld Field Joint.

NOTES:
1. This type of joint not to be used in regions of tension anchorage or locations requiring a welded joint.
2. Pipe joint detail for steel pipe may also utilize bell and spigot ring assembly similar to detail for concrete cylinder pipe.
3. Maximum allowable deflection at this Pipe Joint is 1°30'.

MICROFILMED OCT70

A. M. McKINNON
ENGINEER OF WORK
amMckinnon
11-16-67

NO.	DATE	DESCRIPTION	APP'VD
1	2-19-68	"As Built"	

REVISIONS

DR. BY: EPH DATE: 10/66 CKD. BY: RJD DATE: 1/67 SCALES: HORIZ: 1" = As Shown VERT: 1" =

EDA PROJECT NO. 07-11-00323 (PW-1)

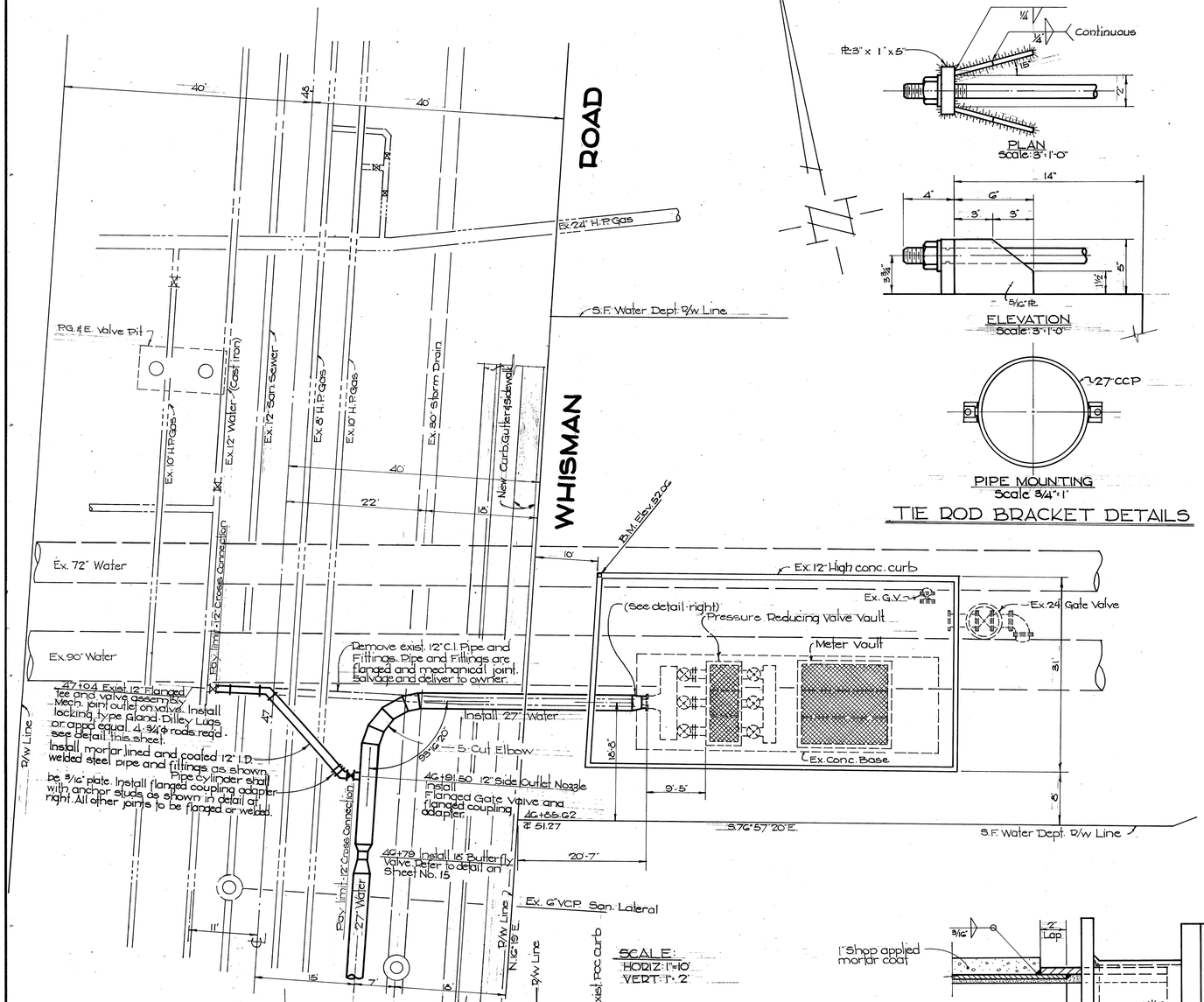
WHISMAN ROAD IMPROVEMENTS
MOUNTAIN VIEW AD GG-09 CALIFORNIA

MARK THOMAS & CO. INC.
CONSULTING CIVIL ENGINEERS
SAN JOSE 18 NO. SAN PEDRO ST., SAN JOSE CUPERTINO

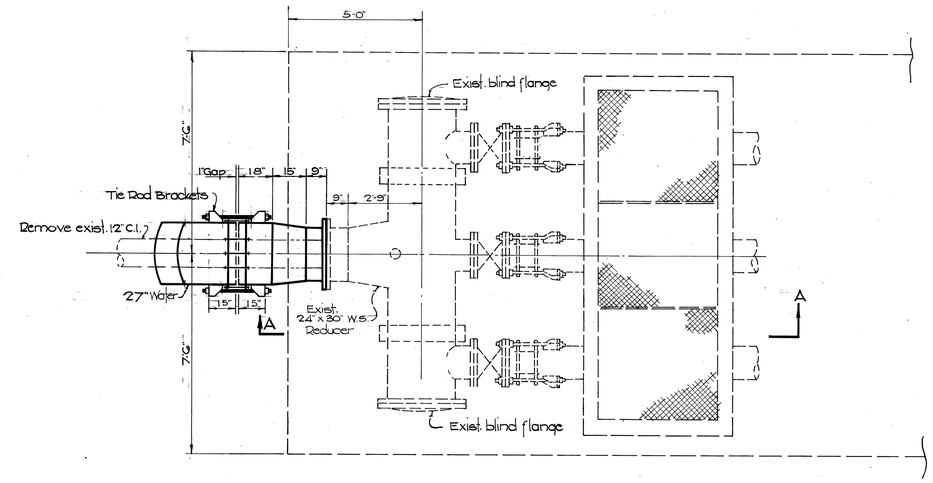
APPROVED ON 6-2-67
BY: Jerry L. Turnesby NO. 8533
JOB NO: GG0G5
FILE NO. G11
SHEET 13 OF 17

FILE NO. 5368-13

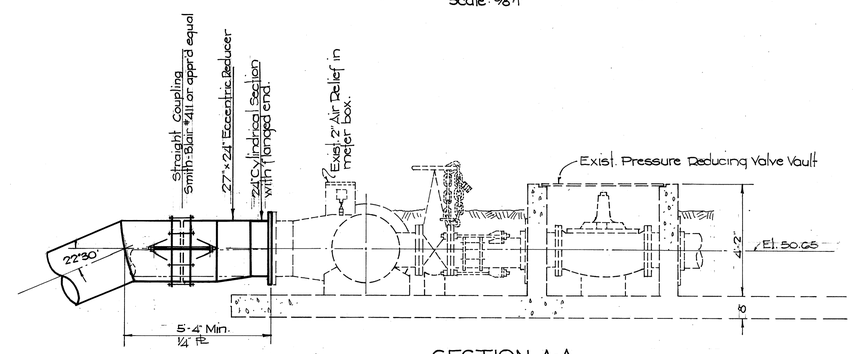
NOTES:
1. Install tie rod brackets on horizontal ℄ of pipe.
2. Fabricate brackets from A283 B or C steel plate.
3. Tie bolts shall be ASTM, A193 Grade B7 or approved equal, 1¼" diameter 37" Long Min.



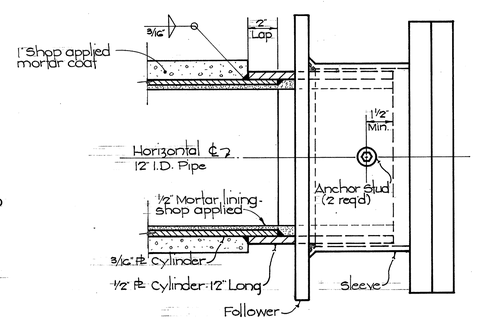
TIE ROD BRACKET DETAILS



PLAN VIEW
Scale: 3/8"=1'

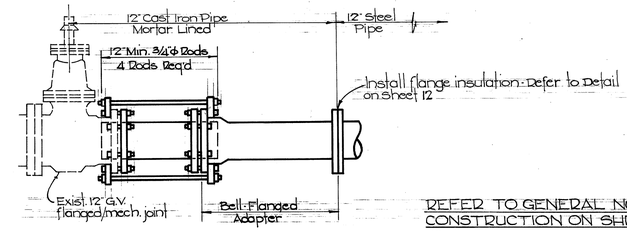


SECTION A-A
Scale: 3/8"=1'-0"



DETAIL-12" FLANGED COUPLING ADAPTER/W ANCHOR STUDS FOR 12" I.D. STL. PIPE
Scale: 2"=1'-0"

1. Anchor studs for flanged coupling adapters shall be A151 4140 steel, ⅝" pin diameter.
2. Stud bosses shall be ½" 6000 pound I.P. half coupling.
3. Fillet weld between boss and sleeve shall be 5/16".
4. Refer to Specifications and details for field applied coatings and waterproof coverings for buried steel fittings and insulating joints.



DETAIL-TENSION TIE ASSEMBLY AT STA. 47+04
No Scale

REFER TO GENERAL NOTES FOR PIPELINE CONSTRUCTION ON SHEET 15

MICROFILMED OCT70

12-19-68 "As Built" RCF. RPO

EDA PROJECT No. 07-1-003223 (PW-1)

A. M. McKINNON
ENGINEER OF WORK
AMMcKinnon
RE 6966
11-16-67

DETAILS

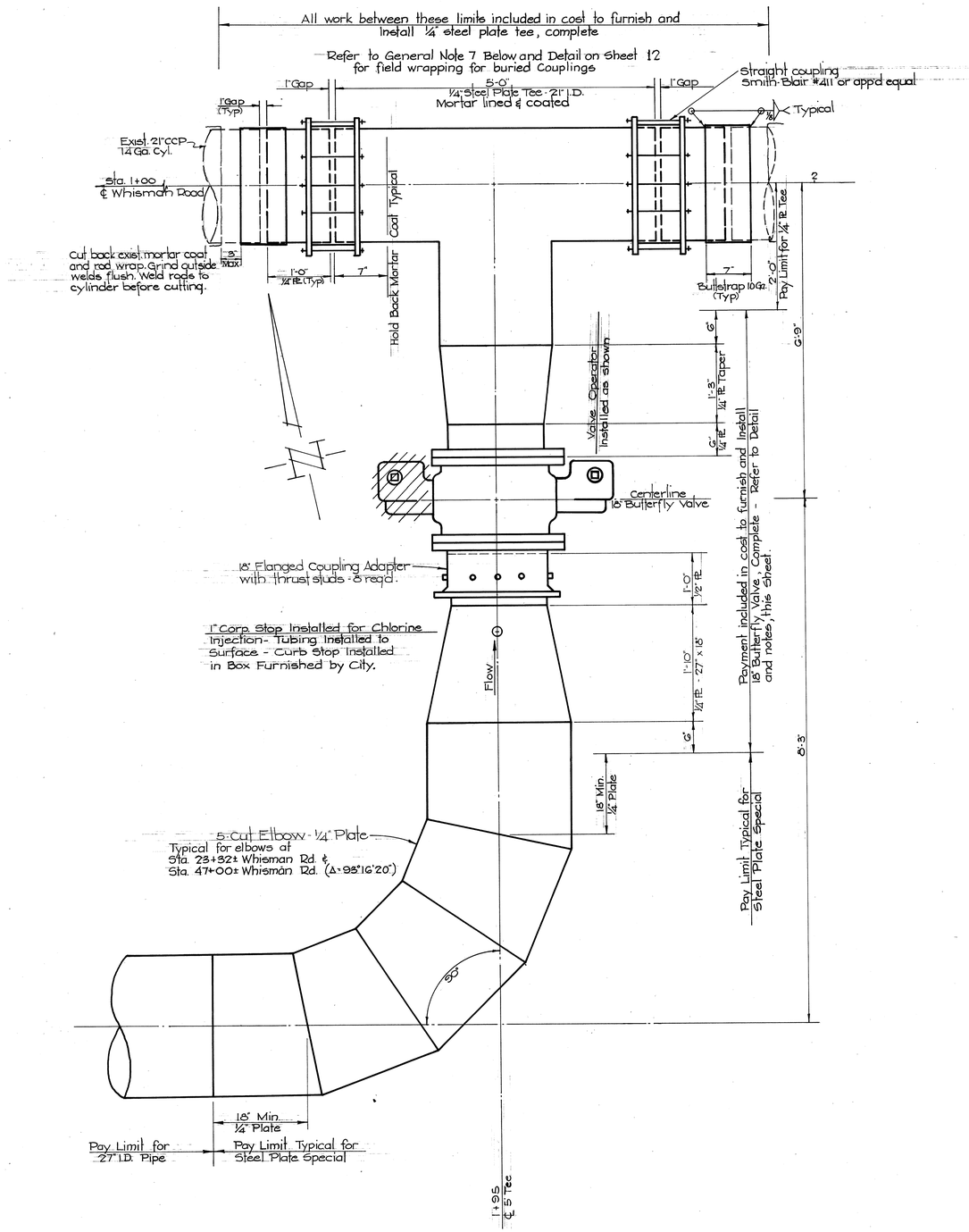
WATER CONNECTION TO S.F.W.D. 90" MAIN WHISMAN ROAD L.I.D.

MOUNTAIN VIEW CALIFORNIA

MARK THOMAS & CO. INC.
CONSULTING CIVIL ENGINEERS
18 NO. SAN PEDRO ST., SAN JOSE CUPERTINO

DR. BY: EPN DATE: 8/66	APPROVED ON 6-2-67	JOB NO. 66065	SHEET 14 OF 17
CKD. BY: RPO DATE: 1/67	BY Harry F. Clemmesh	FILE NO. 611	
SCALE: HORIZ: 1" AS SHOWN	RE NO. 8533		

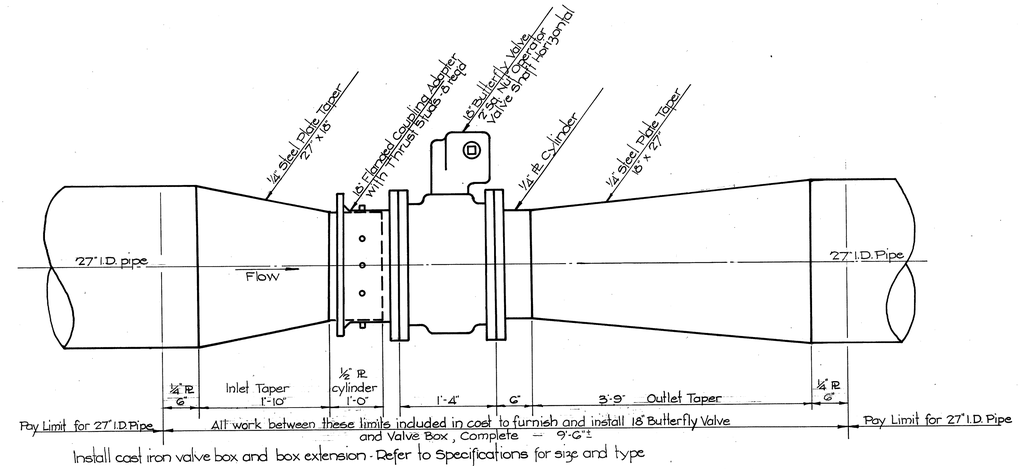
FILE NO 5368-14



CONNECTION DETAIL AT EXIST. 21" CCP

SCALE: 1" = 1'-0"

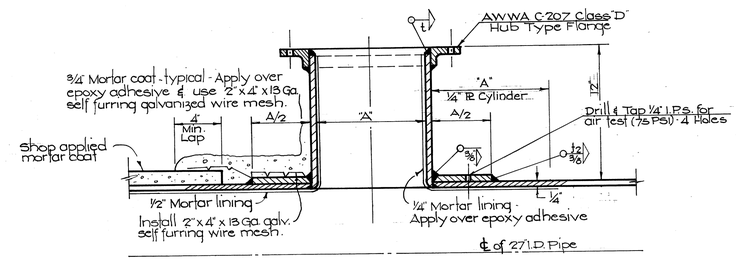
Refer to Plan-Profile Sheet # 13



BUTTERFLY VALVE & TAPERS - TYPICAL DETAIL

SCALE: 1" = 1'-0"

Install at Sta. 40+78± Whisman Rd.
" " Sta. 34+93± Whisman Rd.
" " Sta. 1+95 Existing 21" CCP



NOTES:
1. All nozzle outlets shall be radial.
2. Nozzle outlets shall be fabricated on cylinder of ¼" minimum wall thickness.
3. Reinforcement plate (saddle plate) shall be 3/8" thick.
4. Nozzle outlets shall be fabricated with standard wall steel pipe.

NOZZLE OUTLET DETAIL

SCALE: 1" = 1'-0"

GENERAL NOTES FOR 27" I.D. PIPELINE CONSTRUCTION

1. Pipeline bends in excess of 10 degrees shall be fabricated as ¼" steel plate specials.
2. Minimum cylinder thickness for pipe furnished under Federal Specification SS-P-381, shall be 12 gauge.
3. Minimum cylinder thickness for pipe furnished under Federal Specification SS-P-385a shall be 3/16" (0.1875)
4. Shop drawings and data shall be supplied by the Contractor - Refer to Specifications.
5. Pipe joints in reaches of tension anchorage shall be lap welded with a continuous fillet weld of nominal size equal to the thickness of steel plate.
6. Painting and coating of pipe joints and exposed ferrous metal shall be as required by the specifications.
7. Field joint coating shall be as shown on the Details and as specified. Refer to Sheet 13
8. Cement for mortar lining and coating shall be Type II.

MICROFILMED OCT 70

12-19-68 "As Built" azz

FDA Project No. 07-1-003223 (PW-1)

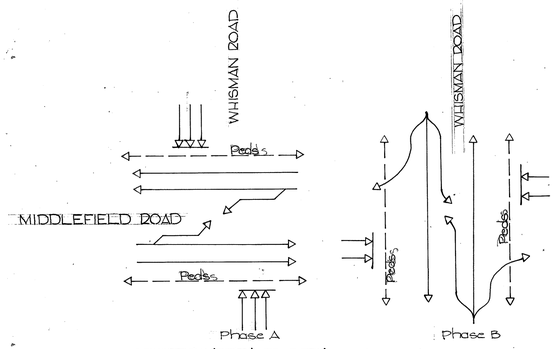
A. M. McKINNON
ENGINEER OF WORK
A M McKinnon
RE 6226
11-16-67

WATER CONNECTION DETAILS
WHISMAN ROAD IMPROVEMENTS
PROJECT ADGG-09
MOUNTAIN VIEW CALIFORNIA

MARK THOMAS & CO. INC.
CONSULTING CIVIL ENGINEERS
18 NO. SAN PEDRO ST., SAN JOSE CUPERTINO

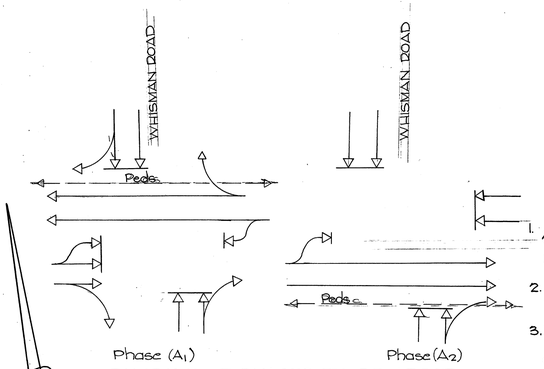
DR. BY EPN DATE 10/66	APPROVED ON 6-2-67	JOB NO. GG065	SHEET 15 OF 17
CKD. BY RPO DATE 1/67	BY Harry F. Plumecke Jr.		
SCALE: HORIZ: 1" = As Shown	RE NO. 8533	FILE NO. G11	

FILE NO. 5368-15



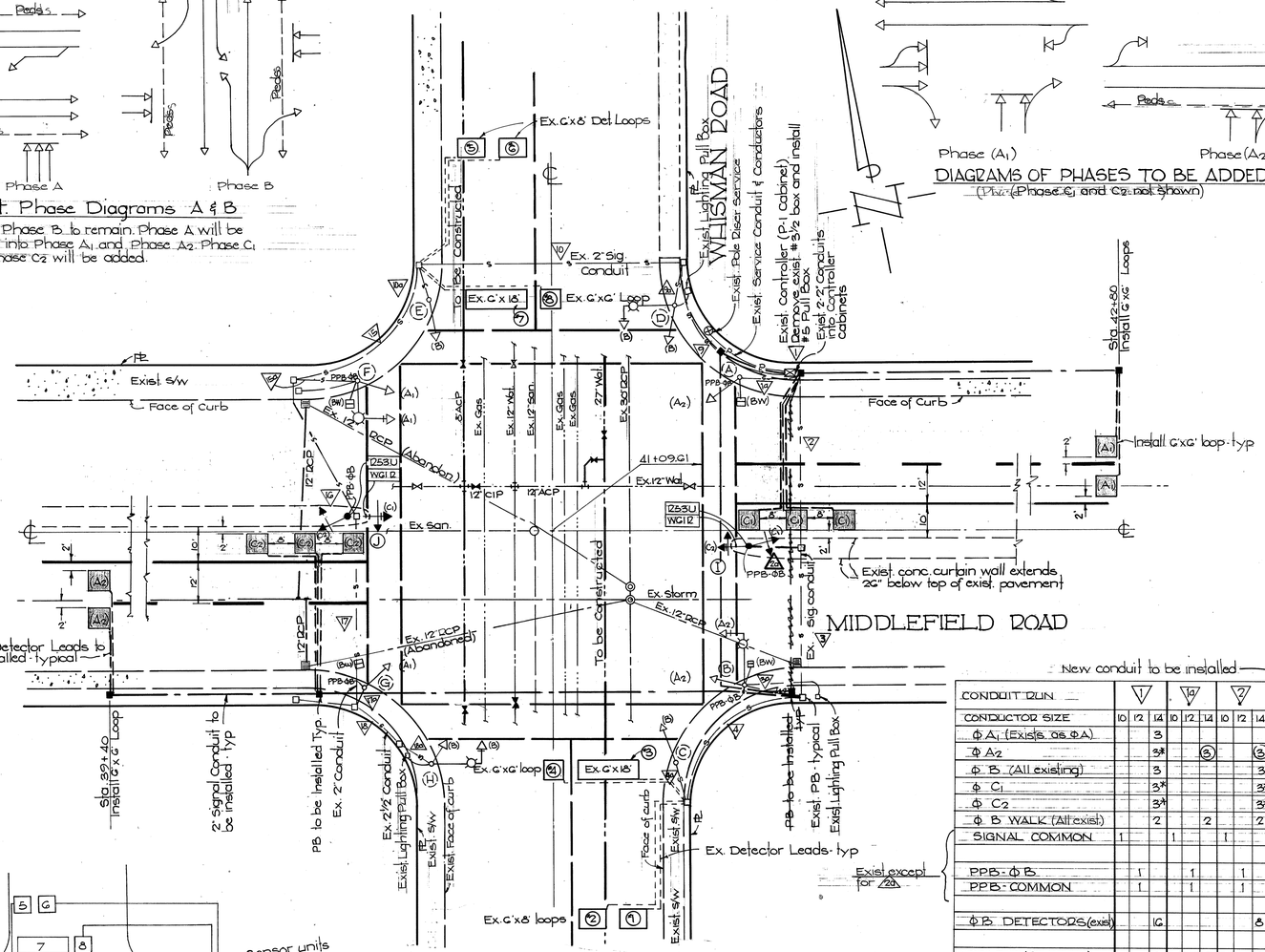
Exist. Phase Diagrams A & B

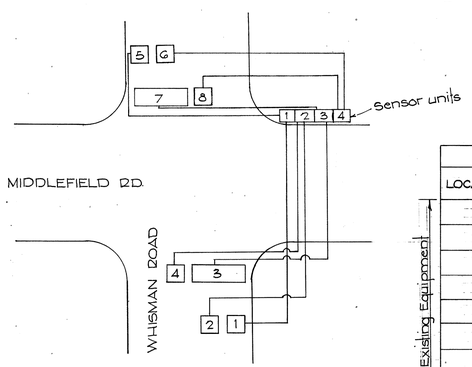
NOTE: Phase B to remain. Phase A will be divided into Phase A_1 and Phase A_2. Phase C_1 and Phase C_2 will be added.



DIAGRAMS OF PHASES TO BE ADDED

(Phase (C_1) and (C_2) not shown)





SCHEMATIC DIAGRAM
DETECTOR LOOPS
(EXISTING)

CONSTRUCTION NOTES

1. All materials and installation shall be performed in accordance with Section 86 "Signals and Lighting" of the Standard Specifications of the California Division of Highways, July, 1964, unless detailed otherwise on these plans.
2. Minor adjustments of placement and location of equipment may be required prior to installation, at no additional cost to City.
3. Vehicle detectors shall be of the inductive loop type. #12 TW wire shall be used in the loop. The loop leads shall be spliced to #12-2 UF cables at the first pull box adjacent to the loop. The #12-2 UF cables shall run, unspliced, from this pull box to the controller cabinet.
4. New Middlefield Road loops shall be 6'x6' dimension, 3 turn loops.
5. Existing loops and loop leads in Whisman Road that are disturbed by underground pipeline construction, in the opinion of the Engineer, shall be replaced in kind to the first pull box adjacent to the loop. Detector loops #5, #7, #3, #2 will definitely require replacement, together with their associated lead-in wires to the first adjacent pull box. Existing loop leads are 14 gage stranded twisted duplex cable, Belden #8720.
6. All conduit to be installed shall be 2" Asbestos-Cement or rigid plastic conduit
7. Pull boxes be #3½ unless shown otherwise.
8. Field Tests: This Contractor is responsible for the satisfactory performance of all field tests required by Section 86-2.14 of the State Standard Specifications. Tests shall be performed on all circuits of the existing signal system as well as the new elements constructed under this project. Refer to Specifications.
9. Contractor shall furnish and install 4 loop detector units (for A_1, A_2, C_1 and C_2), in the controller cabinet. Detector units shall be the approved equal of the LD-1 unit as manufactured by Automatic Signal Division.
10. Install signal standards in median 6'-0" from existing nose of median.
11. Existing loops #1 & #5 are connected only during ΦB GREEN. Existing loops #3 & #7 provide presence detection only.
12. Furnish and install two solid state phase modules (Automatic Signal Type PC-8012) in the existing controller. (Existing frame space - For Phase A)
13. The existing two PC 30 12 Modules shall be used for the left turn movements. Move the existing PC 60 12 module to phase B.
14. The existing interval sequence unit (1M 20), shall be replaced with an IM 40 unit.
15. Furnish and install one additional IM 40 interval sequence unit.

CONDUCTOR SCHEDULE

New conduit to be installed

CONDUIT RUN	1			1a			2			2a			3			3a			4			4a			5			5a			6			6a			7			7a			8			8a		
CONDUCTOR SIZE	10	12	14	10	12	14	10	12	14	10	12	14	10	12	14	10	12	14	10	12	14	10	12	14	10	12	14	10	12	14	10	12	14	10	12	14	10	12	14	10	12	14	10	12	14	10	12	14
Φ A_1 (Exists as ΦA)			3																														3						3						3					
Φ A_2			3*			③			③					③			③																																
Φ B (All existing)			3						3					3							3			3									3			3									3					3
Φ C_1			3*						3*			3																					3*						3*						3*					
Φ C_2			3*						3*			3																					3*						3*						3*					
Φ B WALK (All exist.)			2			2			2					2			2																2						2						2					
SIGNAL COMMON	1				1			1			1		1				1			1				1	1										1	1			1						1						1
PPB-ΦB		1				1			1			1		1			1									1								1						1						1					
PPB-COMMON		1				1			1			1		1			1									1								1						1						1					
ΦB DETECTORS (exist)			6						8					8							8												8						8						8					
SPARES (REMAINING)			3			3			3					6			3				3												3						3						3					
FUTURE DETECTORS (exist)			4						2																								2						2						2					
TOTALS	1	2	40	1	2	8	1	2	27	1	2	6	1	2	22	1	2	8	1	–	14	–	–	4	1	2	27	–	–	4	1	2	27	–	–	4	1	2	19	1	2	8	1	2	19	1	2	14	1	2	8	1	–	6	–	–	4
CONDUIT SIZE	Ex. 2"			Ex. 2"			Ex. 1½"			1½"			Ex. 1½"			Ex. 2"			Ex. 2"			Ex. 2"			Ex. 2"			Ex. 2"			Ex. 1½"			Ex. 2"			Ex. 2"			Ex. 1½"			Ex. 2"			Ex. 2"			Ex. 2½"			Ex. 2½"		

* Use existing spare conductors. ③ Use exist. (ΦA) conductors

Φ A_1 and Φ A_2 Exist as ΦA (on Automatic Recall - No Detector Actuation)

Φ C_1 and Φ C_2 are to be added.

ΦB, BW exist as shown.

** At (J) stub out of exist. pull box with 1½" conduit into base of new 1-A standard and install conductors for Φ C_1 and Φ C_2 and PPB.

POLE SCHEDULE

LOCATION	TYPE STANDARD	SIGNALS TYPE	SIGNALS MOUNTING	WALK-DON'T WALK TYPE	WALK-DON'T WALK MOUNTING	REMARKS
(A)	1-B	1W3C	A-1	1W2C	W-O	PPB-Type B All exist.
(B)	III	1W3C 1W3C	B-1 15 FT. MA.	1W2C	W-O	PPB-Type B All exist.
(C)	1-B	1W3C	A-1	–	–	All exist.
(D)	III	1W3C	B-1	–	–	All exist.
(E)	1-B	1W3C	A-1	–	–	All exist.
(F)	III	1W3C 1W3C	B-1 15 FT. M.A.	1W2C	W-O	PPB-TYPE B All exist.
(G)	1-B	1W3C	A-1	1W2C	W-O	PPB-TYPE B All exist.
(H)	III	1W3C	B-1	–	–	All exist.
(I)	1-A	2W3C	A-7	–	–	Install PPB-Type B
(J)	1-A	2W3C	A-7	–	–	Install PPB-Type B

Existing Equipment

Rev.: Added Schedules, phase diagrams, detector loop diagram 10-4-67

Revised Loop Detector Layout 7-21-67 RPB

WHISMAN ROAD IMPROVEMENTS
PROJECT AD GG-09
WHISMAN ROAD - MIDDLEFIELD ROAD INTERSECTION
SIGNAL SYSTEM MODIFICATIONS

12-18-68 "As Built" N.Z. Add Notes 13, 17, 15

MICROFILMED OCT 70

EDA Project No. 07-1-00323 (PW-1)

D.M. McKinnon 11-16-67

EPH 6/67
RPO 6/67
.20

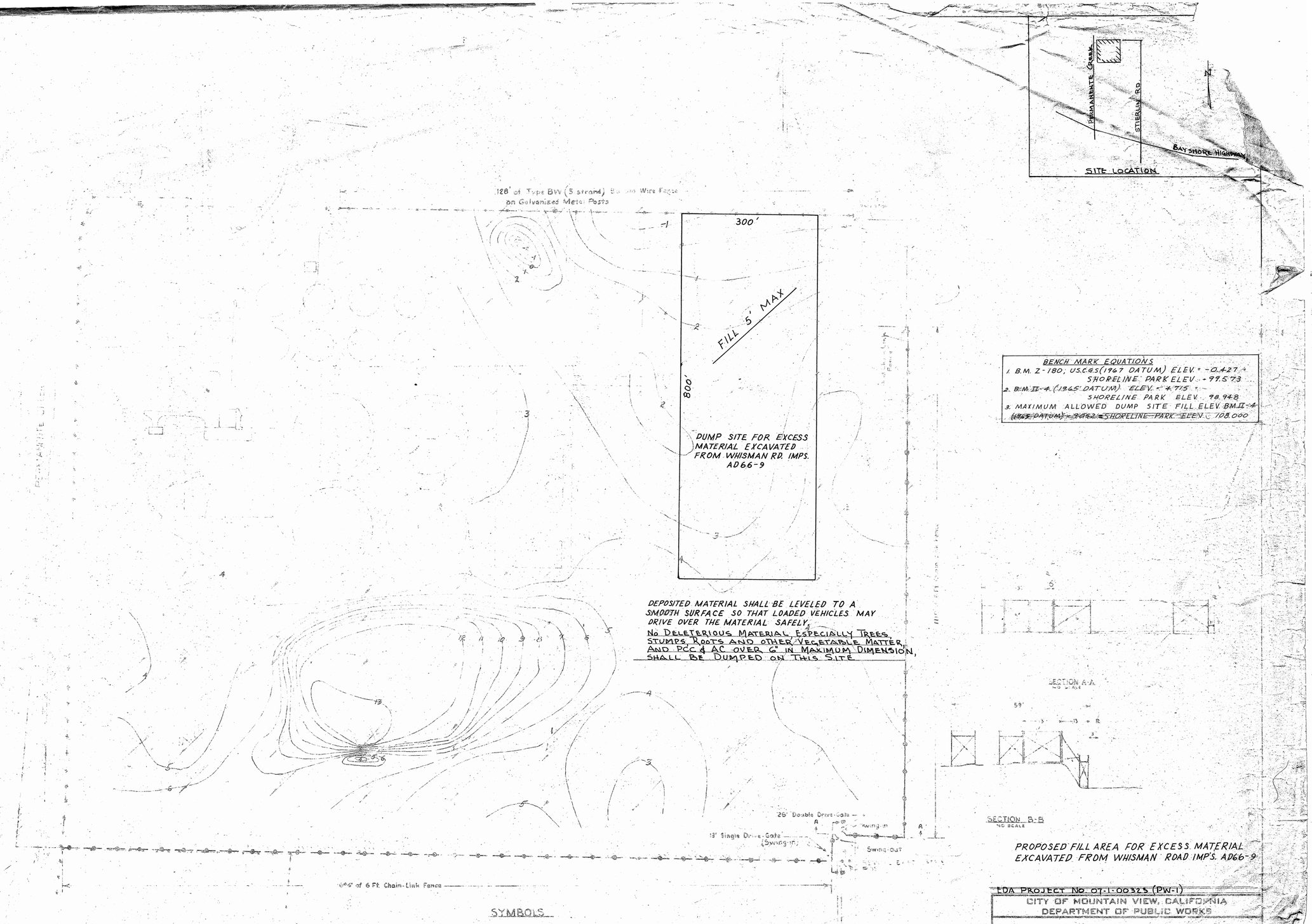
6-2-67

8533 61.1

GG0G5 16

17

FILE NO. 5368-16



MICROFILMED OCT70