

DRAWING INDEX

SITE PLAN	1
GRADING AND DRAINAGE PLAN	2,3
UTILITIES PLAN	4
LANDSCAPING PLAN	5
ELEVATIONS	6



LOCATION MAP K-10

PROJECT DATA

LEGAL DESCRIPTION: The easterly portion of Lots 27 and 28 of the Original Townsite of Westland within the Town of Atrisco Grant

PROPERTY ADDRESS: 7400 Volcano Rd. SW

CURRENT ZONING: RA-2 (Comprehensive City Zoning Code § 14-16-2-5)

SITE AREA: 1.1058 Acres = 48168 square feet

FACILITY AREA: 17,664 square feet

NET SITE AREA: Site area - Facility Area = 30,504 square feet

LANDSCAPING: Area Recommended: 15 % Net Site Area = 4,576 square feet
Area Provided: 10,519 square feet

PARKING: Spaces required - None required for public utility facility
Spaces provided - Adequate parking provided within facility for maintenance personnel

BUILDING SETBACKS: Setbacks per R-1 as follows:
Front: 15 feet
Side: 5 feet
Rear: 25 feet

BUILDING HEIGHT: Structure height up to 26 feet is allowed

SIGNAGE: Number proposed: One wall-mounted sign, plus 4 wall-mounted warning signs

LIGHTING: Switched work-lights shall be located such that visibility of any light source from the street is difficult or impossible during dark. All lighting shall be full cut-off lighting.

KEYED NOTES

- 1 EXIST. 12' CMU WALL (TO REMAIN)
- 2 EXIST. WALL TO BE REMOVED
- 3 ABANDONED CONC. FDN TO BE REMOVED
- 4 EXIST. GRAVEL DRIVEWAY TO REMAIN
- 5 EXIST. 4' CMU WALL
- 6 EXIST. 6' CHAIN LINK FENCE
- 7 NEW 4" THICK GRAVEL YARD
- 8 AREA TO BE LANDSCAPED
- 9 NEW 12" HIGH SPLIT-FACED CMU WALL
- 10 NEW FIXED GRILL
- 11 EXIST. FND'S TO BE REMOVED
- 12 NEW CONCRETE FOUNDATIONS
- 13 NEW TRANSFORMER PAD
- 14 NEW BREAKER CONTROL CABINET

APPROVED:

Frank J. Rojas 11-9-02
DEVELOPMENT REVIEW BOARD CHAIR DATE

Roger A. Khan 8-14-02
UTILITIES DEVELOPMENT DATE

Bruce L. Bigh 11/14/02
CITY ENGINEER DATE

Deborah Wilward 8-14-02
PARKS AND RECREATION DATE

Patrick D. ... 8-14-02
TRANSPORTATION DEVELOPMENT DATE

Shane ... 8/14/02
SOLID WASTE DATE

R.C. Sanchez 8-13-02
FIRE DEPARTMENT DATE

PROJECT # 1001762

EPC: 02128-00000-00304

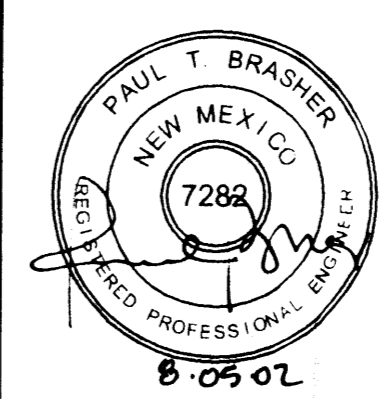
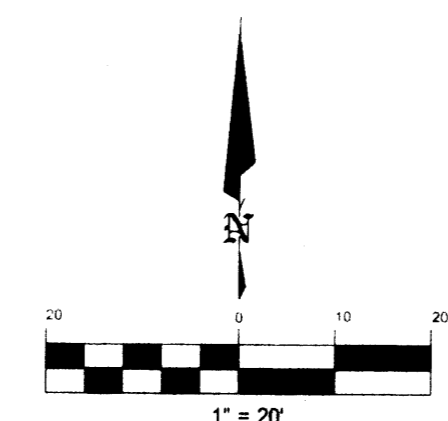
PLAN

BRASHER & LORENZ
CONSULTING ENGINEERS

201 San Mateo St. Building 15000 720
Albuquerque, NM 87110
P: 505.853.4444 Fax: 505.853.6186

REVISION

NO. DATE BY



ASSOCIATED LAYERS	
LAYER NAME	DESCRIPTION
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TBBL	TITLE BLOCK
DRAW	LINE WORK
TEXT	ALL TEXT

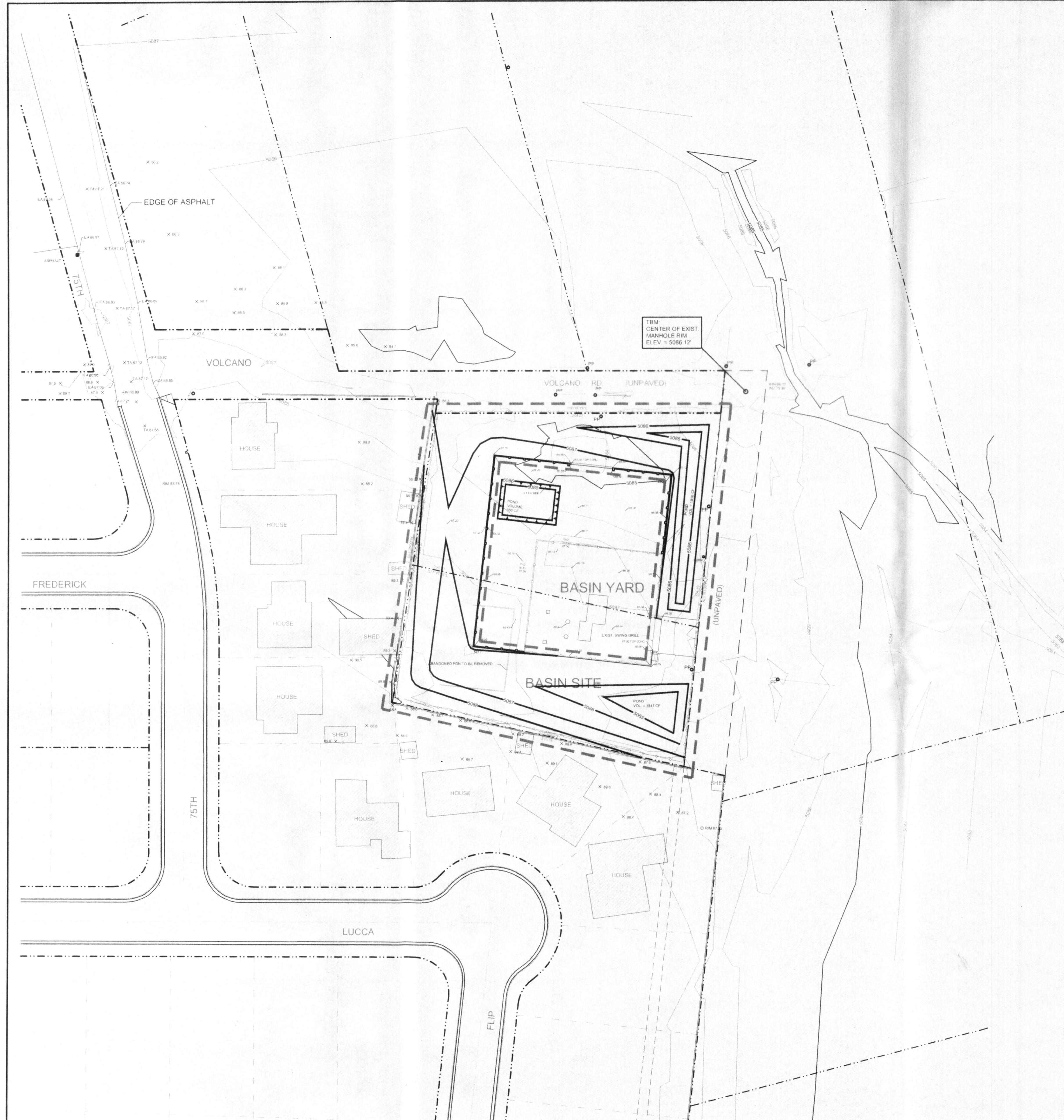
PNM PUBLIC SERVICE COMPANY OF NEW MEXICO

VOLCANO SUBSTATION
SITE PLAN

SHT: 1 OF 6

DRW: R.M	TR:	DATE: 8/04/02
CKD: P.T.B	OK:	SCALE: 1"=20'
APP:	ACAD FILE:	USS-
REV. NO.	SITEDEVPLAN	

P001001762



FLOOD HAZARD ZONE

LOCATION MAP

K - 10

PURPOSE AND SCOPE

Pursuant to the established Drainage Ordinance for the City of Albuquerque and the Development Process Manual, this Drainage Report outlines the drainage management criteria for controlling developed runoff from the project site. The purpose of this plan is to define the grading for a small expansion of the existing substation yard.

EXISTING CONDITIONS

The project site consists of Volcano Substation, 1.1058 acres owned and operated by the Public Service Company of New Mexico, located on the east end of Volcano Rd., east of 75th St., all south of Central Ave. It is bounded on the south and west by existing single-family residential development, and on the east and north by vacant land. The site is platted as the easterly portion of Lots 27 and 28 of the Original Townsite of Westland within the Town of Atrisco Grant. These two lots are remnants of the original platting from 1935. The existing substation electric facilities are situated on a nearly-flat graveled ground surface enclosed by a 12' high wall. The gate openings through the wall are elevated approximately 5' above the yard surface. Therefore, runoff generated within the yard remains within the yard. The yard is higher in elevation than the surrounding site and adjoining vacant properties. The residential properties south and west of the site are separated by a 4-foot wall, and do not drain on to the substation property. With the exception of a small depression on the north side of the site, the site drains generally toward the east. The substation property outside the walled enclosure is vegetated with native desert shrubs and grasses. The FEMA Flood Insurance Rate Map, Panel 329, indicates that the site is not encumbered by a designated 100-year flood hazard zone, but its northernmost portion is subject to inundation under 500-year precipitation conditions.

PROPOSED CONDITIONS

Under this plan, the existing substation yard and wall enclosure will be expanded to the north by 57', and to the west by 37'. The expanded yard will contain runoff generated within itself, and will be graded with a gravel surface to drain to a small area designated for ponding. Because the east and south walls of the existing enclosure will remain, the elevation of the yard will not change, and the surface within the wall will be graded toward the small pond. The remainder of the site outside the yard will be shaped to drain to two on-site ponds outside the enclosed yard. The site outside the yard wall will be landscaped. This plan does not alter the existing drainage patterns of the area in either basin boundaries or flow rates.

CALCULATIONS

The site has been analyzed as two basins: one within the yard; and one consisting of the remainder of the site. The calculations shown hereon define the 100-year/6-hour design storm falling within the project area under existing and developed conditions. The hydrology is per Chapter 22, Development Process Manual, Vol. 2, 1997 Revision. The ponding requirements shown reflect the historical retention of runoff on site. The results of the calculations reflect the minimal effect this minor station expansion has on the quantity of runoff generated by the site.

HYDROLOGY							
PRECIPITATION ZONE 1						P ₂ = 2.20	
BASIN	AREA AC	LAND TREATMENT				V ₂₄ AF	Q ₂₄ CFS
		A	B	C	D		
EXISTING CONDITIONS							
SITE	0.9353	-0-	0.9353	-0-	-0-	0.0520	1.65
YARD	0.1705	-0-	-0-	0.1705	-0-	0.0152	0.47
PROPOSED CONDITIONS							
SITE	0.7003	-0-	-0-	0.7003	-0-	0.0580	1.79
YARD	0.4055	-0-	-0-	0.4055	-0-	0.0336	1.04

YARD RUNOFF VOL. = 0.0336 AF
 REQUIRED POND VOL. = 1464 CF
 POND VOLUME PROVIDED: 960 CF (YARD POND) + 20,070 CF (YARD SURFACE) = 21,030 CF
 SITE RUNOFF VOL. = 0.0580 AF
 REQUIRED POND VOL. = 2526 CF
 POND VOLUME PROVIDED: 1547 CF (SOUTH) + 1916 CF (NORTH) = 3463 CF

LEGEND

- 6001 EXIST. CONTOUR / ELEV.
- 02.5 EXIST. SPOT ELEV.
- 01 PROPOSED CONT. / ELEV.
- RIGHT-OF-WAY
- 01.5 PROPOSED SPOT ELEV.
- DIRECTION OF FLOW
- DRAINAGE SWALE
- DRAINAGE BASIN DIVIDE
- EXIST. POLE W/GUY
- EXIST. FENCE
- EXIST. ROAD
- EXIST. CMU WALL
- PROPOSED CMU WALL

PROPERTY ADDRESS

7400 VOLCANO RD. SW

PROJECT LOCATION

EAST END OF VOLCANO RD., EAST OF 75TH ST., SOUTH OF CENTRAL AVE. MAP K-10

SURVEY:

Topographic and field measurements by Brasher & Lorenz, Inc. Dated December 21, 2001
 PROJECT BENCHMARK: CENTER OF RIM OF EXISTING MANHOLE AT EAST END OF VOLCANO RD. ELEVATION 5086.12' MSL (DATUM 1929)
 Property lines shown are based on plats of record.

I, Paul Brasher do hereby certify that I personally inspected the site shown on this plan on December 26, 2001, and as of that date, it appeared that no filling, grading, or excavation had occurred thereon, since completion of the topographic survey used to prepare this plan.

PAUL BRASHER, NMPE

4-9-02 DATE

BRASHER & LORENZ
 CONSULTING ENGINEERS
 2201 San Pedro NE, Building 1 Suite 220
 Albuquerque, New Mexico 87110
 P: 505.858.6393 Fax: 505.868.0396

PNM PUBLIC SERVICE COMPANY OF NEW MEXICO

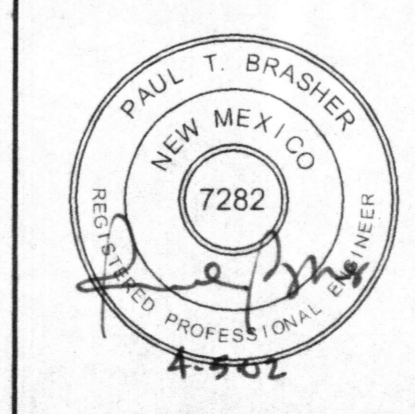
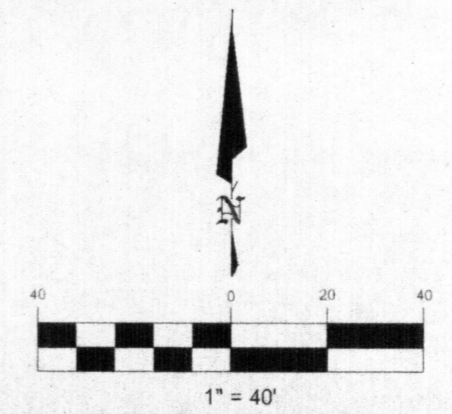
VOLCANO SUBSTATION GRADING & DRAINAGE PLAN

SHT: 2 OF 6

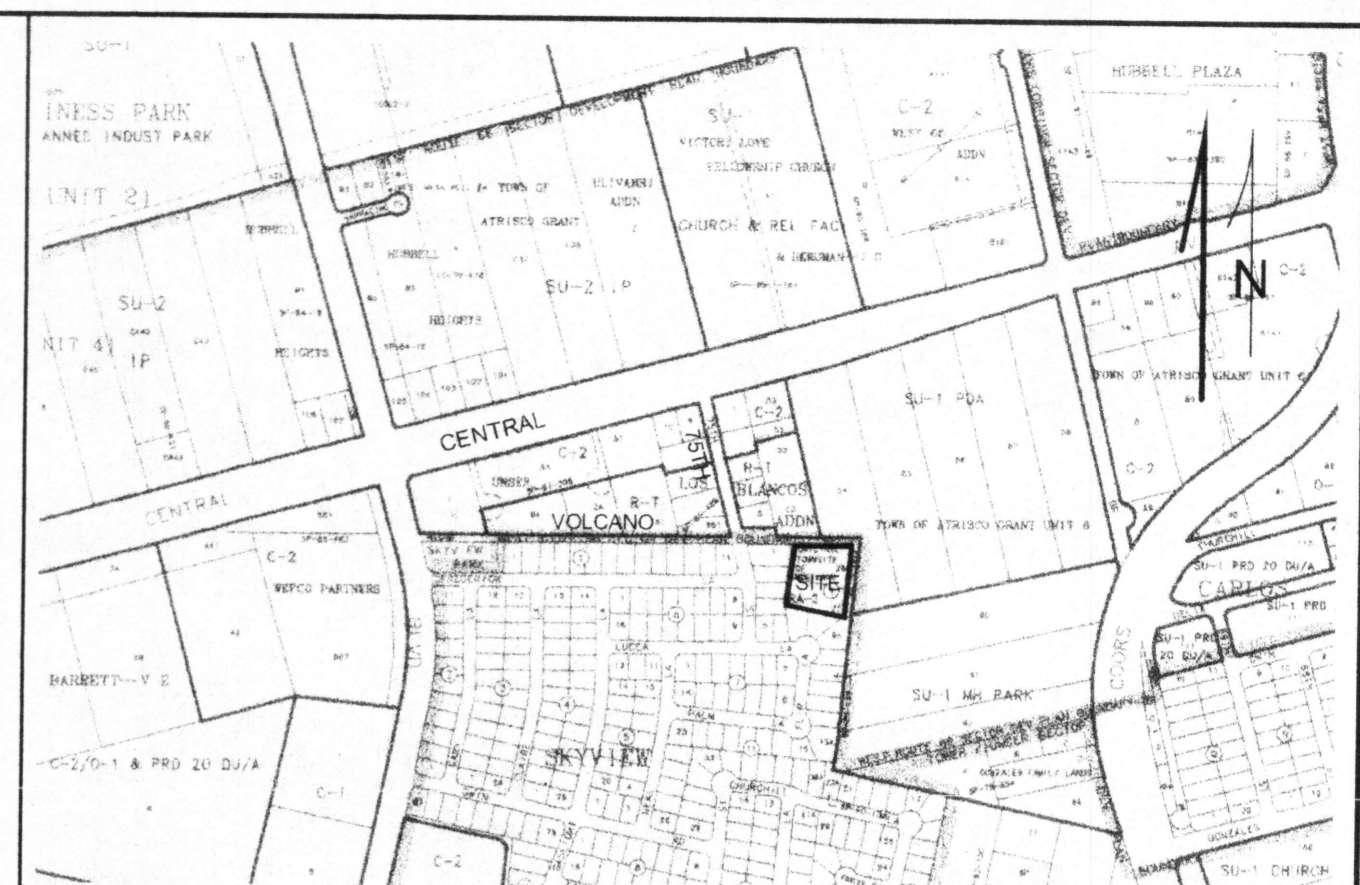
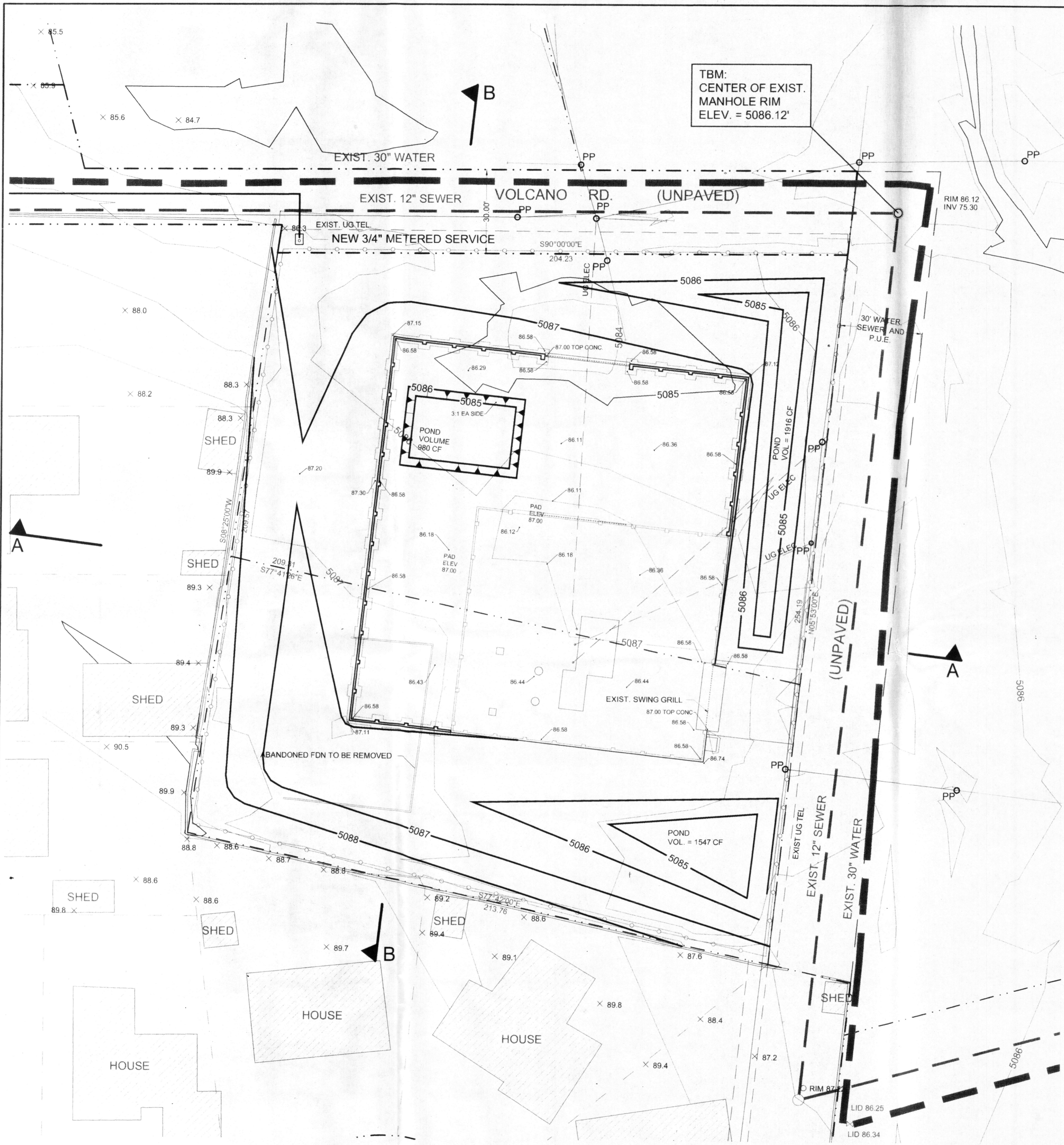
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 REV. NO. SITEDEVPAN

REVISION

NO.	DATE	BY

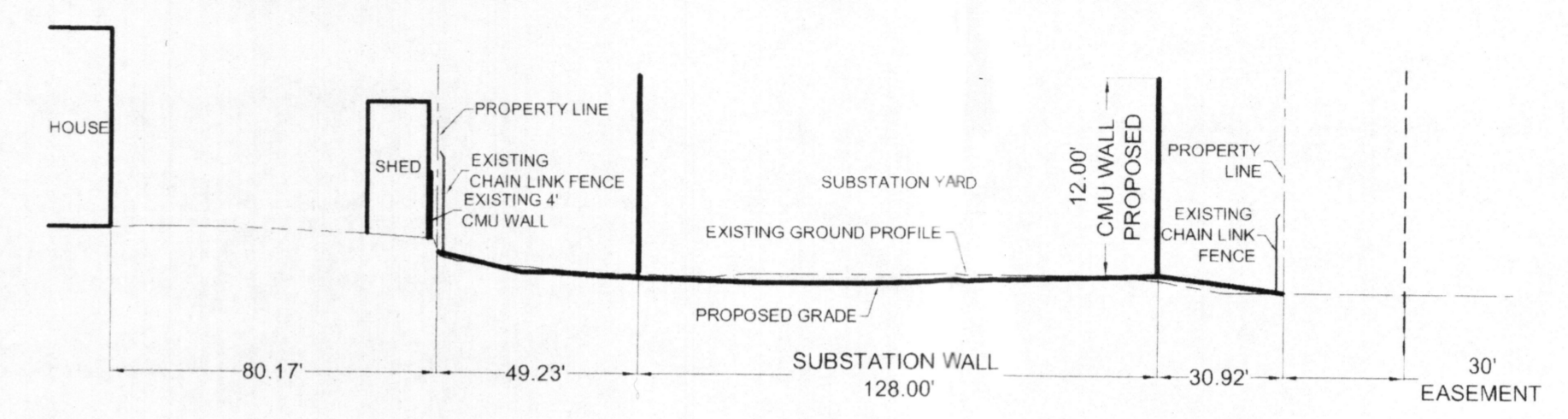


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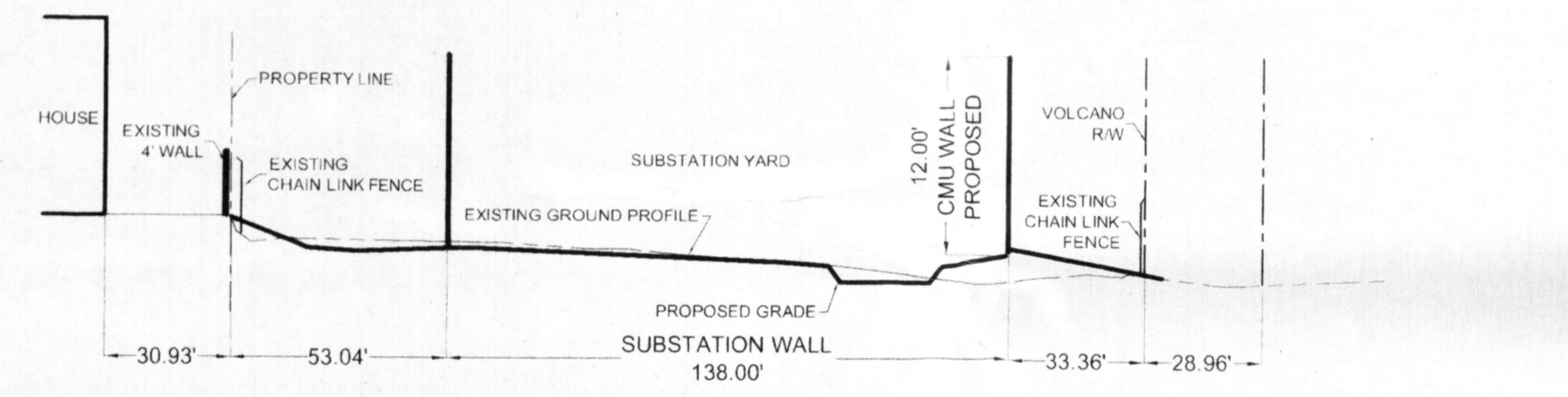


LOCATION MAP K - 10

- LEGEND**
- 6001 EXIST. CONTOUR / ELEV.
 - 02.5 EXIST. SPOT ELEV.
 - 01 PROPOSED CONT. / ELEV.
 - RIGHT-OF-WAY
 - 01.5 PROPOSED SPOT ELEV.
 - ← DIRECTION OF FLOW
 - ← DRAINAGE SWALE
 - DRAINAGE BASIN DIVIDE
 - EXIST. POLE W/GUY
 - EXIST. FENCE
 - EXIST. ROAD
 - EXIST. CMU WALL
 - PROPOSED CMU WALL



SECTION A-A



SECTION B-B

SECTIONS
1"=40' (HORIZ.)
1"=10' (VERT.)

PROPERTY ADDRESS
7400 VOLCANO RD. SW

PROJECT LOCATION
EAST END OF VOLCANO RD.,
EAST OF 75TH ST.,
SOUTH OF CENTRAL AVE. MAP K-10

SURVEY:
Topographic and field measurements by
Brasher & Lorenz, Inc.
Dated December 21, 2001
PROJECT BENCHMARK
CENTER OF EXISTING MANHOLE RIM
AT EAST END OF VOLCANO RD.
ELEVATION = 5086.12' MSL (DATUM 1929)
Property lines shown are based on plats of record.

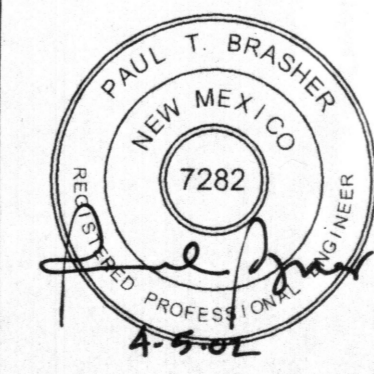
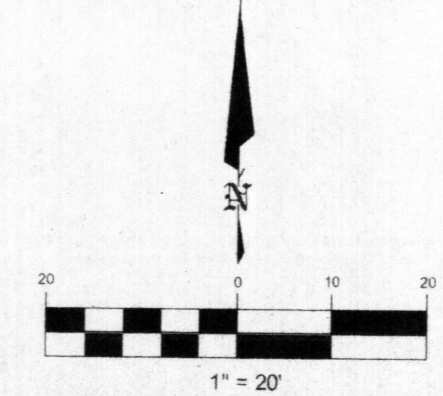
I, Paul Brasher do hereby certify that I personally inspected the site shown on this plan on December 26, 2001, and as of that date, it appeared that no filling, grading, or excavation had occurred thereon, since completion of the topographic survey used to prepare this plan.

Paul Brasher
PAUL BRASHER, NMPE 4.5.02 DATE

APPROVED GRADING AND DRAINAGE PLAN

BRASHER & LORENZ
CONSULTING ENGINEERS
2201 San Pedro NE, Building 1 Suite 203
Albuquerque, New Mexico 87110
Ph: 505.888.0086 Fax: 505.698.0186

REVISION NO.	DATE	BY



ASSOCIATED LAYERS

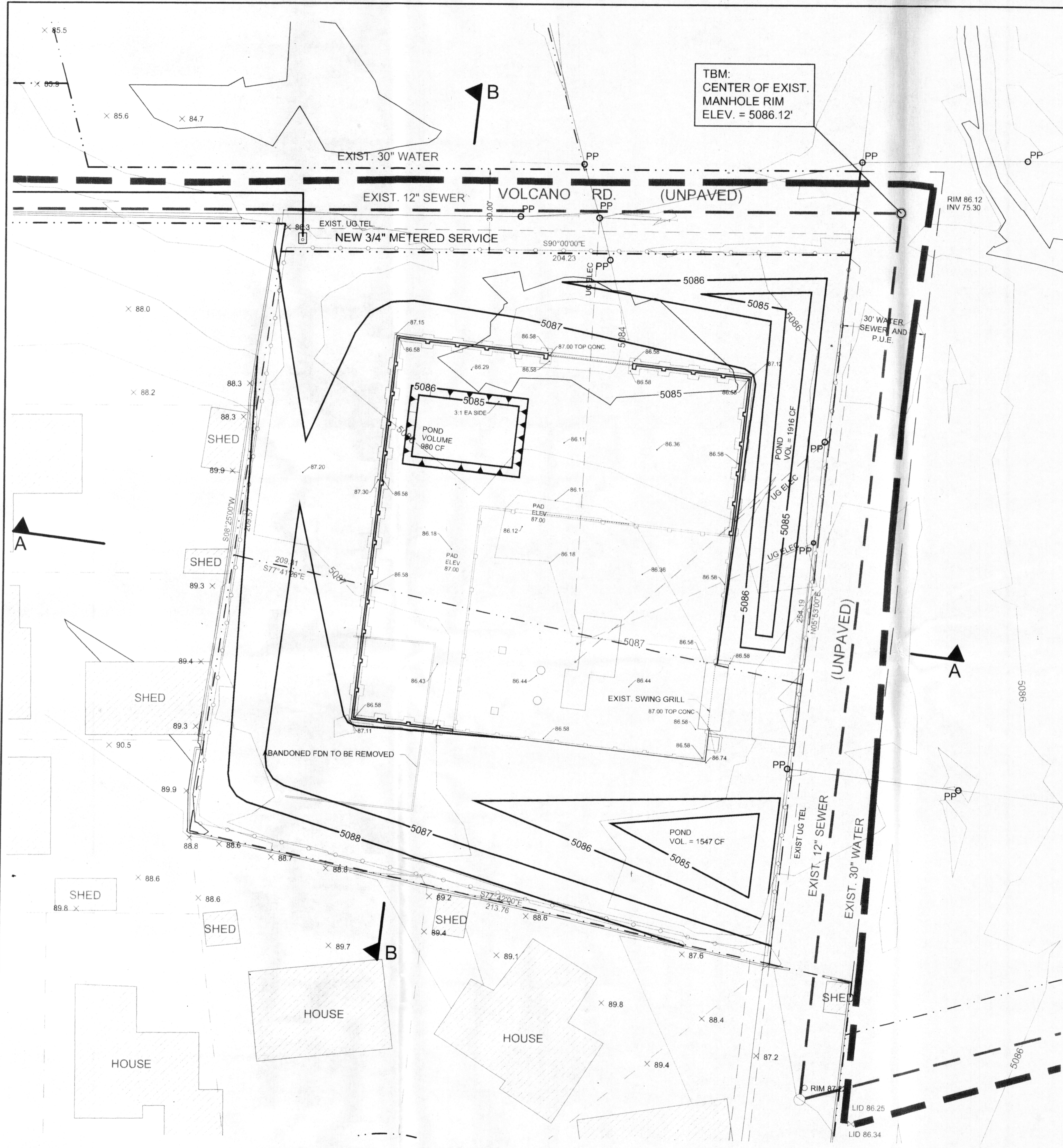
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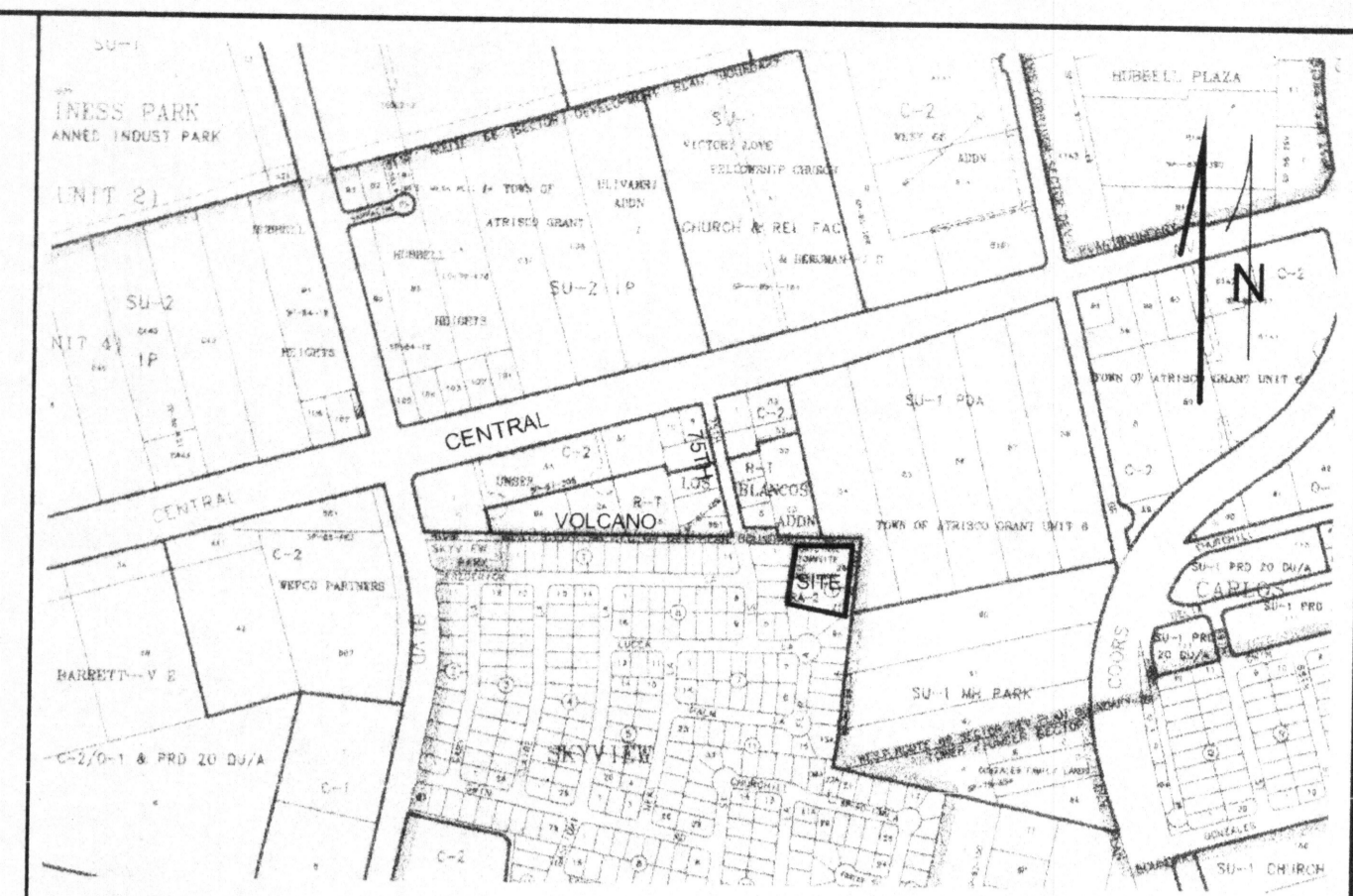
VOLCANO SUBSTATION
GRADING & DRAINAGE PLAN

SHT. 3 OF 6

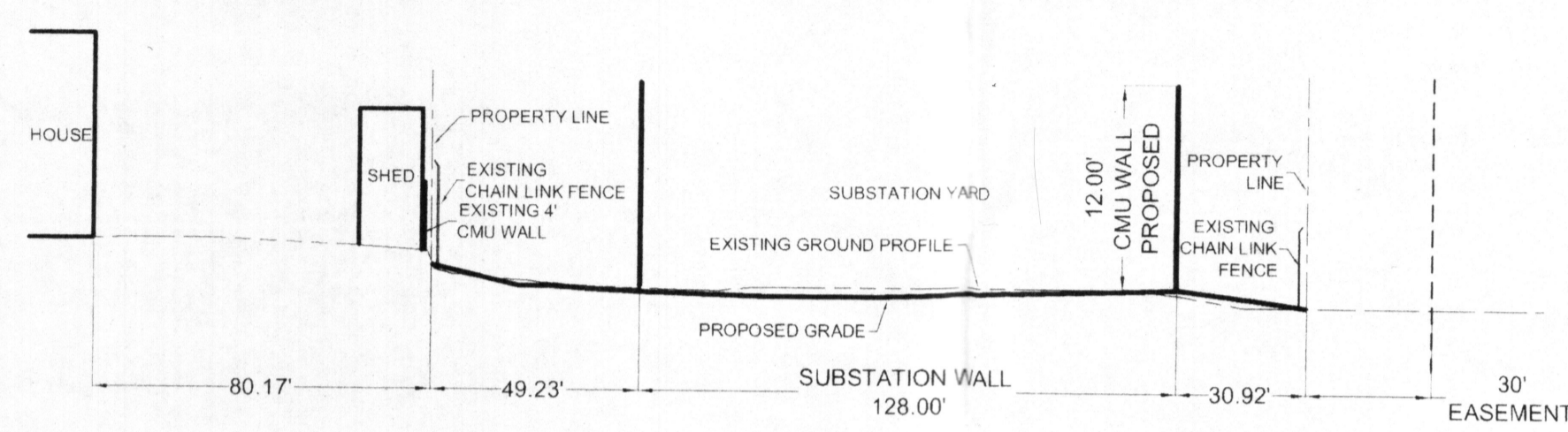
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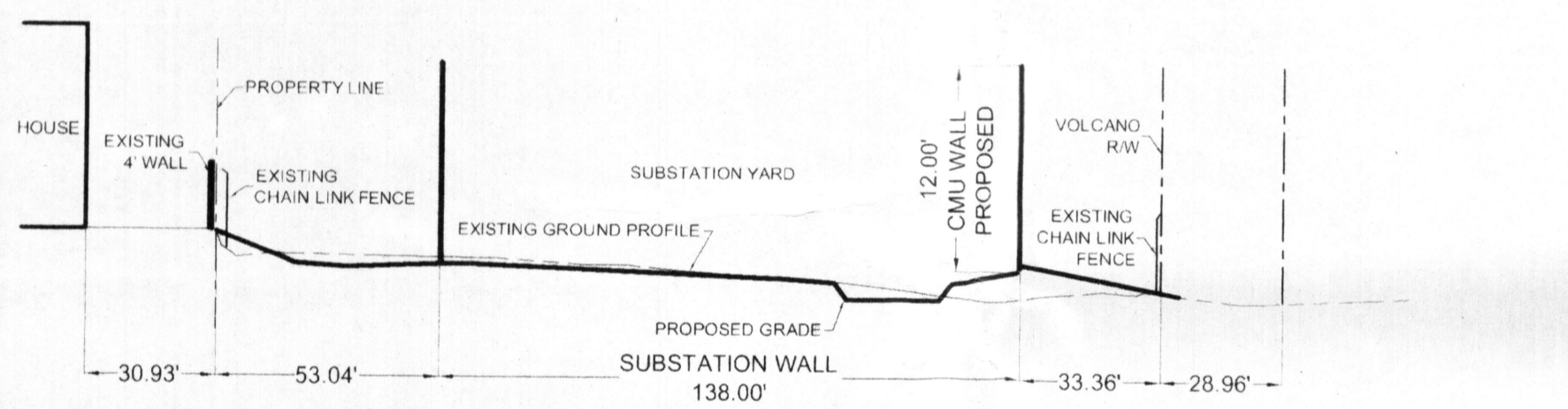
TBM:
CENTER OF EXIST.
MANHOLE RIM
ELEV. = 5086.12'



LOCATION MAP K - 10



SECTION A-A



SECTION B-B

SECTIONS

1"=40' (HORIZ.)
1"=10' (VERT.)

- LEGEND**
- 6001 EXIST. CONTOUR / ELEV.
 - 02.5 x EXIST. SPOT ELEV.
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PROPERTY ADDRESS
7400 VOLCANO RD. SW

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EAST END OF VOLCANO RD.
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SOUTH OF CENTRAL AVE. MAP K-10

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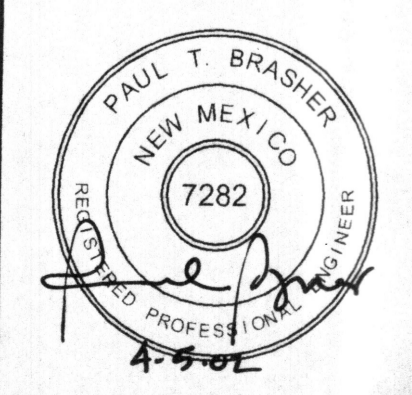
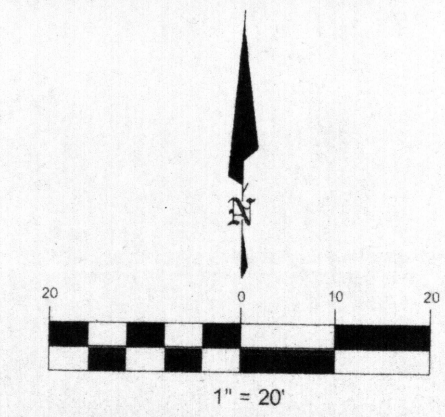
Paul Brasher
PAUL BRASHER, NMPE 4-5-02
DATE

BRASHER & LORENZ
CONSULTING ENGINEERS
2201 San Pedro NE, Building 1 Suite 200
Albuquerque, New Mexico 87110
Ph: 505-988-0388 Fax: 505-988-0388

APPROVED GRADING AND DRAINAGE PLAN

REVISION

NO.	DATE	BY



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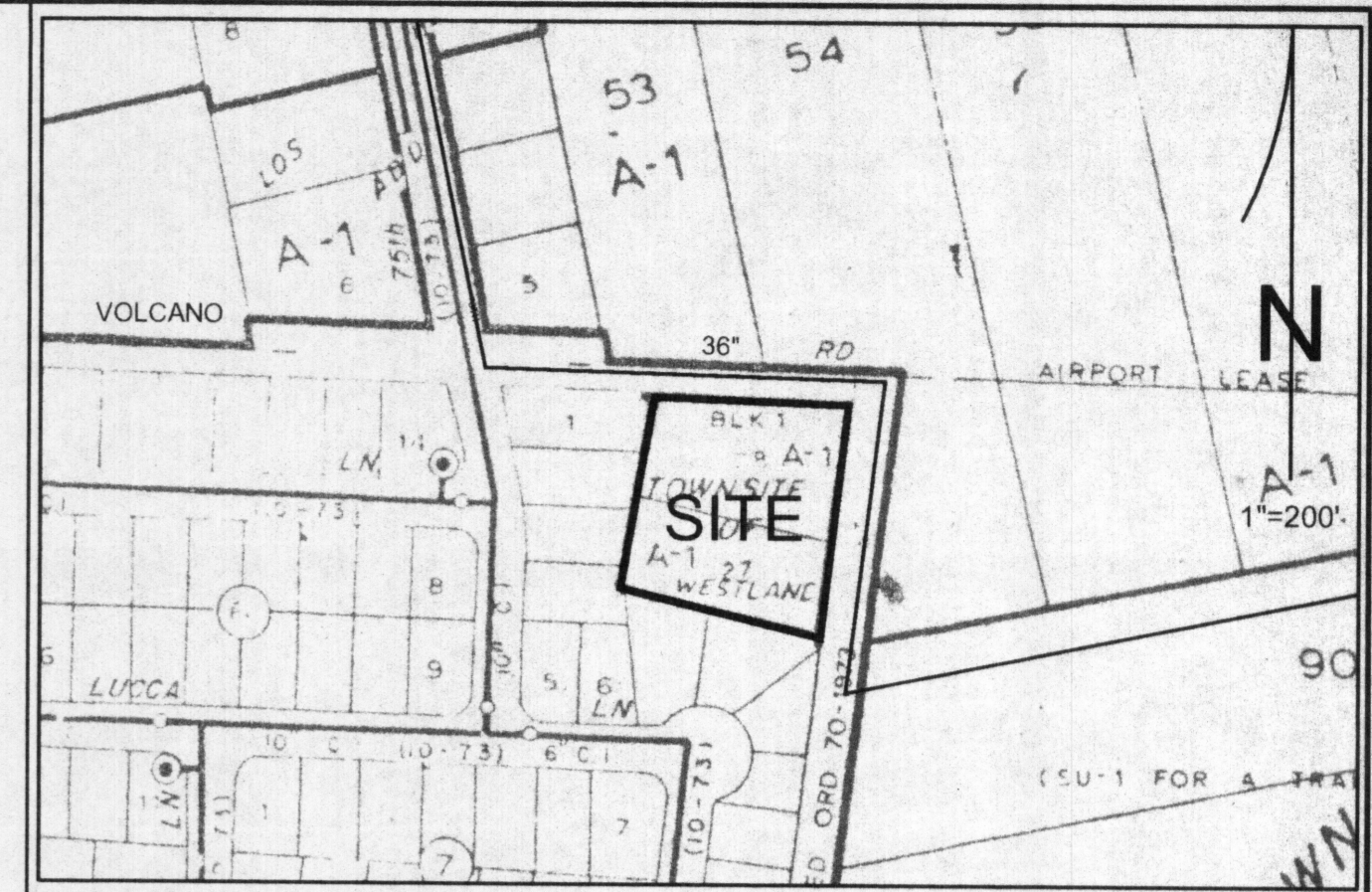
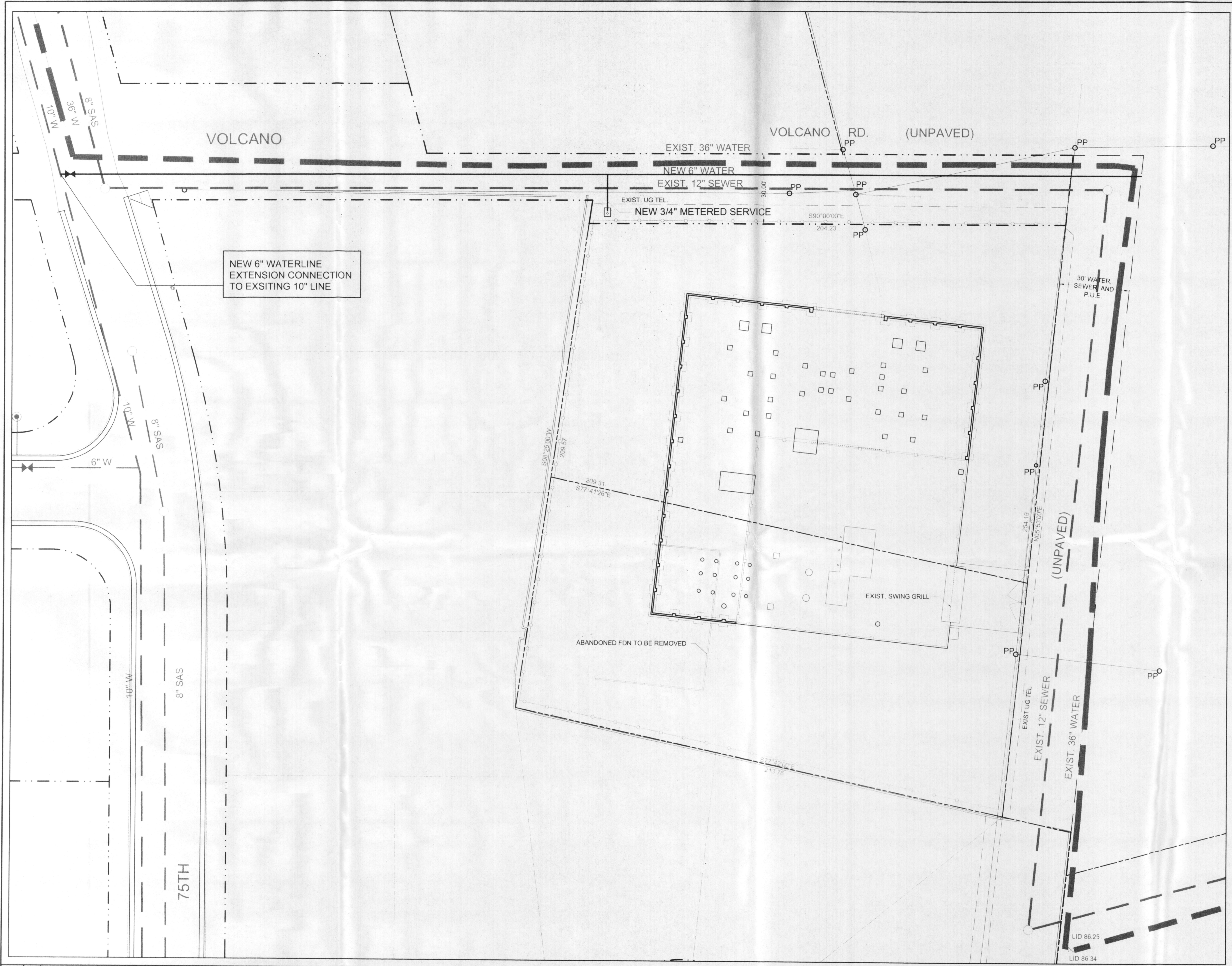
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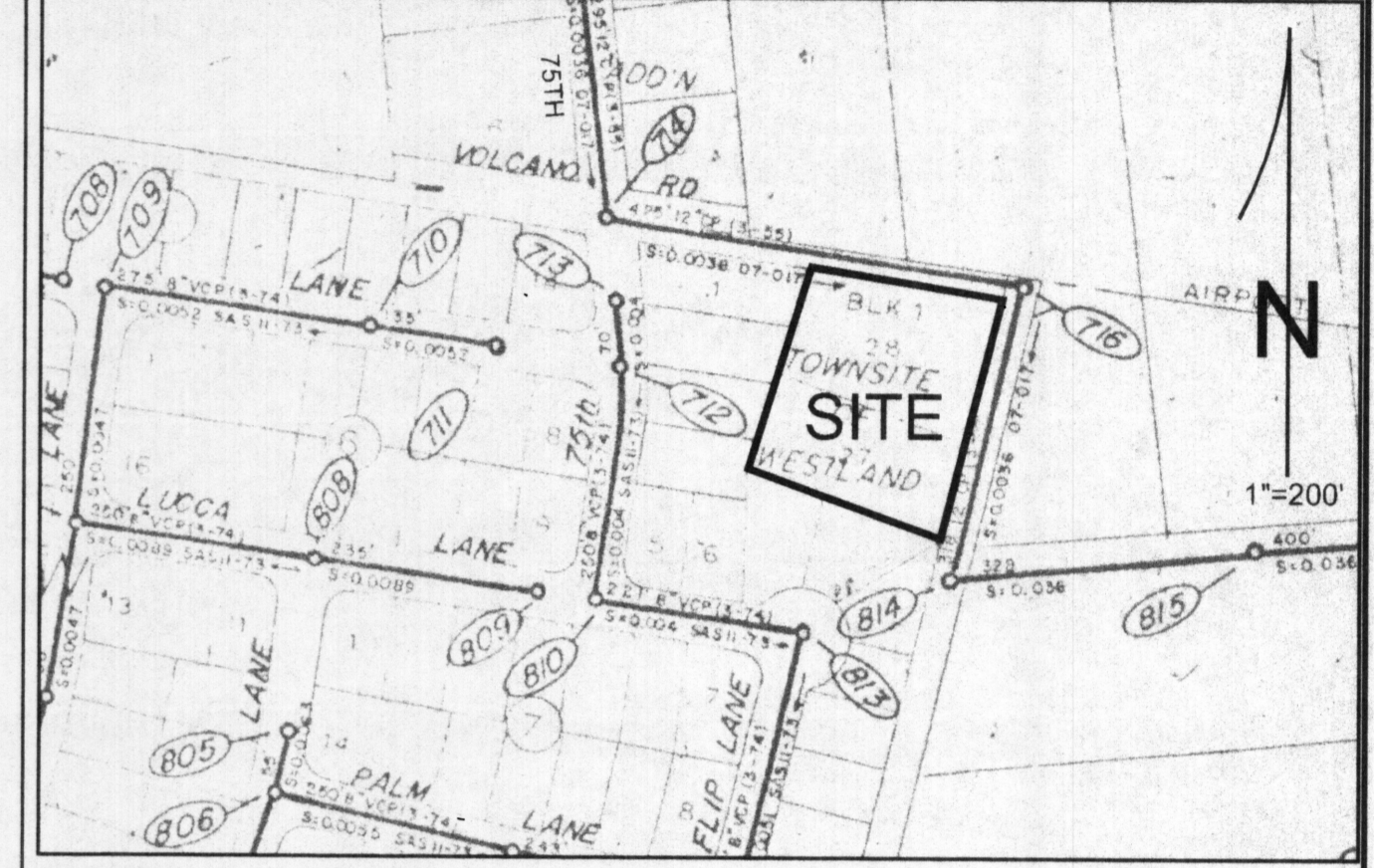
VOLCANO SUBSTATION GRADING & DRAINAGE PLAN

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SHT. 3 OF 6



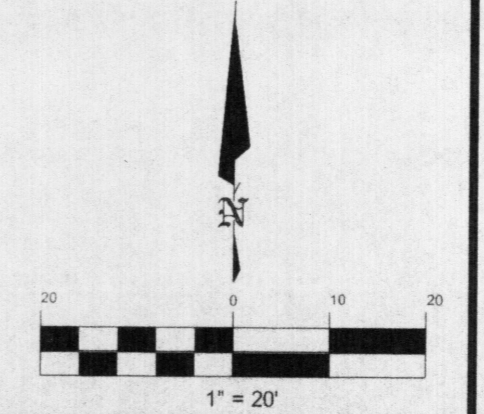
WATER DISTRIBUTION SYSTEM SECTIONAL MAP K - 10



SEWER COLLECTION SYSTEM SECTIONAL MAP K - 10

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CONSULTING ENGINEERS
2201 San Pedro NE Building 1 Suite 220
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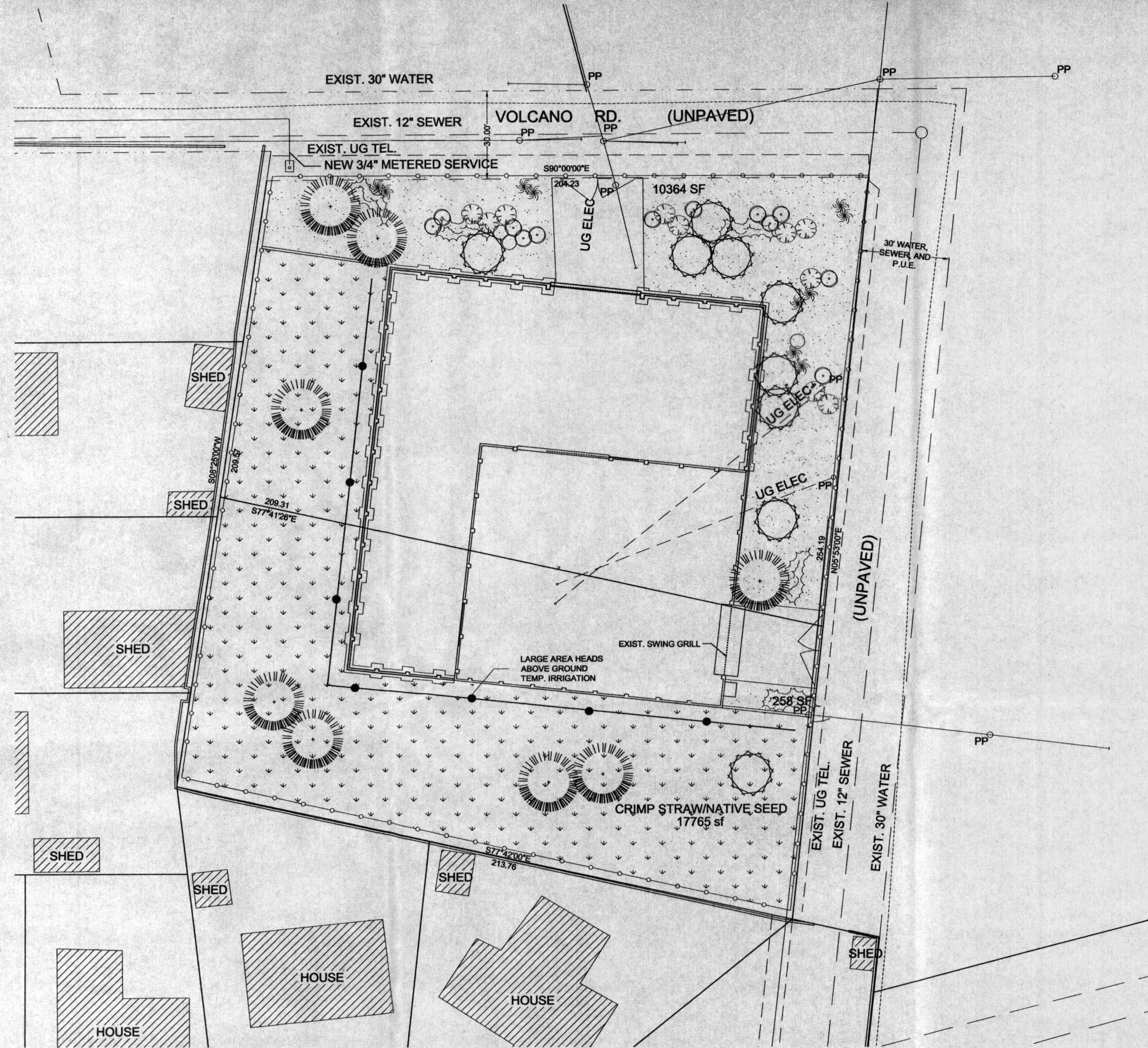
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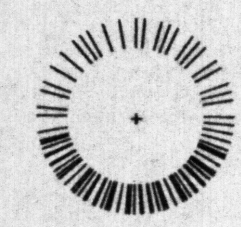

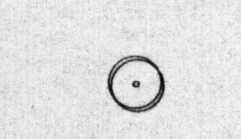

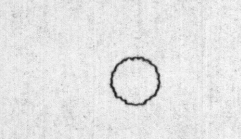



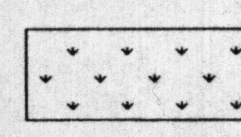
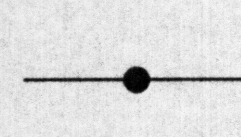
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VOLCANO SUBSTATION UTILITIES PLAN		
DRW: R.M.	TR:	DATE: 8/04/02
CKD: P.T.B.	OK:	SCALE: 1"= 20'
APP:	ACAD FILE:	USS-
REV. NO.	SITEDEVPLAN	

SHT: 4 OF 6



PLANT LEGEND

-  AUSTRIAN PINE(H) 8
Pinus nigra
6-8'
-  DESERT WILLOW(W) 9
Chilopsis linearis
15 gal
-  RUSSIAN SAGE (M) 12
Perovskia atriplicifolia
5 gal
-  MAIDEN GRASS (M) 10
Miscanthus sinensis
5 gal
-  APACHE PLUME (L) 3
Fallugia paradoxa
5 gal
-  CHAMISA (L) 10
Chrysothamnus nauseosus
1 gal
-  TAM JUNIPER (M) 15
JUNIPERUS SABINA
5 gal
-  3/4" CRUSHED GREY GRAVEL W/ FF
-  NATIVE SEED ALL SCARRED AREAS
-  LARGE AREA HEADS ABOVE GROUND TEMP. IRRIGATION

LANDSCAPE NOTES:
Landscape maintenance shall be the responsibility of the Property Owner.

It is the intent of this plan to comply with the City Of Albuquerque Water Conservation Landscaping and Water Waste Ordinance planting restriction approach.

Approval of this plan does not constitute or imply exemption from water waste provisions of the Water Conservation Landscaping and Water Waste Ordinance. Water management is the sole responsibility of the Property Owner.

All landscaping will be in conformance with the City of Albuquerque Zoning Code, Street Tree Ordinance, Pollen Ordinance, and Water Conservation Landscaping and Water Waste Ordinance. In general, water conservative, environmentally sound landscape principles will be followed in design and installation.

Plant beds shall achieve 75% live ground cover at maturity.

Grey Gravel over Filter Fabric shall be placed in all landscape areas which are not designated to receive native seed.

IRRIGATION NOTES:
Irrigation shall be a complete underground system with Trees to receive (5) 1.0 GPH Drip Emitters and Shrubs to receive (2) 1.0 GPH Drip Emitters. Drip and Bubbler systems to be tied to 1/2" poly pipe with flush caps at each end.

Run time per each drip valve will be approximately 15 minutes per day, to be adjusted according to the season.

Native Seed shall be irrigated by temporary irrigation system.

Point of connection for irrigation system is unknown at current time and will be coordinated in the field.

Irrigation will be operated by automatic controller. Location of controller to be field determined and power source for controller to be provided by others.

Irrigation maintenance shall be the responsibility of the Property Owner.

FINAL LANDSCAPING LAYOUT AND DESIGN TO BE DETERMINED UPON RECEIPT OF FINAL GRADING PLAN.



LANDSCAPE ARCHITECTS & CONTRACTORS
Cont. Lic. #26458
7909 Edith N.E.
Albuquerque, NM 87184
Ph. (505) 898-9690
Fax (505) 898-7737
iW@hilltoplandscaping.com

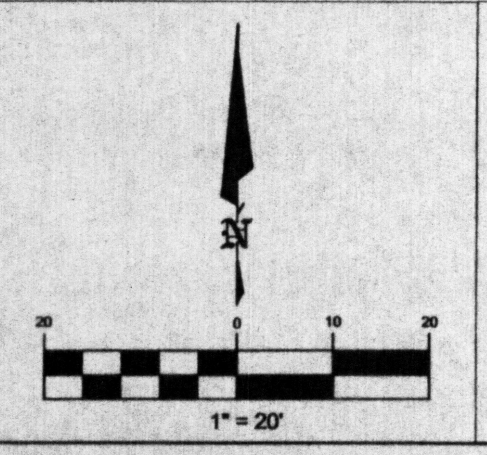
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LANDSCAPE CALCULATIONS

NET LANDSCAPE AREA		
TOTAL LOT AREA	47,291	square feet
TOTAL BUILDINGS AREA	17,963	square feet
OFFSITE AREA	0	square feet
NET LOT AREA	29,328	square feet
LANDSCAPE REQUIREMENT	15%	
TOTAL LANDSCAPE REQUIREMENT	4,399	square feet
TOTAL LANDSCAPE PROVIDED	27,248	square feet
TOTAL BED PROVIDED	9,483	square feet
TOTAL SOD PROVIDED	0	square feet
TOTAL NATIVE SEED PROVIDED	17,765	square feet

BRASHER & LORENZ
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2201 San Pedro NE Building 1 Suite 220
Albuquerque, New Mexico 87110
Ph: 505-888-6088 Fax: 505-888-6188

REVISION NO.	DATE	BY
1	05/21/02	IR
2	8/05/02	CD



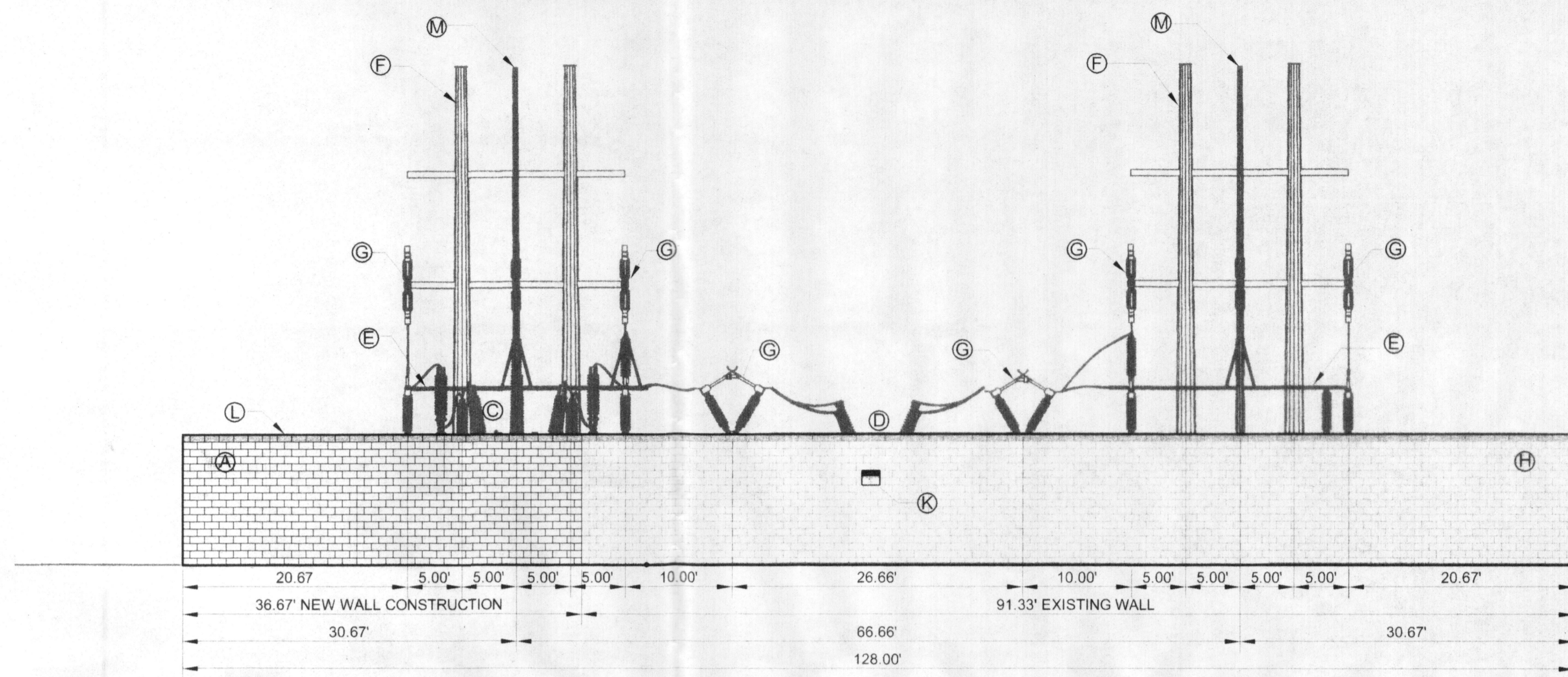
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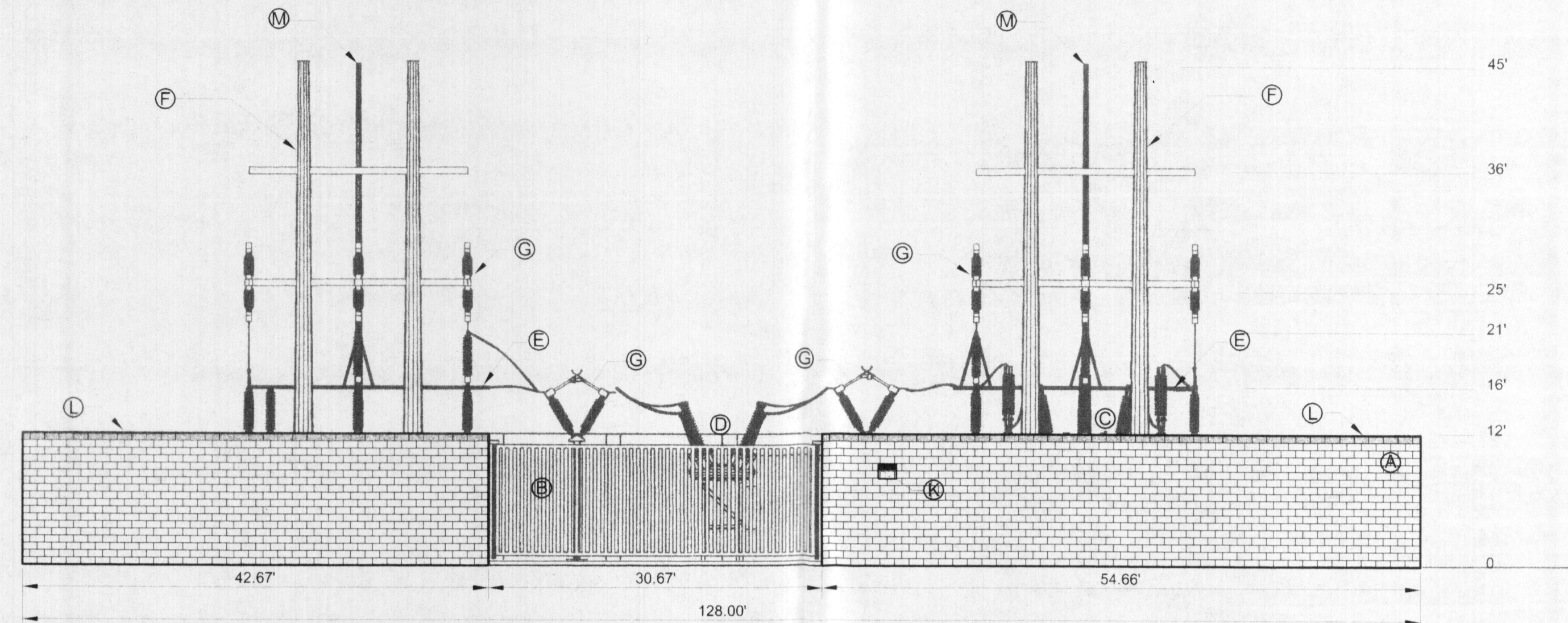
VOLCANO SUBSTATION LANDSCAPING PLAN

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APP: ACAD FILE: HT-LANDSCBLK.DWG
REV. NO. USS-

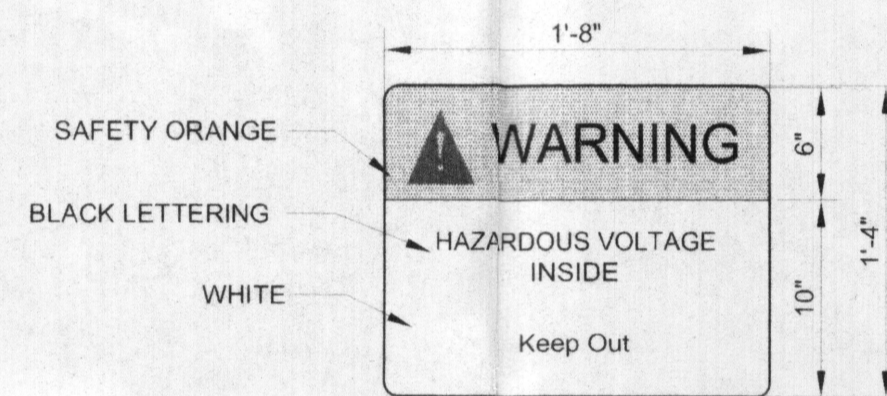
SHT: 5 OF 6



SOUTH ELEVATION
SCALE: 1" = 10'



NORTH ELEVATION
SCALE: 1" = 10'



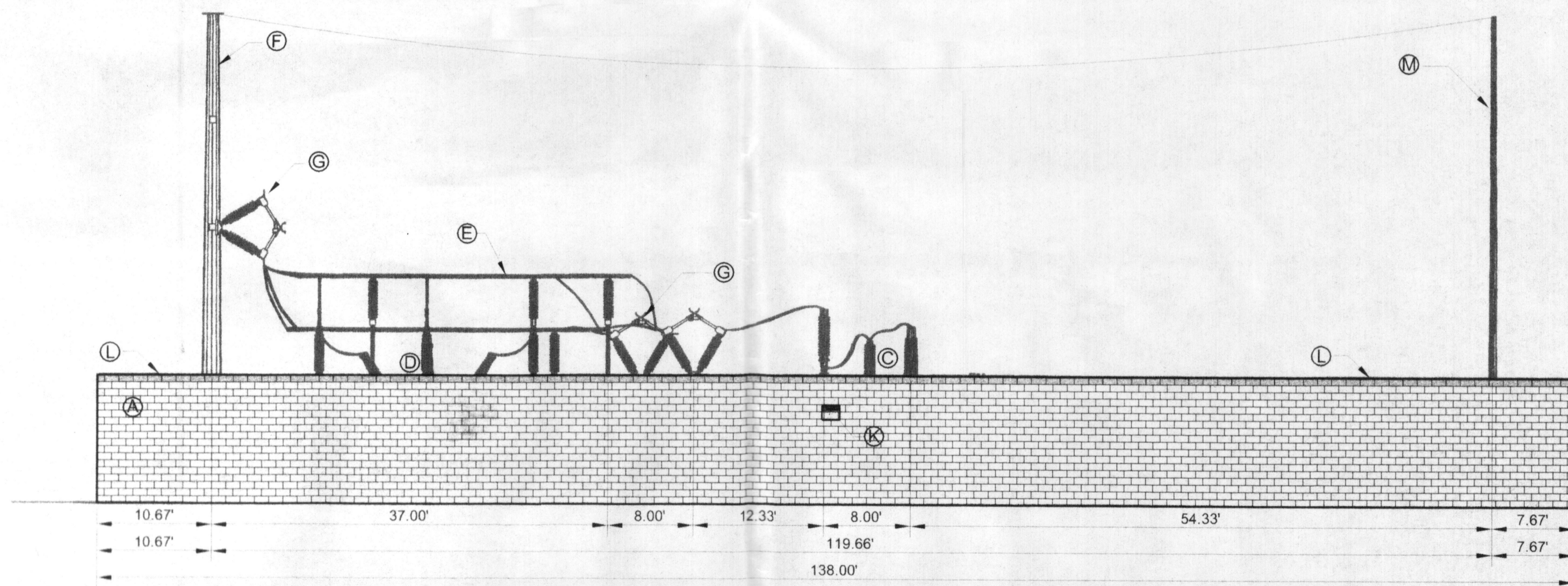
WARNING SIGN

KEYED ITEM

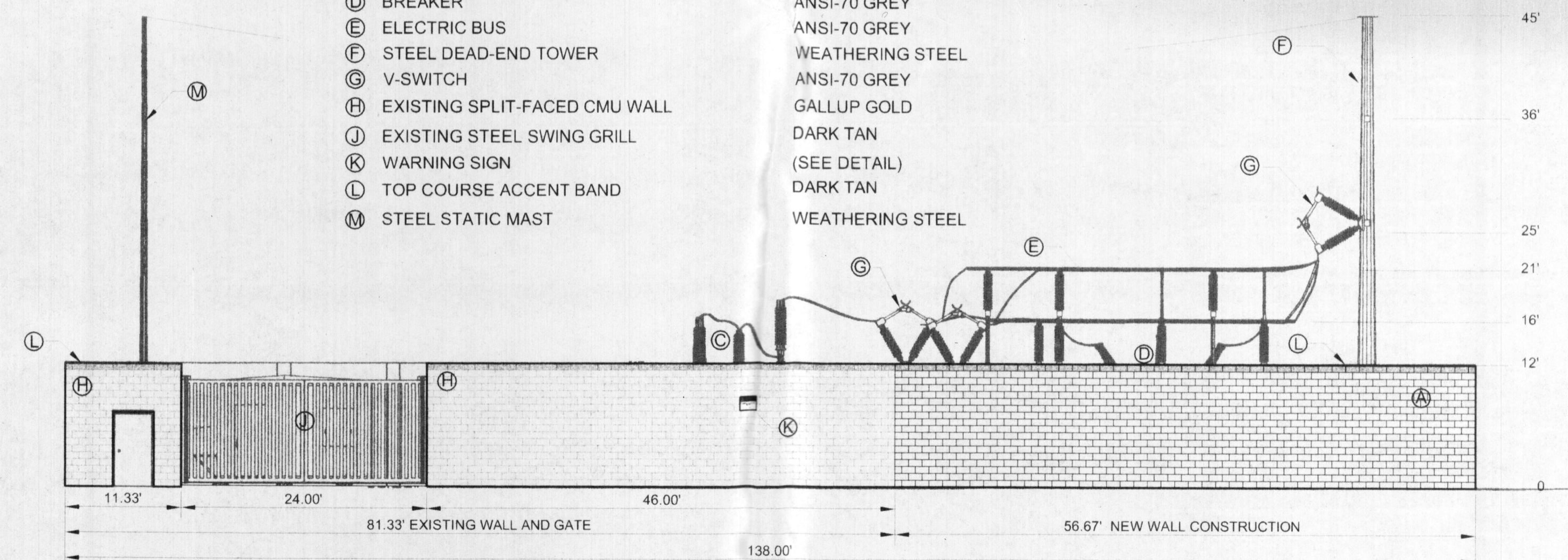
- (A) NEW 8x16 SPLIT-FACED CMU WALL
- (B) NEW STEEL FIXED GRILL
- (C) TRANSFORMER
- (D) BREAKER
- (E) ELECTRIC BUS
- (F) STEEL DEAD-END TOWER
- (G) V-SWITCH
- (H) EXISTING SPLIT-FACED CMU WALL
- (J) EXISTING STEEL SWING GRILL
- (K) WARNING SIGN
- (L) TOP COURSE ACCENT BAND
- (M) STEEL STATIC MAST

COLOR

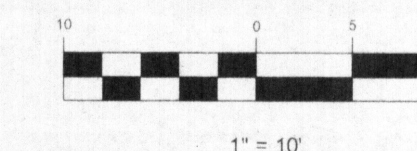
- DARK TAN
- AMBER CANYON (BY TNEMEC - #06BR)
- ANSI-70 GREY
- ANSI-70 GREY
- ANSI-70 GREY
- ANSI-70 GREY
- WEATHERING STEEL
- ANSI-70 GREY
- GALLUP GOLD
- DARK TAN
- (SEE DETAIL)
- DARK TAN
- WEATHERING STEEL



WEST ELEVATION
SCALE: 1" = 10'



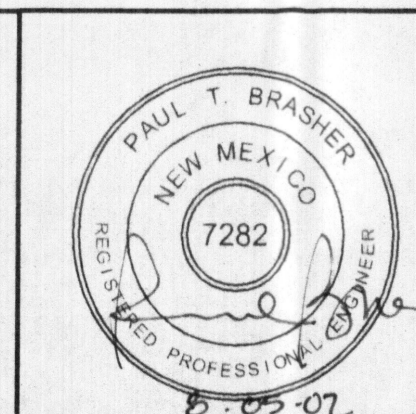
EAST ELEVATION
SCALE: 1" = 10'



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REVISION

NO.	DATE	BY



ASSOCIATED LAYERS	
LAYER NAME	DESCRIPTION
0	STANDARD
TBBL	TITLE BLOCK
DRAW	LINE WORK
TEXT	ALL TEXT

PNM PUBLIC SERVICE COMPANY OF NEW MEXICO

VOLCANO SUBSTATION
ELEVATIONS

DRW: R.M. TR: DATE: 08/05/02
CKD: P.T.B. OK: SCALE: 1"=10'
APP: ACAD FILE: SHT: 6 OF 6
REV. NO. SITE/EVPLAN USS-