City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

November 12, 2003

James Urisko
PBS&J
12101 Indian Creek Court
Beltsville, Maryland 20705

RE: Request for a Letter of Map Revision for Tower/Sage Park, Detention and Outfall Pipe and SAD 222, (LOMR Case No. 03-06-2542P) Comment Letter dated September 12, 2003

City of Albuquerque, New Mexico, Community No. 350002, FIRM Panel 35001C0328D, 329D, 336D, 337D Effective Date September 20, 1996, (CLOMR FEMA Case No. 02-06-1421R)

Dear Mr. Urisko,

Per our phone conversation I wanted to added more information to my letter dated August 15, 2003. This letter submitted the referenced LOMR. I addressed maintenance but did not include the property owners for the storm drain and detention pond. The storm drain is in our public right-of way and the pond is in property purchased by the City. The City will maintain these systems with our maintenance crews. I apologize for the delay, but I thought I had addressed your comment.

If you have any questions, you can contact me at (505) 924-3982.

Sincerely,

Carlos A. Montoya
City Floodplain Administrator

C: Kevin Banks, Larkin Group
Lynn Mazur, AMAFCA

THE CITY OF ALBUQUERQUE IS AN EQUAL OPPORTUNITY/REASONABLE ACCOMMODATION EMPLOYER

C. REVIEW FEE

Has the review fee for the appropriate request category been included? ☐ Yes Fee amount: $3800.00

☒ No, Attach Explanation

Please see the FEMA Web site at http://www.fema.gov/mit/tsd/frm_fees.htm for Fee Amounts and Exemptions.

D. SIGNATURE

All documents submitted in support of this request are correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Name: Carlos A Montoya	Company: C O A.	
Mailing Address: PLANNING C O A 600 2nd St N W 87102	Daytime Telephone No.: 505 924 3982	Fax No.: 924 3814
	E-Mail Address:	
Signature of Requester (required): Carlos A Montoya		Date: 8-16-03

As the community official responsible for floodplain management, I hereby acknowledge that we have received and reviewed this Letter of Map Revision (LOMR) or conditional LOMR request. Based upon the community's review, we find the completed or proposed project meets or is designed to meet all of the community floodplain management requirements, including the requirement that no fill be placed in the regulatory floodway, and that all necessary Federal, State, and local permits have been, or in the case of a conditional LOMR, will be obtained. In addition, we have determined that the land and any existing or proposed structures to be removed from the SFHA are or will be reasonably safe from flooding as defined in 44CFR 65.2(c), and that we have available upon request by FEMA, all analyses and documentation used to make this determination.

Community Official's Name and Title: Carlos A Montoya Floodplain Adm City of Alby		Telephone No.: 505-924-3982
Community Name: City of Alby	Community Official's Signature (required): Carlos A Montoya	Date: 8-16-03

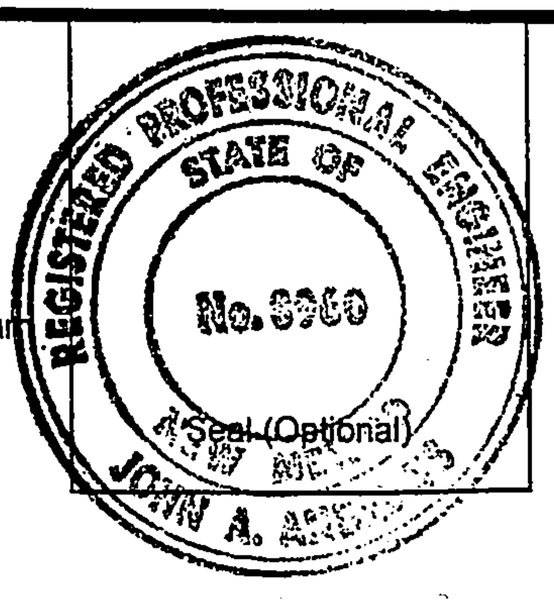
CERTIFICATION BY REGISTERED PROFESSIONAL ENGINEER AND/OR LAND SURVEYOR

This certification is to be signed and sealed by a licensed land surveyor, registered professional engineer, or architect authorized by law to certify elevation information. All documents submitted in support of this request are correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Certifier's Name: John A. Andrews	License No.: 3960	Expiration Date: 12/31/04
Company Name: Larkin Group NM, Inc	Telephone No.: 505-275-7500	Fax No.: 505-275-0748
Signature: John A. Andrews		Date: August 5, 2003

Ensure the forms that are appropriate to your revision request are included in your submittal.

Form Name and (Number)	Required if ...
☐ Riverine Hydrology and Hydraulics Form (Form 2)	New or revised discharges or water-surface elevations
☐ Riverine Structures Form (Form 3)	Channel is modified, addition/revision of bridge/culverts, addition/revision of levee/floodwall, addition/revision of dam
☐ Coastal Analysis Form (Form 4)	New or revised coastal elevations
☐ Coastal Structures Form (Form 5)	Addition/revision of coastal structure
☐ Alluvial Fan Flooding Form (Form 6)	Flood control measures on alluvial fans



Seal (Optional)

C. REVIEW FEE

Has the review fee for the appropriate request category been included? ☐ Yes Fee amount: $3800.00

☒ No, Attach Explanation

Please see the FEMA Web site at http://www.fema.gov/mit/tsd/frm_fees.htm **for Fee Amounts and Exemptions.**

D. SIGNATURE

All documents submitted in support of this request are correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Name: Carlos A. Montoya	Company: C.O.A	
Mailing Address: PLANNING DEPT 600 2nd St. NW 87102	Daytime Telephone No.: 505-924-3982	Fax No.: 924-3864
	E-Mail Address:	
Signature of Requester (required): Carlos A. Montoya		Date: 8-16-03

As the community official responsible for floodplain management, I hereby acknowledge that we have received and reviewed this Letter of Map Revision (LOMR) or conditional LOMR request. Based upon the community's review, we find the completed or proposed project meets or is designed to meet all of the community floodplain management requirements, including the requirement that no fill be placed in the regulatory floodway, and that all necessary Federal, State, and local permits have been, or in the case of a conditional LOMR, will be obtained. In addition, we have determined that the land and any existing or proposed structures to be removed from the SFHA are or will be reasonably safe from flooding as defined in 44CFR 65.2(c), and that we have available upon request by FEMA, all analyses and documentation used to make this determination.

Community Official's Name and Title: (Brian Keat) Acting Floodplain Manager		Telephone No.: 505-848-1527
Community Name: Bernalillo County N.M.	Community Official's Signature (required): Brian Keat	Date: 8/15/03

CERTIFICATION BY REGISTERED PROFESSIONAL ENGINEER AND/OR LAND SURVEYOR

This certification is to be signed and sealed by a licensed land surveyor, registered professional engineer, or architect authorized by law to certify elevation information. All documents submitted in support of this request are correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Certifier's Name: John A. Andrews	License No.: 3960	Expiration Date: 12/31/04
Company Name: Larkin Group NM, Inc	Telephone No.: 505-275-7500	Fax No.: 505-275-0748
Signature: John A. Andrews		Date: August 5, 2003

Ensure the forms that are appropriate to your revision request are included in your submittal.

Form Name and (Number)	Required if ...
☐ Riverine Hydrology and Hydraulics Form (Form 2)	New or revised discharges or water-surface elevations
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☐ Coastal Analysis Form (Form 4)	New or revised coastal elevations
☐ Coastal Structures Form (Form 5)	Addition/revision of coastal structure
☐ Alluvial Fan Flooding Form (Form 6)	Flood control measures on alluvial fans

REGISTERED PROFESSIONAL ENGINEER STATE OF No. 3960 JOHN A. ANDREWS

Seal (Optional)

NATIONAL FLOOD INSURANCE PROGRAM
FEMA MAP COORDINATION CONTRACTOR

SEP 12 2003

Mr. Carlos A. Montoya
City Floodplain Administrator
City of Albuquerque
P.O. Box 1293
Albuquerque, NM 87103

IN REPLY REFER TO:
Case No.: 03-06-2542P
Community: City of Albuquerque,
Bernalillo County, New Mexico; and
Bernalillo County, New Mexico
(Unincorporated Areas)
Community No.: 350002 and 350001

316-ACK.FRQ

Dear Mr. Montoya:

This responds to your request, dated August 15, 2003, that the Federal Emergency Management Agency (FEMA) issue a revision to the Flood Insurance Rate Map (FIRM) for the above-referenced communities. Pertinent information about the request is listed below.

Identifier:	Tower/Sage Park, Detention Pond and Outfall Pipe
Flooding Source:	Arroyo B-B and Arroyo A-C
FIRM Panels Affected:	Bernalillo County, New Mexico and Incorporated Areas FIRM numbers 35001C0328 D, 35001C0329 D, 35001C0336 D, and 35001C0337 D, all dated September 20, 1996

FEMA has implemented a procedure to recover costs associated with reviewing and processing requests for modifications to published flood information and maps. Effective September 1, 2002, FEMA revised that fee schedule. A copy of the notice summarizing the current fee schedule, which was published in the *Federal Register*, is enclosed for your information. In accordance with this schedule, the fee for your request is $3,800 and must be submitted before we can continue processing your request. Payment of this fee must be made in the form of a check or money order, made payable in U.S. funds to the National Flood Insurance Program, or credit card payment. For identification purposes, the case number referenced above must be included on the check or money order. We will not perform a detailed technical review of your request until payment is received.

Payment must be forwarded to one of the addresses listed below.

Using U.S. Postal Service:
Federal Emergency Management Agency
Fee-Charge System Administrator
P.O. Box 3173
Merrifield, VA 22116-3173

Using overnight service:
Fee-Charge System Administrator
c/o Dewberry & Davis, METS Division
8401 Arlington Boulevard, Stop 30
Fairfax, VA 22031

We have completed an inventory of the items that you submitted. The items identified below are required before we can begin a detailed review of your request.

1. Please submit documentation of individual legal notices that were sent to property owners who are adversely impacted by any increases in and/or shifting of the 1% annual chance (100-year) floodplain and/or any increases in the 1% annual chance water surface elevations for the Tower/Sage Park, Detention Pond. Legal notice may take the form of certified mailing receipts or certification that all property owners have been notified, with an accompanying mailing list and copy of letter sent. Examples of individual notices can be found on Pages 12 through 17 of the MT-2 instructions, which can be accessed at http://www.fema.gov/mit/tsd/mt2_inst.pdf.

   a. If you submit notification and acceptance from the adversely impacted property owners, FEMA can issue a Letter of Map Revision (LOMR) effective the date of issuance.

   b. If you submit notification of, but not acceptance by, the adversely impacted property owners, FEMA may issue a LOMR effective three to six months after the date of issuance.

Please send the required data to us at the address shown at the bottom of the first page. If all required items are not submitted within 90 days of the date of this letter, FEMA will treat any subsequent request as an original submittal, and it will be subject to all submittal/payment procedures as outlined in Paragraph 72.7(a) of the National Flood Insurance Program (NFIP) regulations (44 CFR Parts 59-78).

If you are unable to meet the 90-day deadline for submittal of required items and would like FEMA to continue processing your request, you must request an extension of the deadline. This request must be submitted to us in writing and must provide (1) the reason why the data cannot be submitted within the requested timeframe and (2) a new date for the submittal of the data. FEMA receives a very large volume of requests and cannot maintain inactive requests for an indefinite period of time. Therefore, the fees will be forfeited for any request for which neither the requested data nor a written extension request is received within 90 days.

When you write to us about your request, please include the case number referenced above in your letter. If you have general questions about your case, FEMA policy, or the NFIP, please call FEMA's toll free map assistance line at 1-877-FEMA MAP (1-877-336-2627). If you have specific questions concerning your request, please contact the Engineer assigned to your case, Mr. James Urisko, by phone at 1-800-697-7275 Ext. 788, or by e-mail at jurisko@pbsj.com.

Sincerely,

Joseph A. Martinenza, Jr.
Acting Program Manager, Region VI

Enclosure

cc: John A. Andrews, P.E., Larkin Croup NM, Inc.

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

August 15, 2003

Joseph A. Martinenza
PBS&J
12101 Indian Creek Court
Beltsville, Maryland 20705

RE: Request for a Letter of Map Revision for Tower/Sage Park, Detention and Outfall Pipe and SAD 222

City of Albuquerque, New Mexico, Community No. 350002, FIRM Panel 35001C0328D, 329D, 336D, 337D Effective Date September 20, 1996, (CLOMR FEMA Case No. 02-06-1421R)

Dear Mr. Martinenza,

The purpose of this submittal is to convey documents in order to request a Letter of Map Revision based on existing storm drain and detention pond improvements to revise the 100-year floodplain. Enclosed with this letter are storm drain and detention pond construction drawings and the fee has been mailed in a separate envelope.

I have also attached a letter dated October 4, 2002 which included an addendum request that the area of flood zone revision be expanded to include a portion of Arroyo B-C on FIRM Panel 336D. This addendum request was not included in the original CLOMR request.

Both the City and the County floodplain administrators have signed the request. The maintenance of the storm drain and the detention pond will the responsibility of the City of Albuquerque. The detention pond will be the only property that will be adversely impacted with these floodplain revisions. The City recognizes this situation and will maintain the pond with its City crews.

As the City Floodplain Administrator, I have reviewed the response provided with this submittal. Our Community would greatly appreciate your prompt response and approval for this Letter of Map Revision. Mr. Scott Yi was the original CLOMR reviewer.

If you have any questions, you can contact me at (505) 924-3982.

Sincerely,

Carlos A. Montoya
City Floodplain Administrator

C: Bill Blanton, Federal Emergency Management Agency Headquarters
Jack Quarles, FEMA Region VI
Kevin Banks, Larkin Group
Scott J. Steffen, Bohannan Huston
Brian Kent, Bernalillo County Floodplain Administrator
Lynn Mazur, AMAFCA

(161)

Federal Emergency Management Agency

Washington, D.C. 20472

JAN 27 2004

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

The Honorable Martin J. Chavez
Mayor, City of Albuquerque
Office of the Mayor
P.O. Box 1293
Albuquerque, NM 87103

IN REPLY REFER TO:
Case Number: **03-06-2542P**
Community Name: City of Albuquerque,
Bernalillo County, New Mexico
Community Number: 350002
Effective Date of
this Revision: JAN 27 2004

Dear Mayor Chavez:

The Flood Insurance Study (FIS) report and Flood Insurance Rate Map (FIRM) for your community have been revised by this Letter of Map Revision (LOMR). Please use the enclosed annotated map panels revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals issued in your community.

Additional documents are enclosed that provide information regarding this LOMR. Please see the List of Enclosures below to determine which documents are included. Other attachments specific to this request may be included as referenced in the Determination Document. If you have any questions regarding floodplain management regulations for your community or the National Flood Insurance Program (NFIP) in general, please contact the Consultation Coordination Officer (CCO) for your community. If you have any technical questions regarding this LOMR, please contact the Director, Federal Insurance and Mitigation Division of the Federal Emergency Management Agency (FEMA) in Denton, Texas, at (940) 898-5165, or the FEMA Map Assistance Center, toll free, at 1-877-336-2627 (1-877-FEMA MAP). Additional information about the NFIP is available on our web site at http://www.fema.gov/nfip.

Sincerely,

Kevin C. Long

Kevin C. Long, CFM, Project Engineer
Hazard Identification Section
Mitigation Division
Emergency Preparedness
and Response Directorate

For: Doug Bellomo, P.E., CFM, Acting Chief
Hazard Identification Section
Mitigation Division
Emergency Preparedness
and Response Directorate

List of Enclosures:
Letter of Map Revision Determination Document
Annotated Flood Insurance Study Report
Annotated Flood Insurance Rate Map
List of Current Flood Insurance Study Data

cc: Susan M. Calongne, P.E., Floodplain Administrator, Bernalillo County
Brian Kent, Floodplain Administrator, City of Albuquerque
John A. Andrews, P.E., Larkin Group NM, Inc.
Community Map Repository

Follows Conditional Case No.: 02-06-1421R

Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT

COMMUNITY AND REVISION INFORMATION		PROJECT DESCRIPTION	BASIS OF REQUEST
COMMUNITY	CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO	NO PROJECT	BASE MAP CHANGES HYDRAULIC ANALYSIS HYDROLOGIC ANALYSIS
	COMMUNITY NO.: 350002		
IDENTIFIER	TOWER/SAGE PARK, DETENTION POND, AND OUTFALL PIPE	APPROXIMATE LATITUDE & LONGITUDE: 35.081, -106.710 SOURCE: USGS QUADRANGLE DATUM: NAD 83	
FLOODING SOURCE & REVISED REACH	ARROYO B-B – from approximately 880 feet upstream of Stinson Road to approximately 850 feet upstream of 94th Street SW (all flooding effects of Arroyo B-B have been routed to the Tower/Sage Detention Pond)		

SUMMARY OF REVISIONS

Effective Flooding:	Zone AE	BFEs*	X (shaded)
Revised Flooding:	X (unshaded)	X (unshaded)	X (unshaded)
Increases:	NONE	NONE	YES
Decreases:	YES	YES	YES

* BFEs - Base Flood Elevations

ANNOTATED MAPPING ENCLOSURES			ANNOTATED STUDY ENCLOSURES
TYPE: FIRM*	NO: 35001C0328 E NO: 35001C0336 E	Date: November 19, 2003 Date: November 19, 2003	DATE OF EFFECTIVE FLOOD INSURANCE STUDY: November 19, 2003 SUMMARY OF DISCHARGES PROFILE: 08P through 12P

* FIRM - Flood Insurance Rate Map

DETERMINATION

This document provides the determination from the Federal Emergency Management Agency (FEMA) regarding a request for a Letter of Map Revision (LOMR) for the area described above. Using the information submitted, we have determined that a revision to the flood hazards depicted in the Flood Insurance Study (FIS) and/or National Flood Insurance Program (NFIP) map is warranted. This document revises the effective NFIP map, as indicated in the attached documentation. Please use the enclosed annotated map panels revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals in your community.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center, toll free, at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the FEMA MCC Services, 12101 Indian Creek Court, Beltsville, MD 20705. Additional Information about the NFIP is available on our web site at http://www.fema.gov/nfip.

Kevin C. Long

Kevin C. Long, CFM, Project Engineer
Hazard Identification Section
Mitigation Division
Emergency Preparedness
and Response Directorate

Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT

COMMUNITY AND REVISION INFORMATION		PROJECT DESCRIPTION	BASIS OF REQUEST
COMMUNITY	CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO	STORM SEWER SYSTEM	BASE MAP CHANGES HYDRAULIC ANALYSIS
	COMMUNITY NO.: 350002		
IDENTIFIER	TOWER/SAGE PARK, DETENTION POND, AND OUTFALL PIPE	APPROXIMATE LATITUDE & LONGITUDE: 35.081, -106.710 SOURCE: USGS QUADRANGLE DATUM: NAD 83	
FLOODING SOURCE & REVISED REACH	ARROYO B-C – from approximately 400 feet downstream of 86th Street SW to approximately 250 feet upstream of West Sky Street SW		

SUMMARY OF REVISIONS

Effective Flooding:	Zone AE	BFEs*	X (shaded)
Revised Flooding:	X (unshaded)	X (unshaded)	X (unshaded)
Increases:	NONE	NONE	NONE
Decreases:	YES	YES	YES

* BFEs - Base Flood Elevations

ANNOTATED MAPPING ENCLOSURES	ANNOTATED STUDY ENCLOSURES
TYPE: FIRM* NO: 35001C0336 E Date: November 19, 2003	DATE OF EFFECTIVE FLOOD INSURANCE STUDY: November 19, 2003 PROFILE: 14P through 17P

* FIRM - Flood Insurance Rate Map

DETERMINATION

This document provides the determination from the Federal Emergency Management Agency (FEMA) regarding a request for a Letter of Map Revision (LOMR) for the area described above. Using the information submitted, we have determined that a revision to the flood hazards depicted in the Flood Insurance Study (FIS) and/or National Flood Insurance Program (NFIP) map is warranted. This document revises the effective NFIP map, as indicated in the attached documentation. Please use the enclosed annotated map panels revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals in your community.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center, toll free, at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the FEMA MCC Services, 12101 Indian Creek Court, Beltsville, MD 20705. Additional Information about the NFIP is available on our web site at http://www.fema.gov/nfip.

Kevin C. Long

Kevin C. Long, CFM, Project Engineer
Hazard Identification Section
Mitigation Division
Emergency Preparedness
and Response Directorate

Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT

COMMUNITY AND REVISION INFORMATION		PROJECT DESCRIPTION	BASIS OF REQUEST
COMMUNITY	CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO	DETENTION BASIN	BASE MAP CHANGES HYDRAULIC ANALYSIS HYDROLOGIC ANALYSIS
	COMMUNITY NO.: 350002		
IDENTIFIER	TOWER/SAGE PARK, DETENTION POND, AND OUTFALL PIPE	APPROXIMATE LATITUDE & LONGITUDE: 35.081, -106.710 SOURCE: USGS QUADRANGLE DATUM: NAD 83	
FLOODING SOURCE & REVISED REACH	TOWER/SAGE DETENTION POND - shallow flooding bounded by San Ygnacio Road SW to the south, 86th Street SW to the west, Tower Road SW to the north, and 82nd Street SW		

SUMMARY OF REVISIONS

Effective Flooding:	X (unshaded)	X (unshaded)
Revised Flooding:	Zone AH	BFEs*
Increases:	YES	YES
Decreases:	NONE	NONE

* BFEs - Base Flood Elevations

ANNOTATED MAPPING ENCLOSURES	ANNOTATED STUDY ENCLOSURES
TYPE: FIRM* NO: 35001C0328 E Date: November 19, 2003 NO: 35001C0336 E Date: November 19, 2003	NO CHANGE TO THE FLOOD INSURANCE STUDY

* FIRM - Flood Insurance Rate Map

DETERMINATION

This document provides the determination from the Federal Emergency Management Agency (FEMA) regarding a request for a Letter of Map Revision (LOMR) for the area described above. Using the information submitted, we have determined that a revision to the flood hazards depicted in the Flood Insurance Study (FIS) and/or National Flood Insurance Program (NFIP) map is warranted. This document revises the effective NFIP map, as indicated in the attached documentation. Please use the enclosed annotated map panels revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals in your community.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center, toll free, at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the FEMA MCC Services, 12101 Indian Creek Court, Beltsville, MD 20705. Additional Information about the NFIP is available on our web site at http://www.fema.gov/nfip.

Kevin C. Long

Kevin C. Long, CFM, Project Engineer
Hazard Identification Section
Mitigation Division
Emergency Preparedness
and Response Directorate

Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT

COMMUNITY AND REVISION INFORMATION		PROJECT DESCRIPTION	BASIS OF REQUEST
COMMUNITY	CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO	NO PROJECT	BASE MAP CHANGES HYDRAULIC ANALYSIS
	COMMUNITY NO.: 350002		
IDENTIFIER	TOWER/SAGE PARK, DETENTION POND, AND OUTFALL PIPE	APPROXIMATE LATITUDE & LONGITUDE: 35.081, -106.710 SOURCE: USGS QUADRANGLE DATUM: NAD 83	
FLOODING SOURCE & REVISED REACH	UNNAMED SHALLOW FLOODING AREA – shallow flooding, with San Ygnacio Road SW to the north, Abeyta Road SW to the east, Sage Road SW to the south, and Arenal Road SW to the west		

SUMMARY OF REVISIONS

Effective Flooding:	Zone AO	X (unshaded)
Revised Flooding:	Zone AO	X (unshaded)
Increases:	YES	YES
Decreases:	YES	YES

ANNOTATED MAPPING ENCLOSURES	ANNOTATED STUDY ENCLOSURES
TYPE: FIRM* NO: 35001C0336 E Date: November 19, 2003 NO: 35001C0337 E Date: November 19, 2003	NO CHANGE TO THE FLOOD INSURANCE STUDY

* FIRM - Flood Insurance Rate Map

DETERMINATION

This document provides the determination from the Federal Emergency Management Agency (FEMA) regarding a request for a Letter of Map Revision (LOMR) for the area described above. Using the information submitted, we have determined that a revision to the flood hazards depicted in the Flood Insurance Study (FIS) and/or National Flood Insurance Program (NFIP) map is warranted. This document revises the effective NFIP map, as indicated in the attached documentation. Please use the enclosed annotated map panels revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals in your community.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center, toll free, at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the FEMA MCC Services, 12101 Indian Creek Court, Beltsville, MD 20705. Additional Information about the NFIP is available on our web site at http://www.fema.gov/nfip.

Kevin C. Long

Kevin C. Long, CFM, Project Engineer
Hazard Identification Section
Mitigation Division
Emergency Preparedness
and Response Directorate

Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT

COMMUNITY AND REVISION INFORMATION		PROJECT DESCRIPTION	BASIS OF REQUEST
COMMUNITY	CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO COMMUNITY NO.: 350002	NO PROJECT	BASE MAP CHANGES HYDRAULIC ANALYSIS HYDROLOGIC ANALYSIS
IDENTIFIER	TOWER/SAGE PARK, DETENTION POND, AND OUTFALL PIPE	APPROXIMATE LATITUDE & LONGITUDE: 35.081, -106.710 SOURCE: USGS QUADRANGLE DATUM: NAD 83	
FLOODING SOURCE & REVISED REACH	UNNAMED PONDING AREA – shallow flooding bounded by Tower Road SW to the south, Unser Boulevard SW to the west, Eucariz Avenue SW to the north, and Stinson Street SW to the east		

SUMMARY OF REVISIONS

Effective Flooding:	Zone AH	BFEs*
Revised Flooding:	Zone AH	BFEs*
Increases:	NONE	NONE
Decreases:	YES	YES

* BFEs - Base Flood Elevations

ANNOTATED MAPPING ENCLOSURES	ANNOTATED STUDY ENCLOSURES
TYPE: FIRM* NO: 35001C0328 E Date: November 19, 2003 NO: 35001C0329 E Date: November 19, 2003	NO CHANGE TO THE FLOOD INSURANCE STUDY

* FIRM - Flood Insurance Rate Map

DETERMINATION

This document provides the determination from the Federal Emergency Management Agency (FEMA) regarding a request for a Letter of Map Revision (LOMR) for the area described above. Using the information submitted, we have determined that a revision to the flood hazards depicted in the Flood Insurance Study (FIS) and/or National Flood Insurance Program (NFIP) map is warranted. This document revises the effective NFIP map, as indicated in the attached documentation. Please use the enclosed annotated map panels revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals in your community.

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Kevin C. Long

Kevin C. Long, CFM, Project Engineer
Hazard Identification Section
Mitigation Division
Emergency Preparedness
and Response Directorate

Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

OTHER COMMUNITIES AFFECTED BY THIS REVISION

CID Number: 350001 **Name:** BERNALILLO COUNTY, NEW MEXICO (UNINCORPORATED AREAS)

AFFECTED MAP PANELS			AFFECTED PORTIONS of the FLOOD INSURANCE STUDY
TYPE: FIRM	NO: 35001C0328 E	Date: November 19, 2003	DATE OF EFFECTIVE FLOOD INSURANCE STUDY: November 19, 2003 SUMMARY OF DISCHARGES PROFILE: 08P through 12P; and 14P through 17P
	NO: 35001C0329 E	Date: November 19, 2003	
	NO: 35001C0336 E	Date: November 19, 2003	
	NO: 35001C0337 E	Date: November 19, 2003	

CID Number: **Name:**

AFFECTED MAP PANELS	AFFECTED PORTIONS of the FLOOD INSURANCE STUDY

CID Number: **Name:**

AFFECTED MAP PANELS	AFFECTED PORTIONS of the FLOOD INSURANCE STUDY

CID Number: **Name:**

AFFECTED MAP PANELS	AFFECTED PORTIONS of the FLOOD INSURANCE STUDY

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center, toll free, at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the FEMA MCC Services, 12101 Indian Creek Court, Beltsville, MD 20705. Additional Information about the NFIP is available on our web site at http://www.fema.gov/nfip.

Kevin C. Long

William R. Blanton Jr., CFM, Project Officer
Hazard Identification Section
Mitigation Division
Emergency Preparedness
and Response Directorate

Federal Emergency Management Agency
Washington, D.C. 20472

LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

COMMUNITY INFORMATION

APPLICABLE NFIP REGULATIONS/COMMUNITY OBLIGATION

We have made this determination pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (P.L. 93-234) and in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, P.L. 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65. Pursuant to Section 1361 of the National Flood Insurance Act of 1968, as amended, communities participating in the NFIP are required to adopt and enforce floodplain management regulations that meet or exceed NFIP criteria. These criteria, including adoption of the FIS and FIRM, and the modifications made by this LOMR, are the minimum requirements for continued NFIP participation and do not supersede more stringent State/Commonwealth or local requirements to which the regulations apply.

NFIP regulations Subparagraph 60.3(b)(7) requires communities to ensure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained. This provision is incorporated into your community's existing floodplain management ordinances; therefore, responsibility for maintenance of the detention pond and storm sewer system rests with your community. We may request that your community submit a description and schedule of detention pond and storm sewer system activities.

COMMUNITY REMINDERS

We based this determination on the 1% annual chance flood discharges for Arroyo B-C and the unnamed Zone AO ponding areas computed in the FIS for your community without considering subsequent changes in watershed characteristics that could increase flood discharges. Future development of projects upstream could cause increased flood discharges, which could cause increased flood hazards. A comprehensive restudy of your community's flood hazards would consider the cumulative effects of development on flood discharges subsequent to the publication of the FIS for your community and could, therefore, establish greater flood hazards in this area.

We based this determination on the 1% annual chance discharges computed in the submitted hydrologic model for Arroyo B-B, the unnamed Zone AH ponding area, and the Tower/Sage Detention Pond. Future development of projects upstream could cause increased discharges, which could cause increased flood hazards. A comprehensive restudy of your community's flood hazards would consider the cumulative effects of development on discharges and could, therefore, indicate that greater flood hazards exist in this area.

Your community must regulate all proposed floodplain development and ensure that permits required by Federal and/or State law have been obtained. State or community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction or may limit development in floodplain areas. If your State or community has adopted more restrictive or comprehensive floodplain management criteria, those criteria take precedence over the minimum NFIP requirements.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center, toll free, at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the FEMA MCC Services, 12101 Indian Creek Court, Beltsville, MD 20705. Additional Information about the NFIP is available on our web site at http://www.fema.gov/nfip.

Kevin C. Long

Kevin C. Long, CFM, Project Engineer
Hazard Identification Section
Mitigation Division
Emergency Preparedness
and Response Directorate

Federal Emergency Management Agency
Washington, D.C. 20472

LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

COMMUNITY INFORMATION (CONTINUED)

We will not print and distribute this LOMR to primary users, such as local insurance agents or mortgage lenders; instead, the community will serve as a repository for the new data. We encourage you to disseminate the information in this LOMR by preparing a news release for publication in your community's newspaper that describes the revision and explains how your community will provide the data and help interpret the NFIP maps. In that way, interested persons, such as property owners, insurance agents, and mortgage lenders, can benefit from the information.

We have enclosed a document, titled *List of Current Flood Insurance Study Data*, which includes this letter, to help your community maintain all information for floodplain management and flood insurance. If any of the items in that document are not filed in your community's map repository, please contact the FEMA Map Assistance Center at the number listed below for information on how to obtain those items.

We have designated a Consultation Coordination Officer (CCO) to assist your community. The CCO will be the primary liaison between your community and FEMA. For information regarding your CCO, please contact:

Mr. Frank Pagano
Director, Federal Insurance and Mitigation Division
Federal Emergency Management Agency, Region VI
Federal Regional Center, Room 206
800 North Loop 288
Denton, Texas 76209-3698
(940) 898-5127

STATUS OF THE COMMUNITY NFIP MAPS

We will not physically revise and republish the FIRM and FIS report for your community to reflect the modifications made by this LOMR at this time. When changes to the previously cited FIRM panels and FIS report warrant physical revision and republication in the future, we will incorporate the modifications made by this LOMR at that time.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center, toll free, at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the FEMA MCC Services, 12101 Indian Creek Court, Beltsville, MD 20705. Additional Information about the NFIP is available on our web site at http://www.fema.gov/nfip.

Kevin C. Long

Kevin C. Long, CFM, Project Engineer
Hazard Identification Section
Mitigation Division
Emergency Preparedness
and Response Directorate

Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

PUBLIC NOTIFICATION OF REVISION

Within 90 days of the second publication in the local newspaper, a citizen may request that we reconsider this determination. Any request for reconsideration must be based on scientific or technical data. This revision is effective as of the date of this letter. However, until the 90-day period elapses, the revised BFEs presented in this LOMR may be changed.

This information will be published in the *Federal Register* and your local newspaper as detailed below.

LOCAL NEWSPAPER Name: *The Albuquerque Journal*
Dates: 02/06/2004 02/13/2004

PUBLIC NOTIFICATION				
FLOODING SOURCE	LOCATION OF REFERENCED ELEVATION	BFE (FEET NGVD)		MAP PANEL NUMBERS
		EFFECTIVE	REVISED	
UNNAMED PONDING AREA	In the vicinity of the intersection of 75th Street and Tower Road SW	5,083	5,080	35001C0328 E and 35001C0329 E
PONDING AREA 21	Shallow flooding in the vicinity of the intersection of San Ygnacio Road SW and Abeyta Road SW	5,079	5,075	35001C0336 E
TOWER/SAGE DETENTION POND	Shallow flooding bounded by San Ygnacio Road SW to the south, 86th Street SW to the west, Tower Road SW to the north, and 82nd Street SW	NONE	5,089	35001C0328 E and 35001C0336 E

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center, toll free, at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the FEMA MCC Services, 12101 Indian Creek Court, Beltsville, MD 20705. Additional Information about the NFIP is available on our web site at http://www.fema.gov/nfip.

Kevin C. Long

Kevin C. Long, CFM, Project Engineer
Hazard Identification Section
Mitigation Division
Emergency Preparedness
and Response Directorate

LIST OF CURRENT FLOOD INSURANCE STUDY DATA

This list is provided to document all information currently effective for your community for insurance and floodplain management.

Date: JAN 27 2004

Community: City of Albuquerque, Bernalillo County, New Mexico

Community Number: 350002

CURRENT EFFECTIVE FLOOD INSURANCE STUDY DATE: November 19, 2003

FLOOD INSURANCE RATE MAP

Map Index 35001CIND0	Effective Date November 19, 2003
Panel Numbers 0092 E, 0094 E, 0100 E, 0103 E, 0104 E, 0108 E, 0111 E, 0112 E, 0113 E, 0114 E, 0118 E, 0119 E, 0138 E, 0139 E, 0143 E, 0307 E, 0309 E, 0317 E, 0319 E, 0326 E, 0327 E, 0328 E, 0329 E, 0331 E, 0332 E, 0333 E, 0334 E, 0336 E, 0337 E, 0338 E, 0339 E, 0341 E, 0342 E, 0344 E, 0351 E, 0352 E, 0353 E, 0354 E, 0356 E, 0357 E, 0361 E, 0362 E, 0363 E, 0364 E, 0366 E, 0376 E, 0378 E, 0527 E, 0531 E, 0533 E, 0535 E, and 0555 E	Effective Date November 19, 2003
Panel Numbers 0109 F, 0116 F, 0128 F, 0129 F, 0133 F, 0136 F, 0137 F, 0141 F, 0142 F, 0144 F, 0161 F, 0163 F, 0358 F, 0359 F, 0367 F, and 0386 F	Effective Date November 19, 2003

LETTERS OF MAP REVISION

Panel Numbers 0137 E	Effective Date November 20, 2003
0161 E	
0163 E	

LETTERS OF MAP REVISION *(continued)*

Panel Numbers	Effective Date
0309 E	November 20, 2003
0327 E	November 20, 2003
	November 20, 2003
0328 E	November 20, 2003
	November 20, 2003
	JAN 27 2004
0329 E	JAN 27 2004
0336 E	JAN 27 2004

LETTERS OF MAP AMENDMENT AND MAP REVISION BASED ON FILL

None

BEST AVAILABLE DATA LETTERS

None

CHANGES ARE MADE IN DETERMINATIONS OF BASE FLOOD ELEVATIONS FOR THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, UNDER THE NATIONAL FLOOD INSURANCE PROGRAM

On November 19, 2003, the Department of Homeland Security's Federal Emergency Management Agency identified Special Flood Hazard Areas (SFHAs) in unincorporated areas of Bernalillo County, New Mexico, which include the City of Albuquerque, through issuance of a Flood Insurance Rate Map (FIRM). The Mitigation Division has determined that modification of the elevations of the flood having a 1% chance of being equaled or exceeded in any given year (base or 100-year flood) for certain locations in this community is appropriate. The modified Base Flood Elevations (BFEs) revise the FIRM for the community.

The changes are being made pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (Public Law 93-234) and are in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, Public Law 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65.

Hydrologic and hydraulic analyses were performed to incorporate the construction of a detention pond and an upgraded storm sewer system, and have resulted in reductions in SFHAs for Arroyo B-B and Arroyo B-C, and lower BFEs for Ponding Area 21 and an unnamed Zone AH area of shallow flooding. Furthermore, the revision has resulted in the establishment of SFHAs and BFEs for the Tower/Sage Park Detention pond. The table below indicates existing and modified BFEs for selected locations along the affected lengths of the flooding sources cited above.

Location	Existing BFE (feet)*	Modified BFE (feet)*
Unnamed Ponding Area	5,083	5,080
Ponding Area 21	5,079	5,075
Tower/Sage Detention Pond	None	5,089

*National Geodetic Vertical Datum, rounded to nearest whole foot

Under the above-mentioned Acts of 1968 and 1973, the Mitigation Division must develop criteria for floodplain management. For the community to participate in the National Flood Insurance Program (NFIP), the community must use the modified BFEs to administer the floodplain management measures of the NFIP. These modified BFEs will also be used to calculate the appropriate flood insurance premium rates for new buildings and their contents and for the second layer of insurance on existing buildings and contents.

Upon the second publication of notice of these changes in this newspaper, any person has 90 days in which he or she can request, through the Chief Executive Officer of the community, that the

Mitigation Division reconsider the determination. Any request for reconsideration must be based on knowledge of changed conditions or new scientific or technical data. All interested parties are on notice that until the 90-day period elapses, the Mitigation Division's determination to modify the BFEs may itself be changed.

Any person having knowledge or wishing to comment on these changes should immediately notify:

The Honorable Martin J. Chavez
Mayor, City of Albuquerque
Office of the Mayor
P.O. Box 1293
Albuquerque, NM 87103

Or

Tom Rutherford
Chairman, Bernalillo County Commision
Bernalillo County
One Civic Plaza NW
Albuquerque, NM 87102

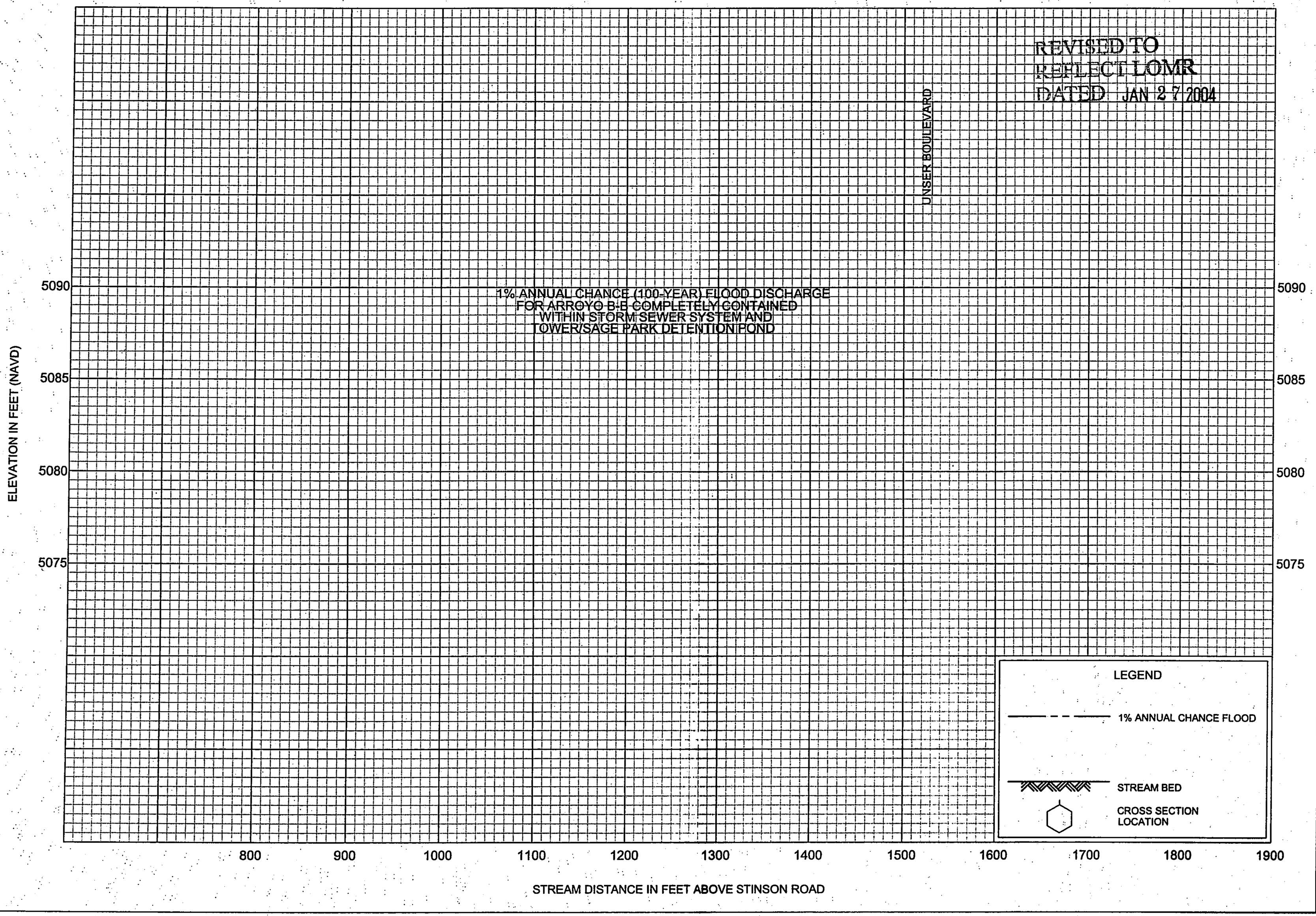
Table 2. Summary of Discharges (Cont'd)

Flooding Source and Location	Drainage Area (Square Miles)	Peak Discharges (cfs) 10-Year	50-Year	100-Year	500-Year
Unnamed Tributary No. 1 At Interstate Highway 40	8.78	1,290	3,220	4,450	8,550
Arroyo A-B At Sage Road	0.1	81	149	179	1,767
Arroyo A-C At the Arenal Main Canal	0.2	122	247	263	372
Arroyo B-A At Unser Boulevard	0.1	29	67	90	126
Arroyo B-B At Unser Boulevard	Discharges for all recurrence intervals routed to the Tower/Sage Detention Pond				
Arroyo B-C At Unser Boulevard	0.7	138	342	494	757

REVISED AREA

REVISED TO
REFLECT LOMR
DATED JAN 27 2004

REVISED TO
REFLECT LOMR
DATED JAN 27 2004



FLOOD PROFILES

ARROYO B-B

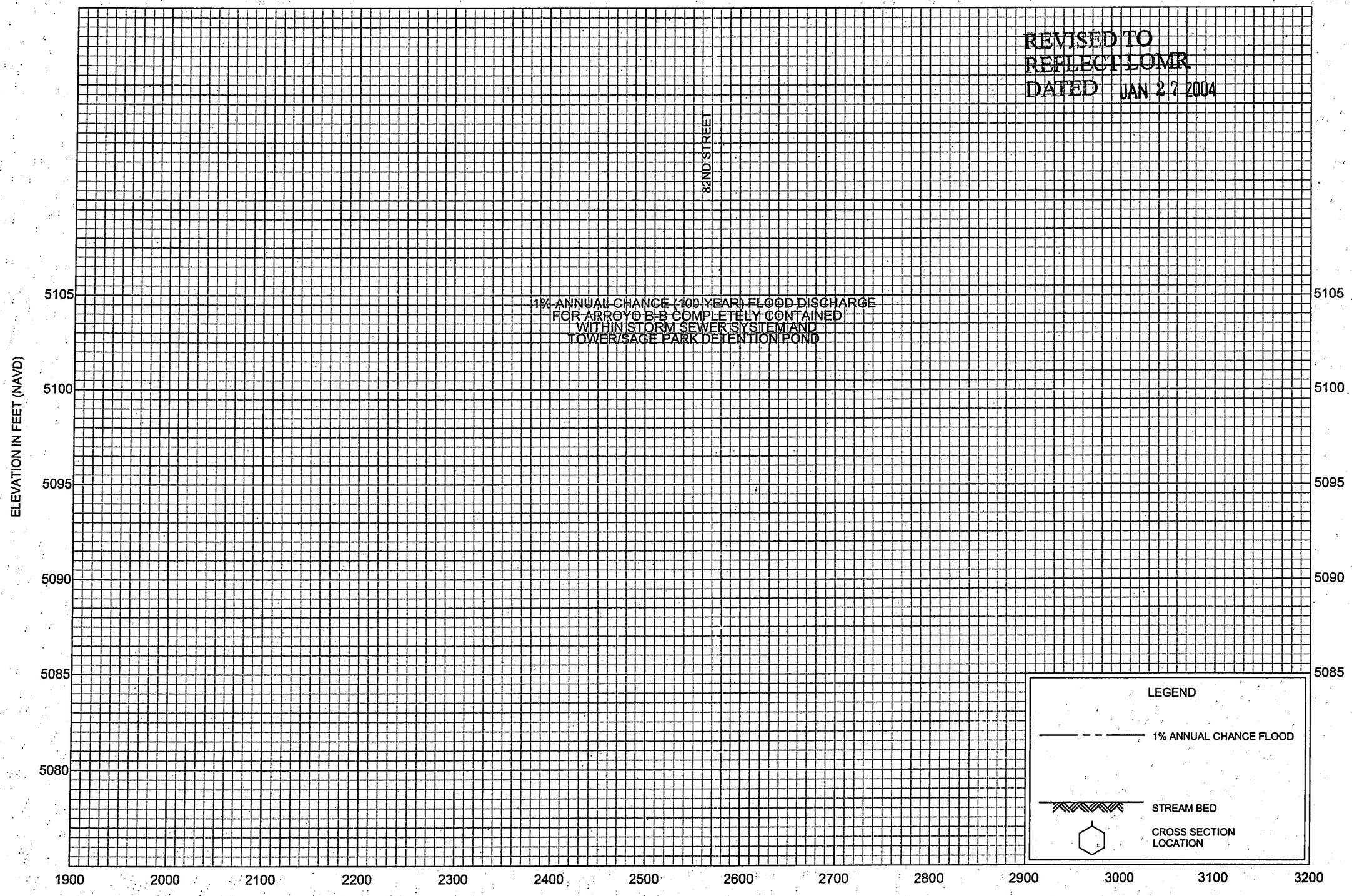
FEDERAL EMERGENCY MANAGEMENT AGENCY

BERNALILLO COUNTY, NM

AND INCORPORATED AREAS

08P

REVISED TO
REFLECT LOMR
DATED JAN 27 2004



FLOOD PROFILES

ARROYO B-B

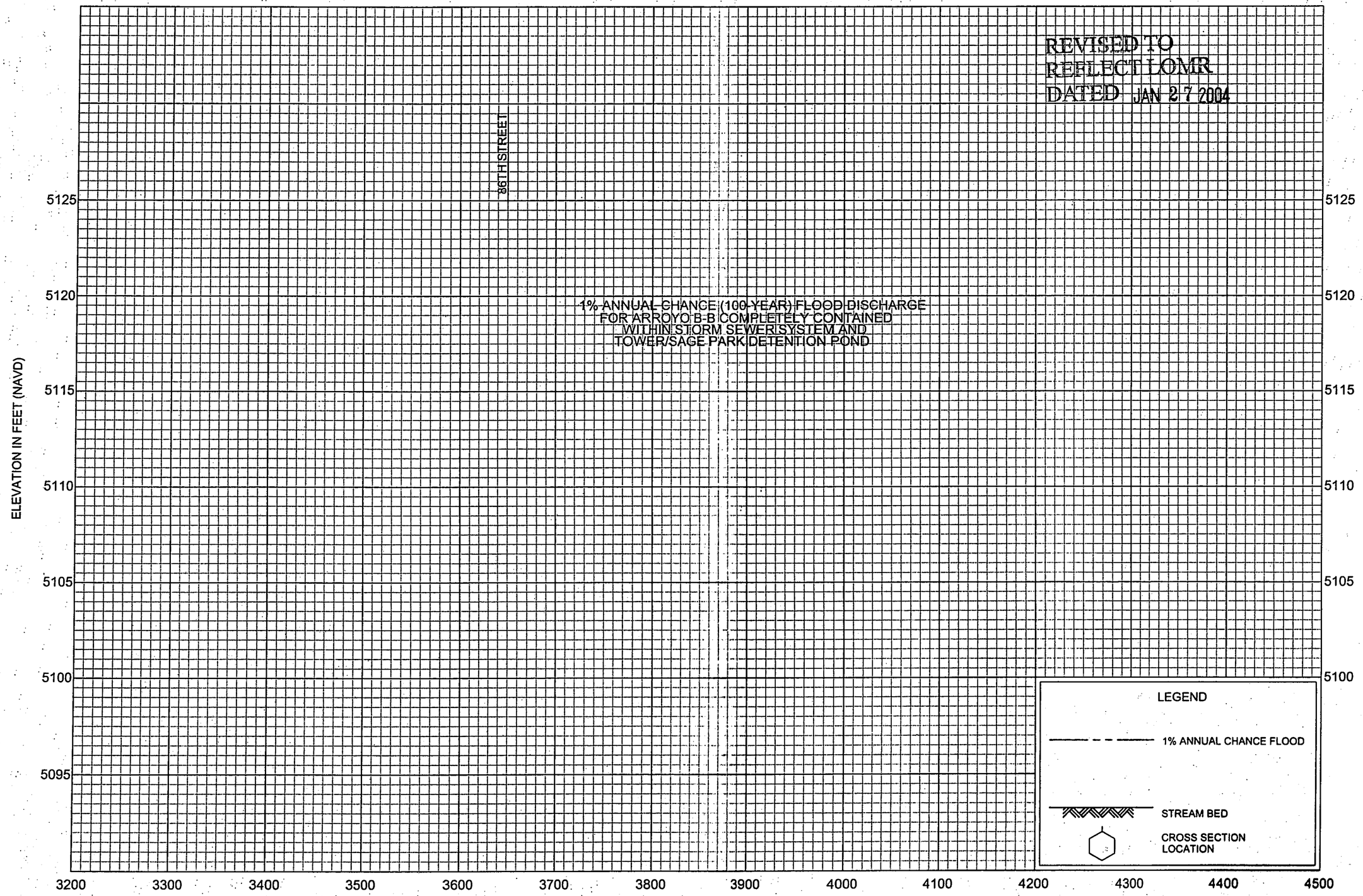
FEDERAL EMERGENCY MANAGEMENT AGENCY

BERNALILLO COUNTY, NM

AND INCORPORATED AREAS

09P

REVISED TO
REFLECT LOMR
DATED JAN 27 2004



FLOOD PROFILES

ARROYO B-B

FEDERAL EMERGENCY MANAGEMENT AGENCY

BERNALILLO COUNTY, NM

AND INCORPORATED AREAS

REVISED TO
REFLECT LOMR
DATED JAN 27 2004

ELEVATION IN FEET (NAVD)

5155
5150
5145
5140
5135
5130
5125
5120
5115

90TH STREET

94TH STREET

1% ANNUAL CHANCE (100-YEAR) FLOOD DISCHARGE
FOR ARROYO B-B COMPLETELY CONTAINED
WITHIN STORM SEWER SYSTEM AND
TOWER/SAGE PARK DETENTION POND

LEGEND

1% ANNUAL CHANCE FLOOD

STREAM BED

CROSS SECTION
LOCATION

4500 4600 4700 4800 4900 5000 5100 5200 5300 5400 5500 5600 5700 5800

STREAM DISTANCE IN FEET ABOVE STINSON ROAD

FLOOD PROFILES

ARROYO B-B

FEDERAL EMERGENCY MANAGEMENT AGENCY

BERNALILLO COUNTY, NM

AND INCORPORATED AREAS

11P

12P

FEDERAL EMERGENCY MANAGEMENT AGENCY

BERNALILLO COUNTY, NM

AND INCORPORATED AREAS

FLOOD PROFILES

ARROYO B-B

STREAM DISTANCE IN FEET ABOVE STINSON ROAD

5800 5900 6000 6100 6200 6300 6400 6500 6600 6700

ELEVATION IN FEET (NAVD)

5145 5150 5155 5160 5165 5170 5175

1% ANNUAL CHANCE (100-YEAR) FLOOD DISCHARGE FOR ARROYO B-B COMPLETELY CONTAINED WITHIN STORM SEWER SYSTEM AND TOWER/SAGE PARK DETENTION POND

LEGEND

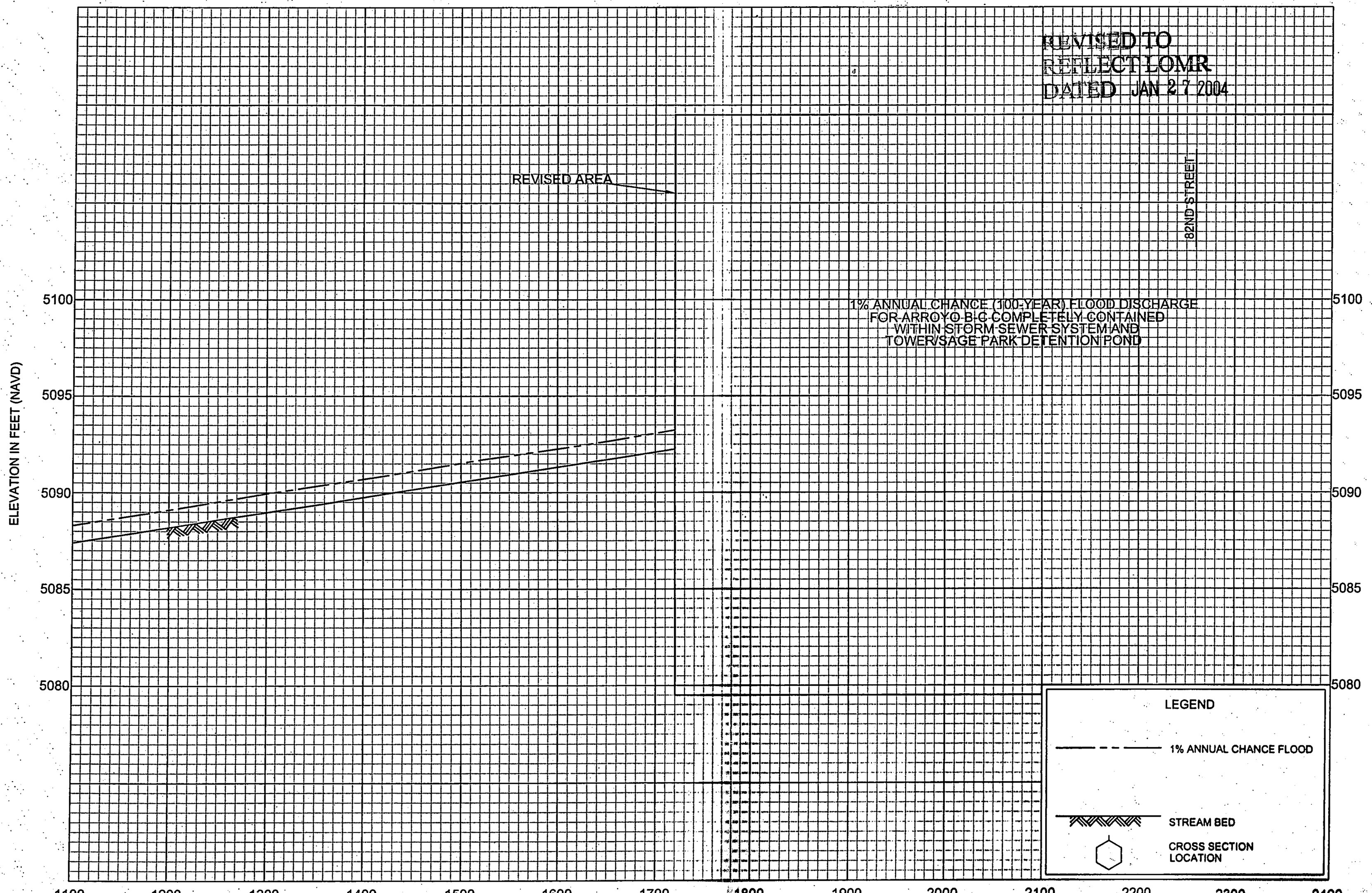
1% ANNUAL CHANCE FLOOD

STREAM BED

CROSS SECTION LOCATION

REVISED TO REFLECT LOMR DATED JAN 27 2004

REVISED TO
REFLECT LOMR
DATED JAN 27 2004



FLOOD PROFILES

ARROY B-C

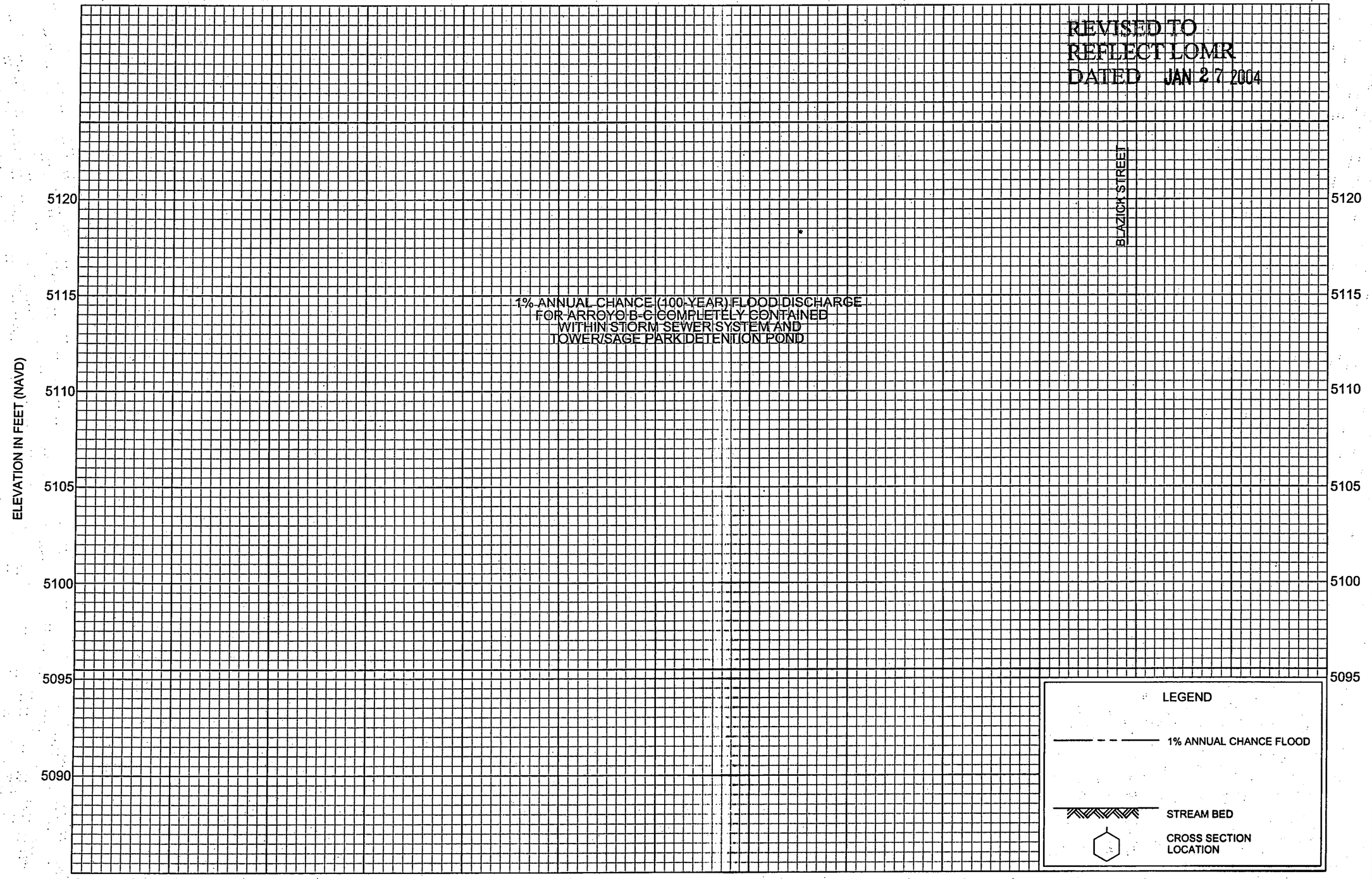
FEDERAL EMERGENCY MANAGEMENT AGENCY

BERNALILLO COUNTY, NM

AND INCORPORATED AREAS

14P

REVISED TO
REFLECT LOMR
DATED JAN 27 2004



FLOOD PROFILES

ARROY B-C

FEDERAL EMERGENCY MANAGEMENT AGENCY

BERNALILLO COUNTY, NM

AND INCORPORATED AREAS

15P

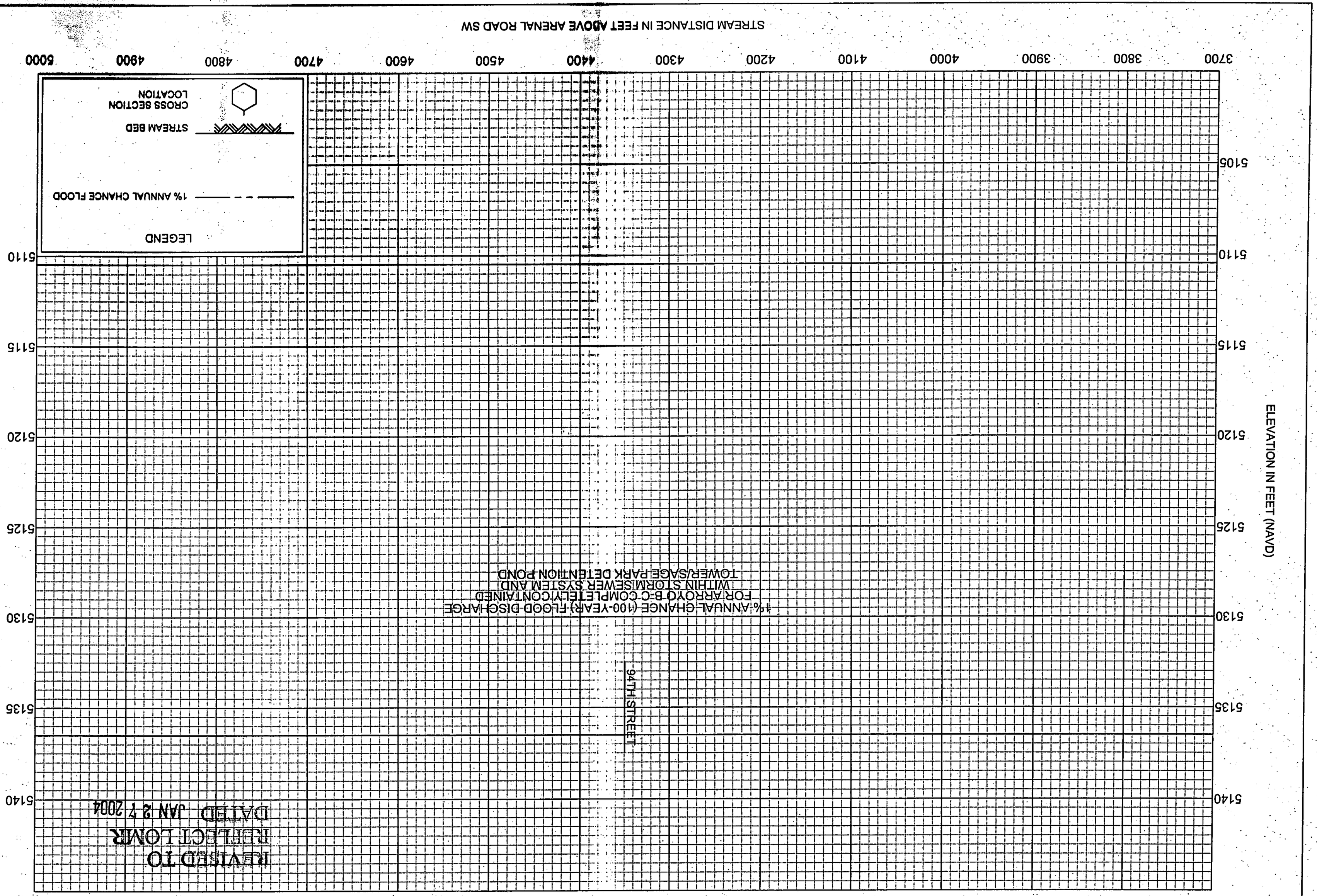
FEDERAL EMERGENCY MANAGEMENT AGENCY

BERNALILLO COUNTY, NM

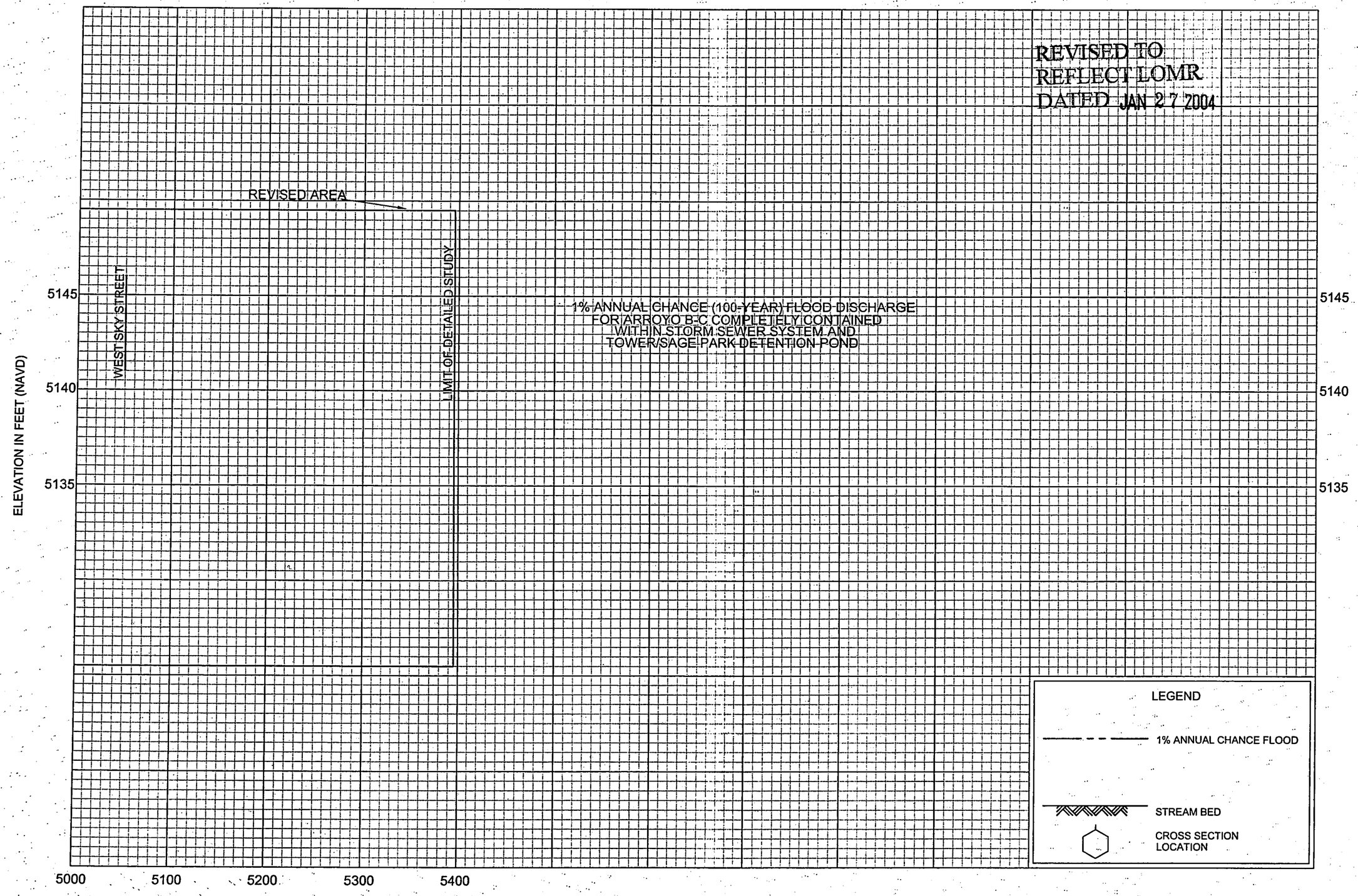
AND INCORPORATED AREAS

FLOOD PROFILES

ARROY B-C



REVISED TO
REFLECT LOMR
DATED JAN 27 2004



FLOOD PROFILES

ARROYO B-C

FEDERAL EMERGENCY MANAGEMENT AGENCY

BERNALILLO COUNTY, NM

AND INCORPORATED AREAS

17P

LARKIN GROUP NM INC.

8500 Menaul Boulevard NE, Suite A-440
Albuquerque, New Mexico 87112
Phone: 505-275-7500
Fax: 505-275-0748
e-mail: info@larkinnm.com

August 5, 2003

Carlos A. Montoya, P.E.
Floodplain Administrator
City of Albuquerque
P.O. Box 1293
Albuquerque, NM 87103

Subject: Tower/Sage Park, Detention Pond and Outfall Pipe LOMR
CASE NO. 02-06-1421R

Dear Mr. Montoya:

Transmitted herewith are three (3) copies of an application to the Federal Emergency Management Agency (FEMA) for a Letter of Map Revision (LOMR) for your review and submittal to FEMA. One copy is for your files, one copy is for review by Bernalillo County, and the other is to forward to FEMA with endorsements from The City of Albuquerque and Bernalillo County. The required forms for the submittal are complete and ready for the appropriate City of Albuquerque signatures. Due to the constructed project and requested map revisions being partly outside the municipal limits and in the County we have provided a second copy of page 2 of 2 of Form 1 for Bernalillo County to sign. Also note we will provide a check, payable to FEMA, in the amount of $3,800.00 (application fee) upon completion of your review and notification that you have the application ready to submit to FEMA. This LOMR is to follow up the previously submitted and FEMA approved Conditional Letter of Map Revision (CLOMR) for the construction of the Tower/Sage Park Detention Pond and Outfall Pipe, by the Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA), and the Special Assessment District 222 project by the City of Albuquerque.

As per your earlier conversations with Kevin Banks of our office it is understood you will provide the following required items:

- A request, in writing, for the LOMR from the community's Chief Executive Officer.
- A letter, from The City of Albuquerque as the only property owner who is adversely impacted by increases of the floodplain, due to the construction of the Tower/Sage Park Detention Pond on City property.
- Documentation showing compliance with NFIP regulations regarding maintenance of the pond and storm drain system.

Thank you for your review of this submittal. Should you have any questions or require additional information, please do not hesitate to call.

Very truly yours,
Larkin Group NM, Inc.

John A. Andrews, P.E.
Principal

KB:em

Enclosures:

CC: Jerry Lovato, AMAFCA w/o enclosures
Dan Hogan, COA-PWD w/o enclosures

M:\Projects AL90\AL900572\0052 LOMR\Lo-trans-city.doc

25 YEARS SERVING NEW MEXICO

TABLE OF CONTENTS

I. FORM 1 Overview and Concurrence Form
Form 1 - Additional Information & Explanation
Vicinity Map

II. As-Built Drawings

FORM 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

OVERVIEW & CONCURRENCE FORM

O.M.B No. 3067-0148
Expires September 30, 2005

PAPERWORK BURDEN DISCLOSURE NOTICE

Public reporting burden for this form is estimated to average 1 hour per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing, reviewing, and submitting the form. You are not required to respond to this collection of information unless a valid OMB control number appears in the upper right corner of this form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden to: Information Collections Management, Federal Emergency Management Agency, 500 C Street, SW, Washington DC 20472, Paperwork Reduction Project (3067-0148). Submission of the form is required to obtain or retain benefits under the National Flood Insurance Program. **Please do not send your completed survey to the above address.**

A. REQUESTED RESPONSE FROM FEMA

This request is for a (check one):

☐ CLOMR: A letter from FEMA commenting on whether a proposed project, if built as proposed, would justify a map revision, or proposed hydrology changes (See 44 CFR Ch. 1, Parts 60, 65 & 72).

☒ LOMR: A letter from FEMA officially revising the current NFIP map to show the changes to floodplains, regulatory floodway or flood elevations. (See Parts 60 & 65 of the NFIP Regulations.)

B. OVERVIEW

1. The NFIP map panel(s) affected for all impacted communities is (are): See Additional Information and Explanation for others.

Community No.	Community Name	State	Map No.	Panel No.	Effective Date
Ex: 480301 480287	City of Katy Harris County	TX TX	480301 48201C	0005D 0220G	02/08/83 09/28/90
350001	Bernalillo County Unincorporated Areas	NM	350001 C	0328D	9/20/96
350001	Bernalillo County Unincorporated Areas	NM	350001 C	0336D	9/20/96

2. Flooding Source: Arroyo B-B (Tower Rd.) and Arroyo B-C (Sage Rd.)

3. Project Name/Identifier: Tower/Sage Park, Detention Pond and Outfall Pipe

4. FEMA zone designations affected: AE, AO, X (choices: A, AH, AO, A1-A30, A99, AE, AR, V, V1-V30, VE, B, C, D, X)

5. Basis for Request and Type of Revision:

a. The basis for this revision request is (check all that apply)

☒ Physical Change ☐ Improved Methodology/Data

☐ Regulatory Floodway Revision ☐ Other (Attach Description)

Note: A photograph and narrative description of the area of concern is not required, but is very helpful during review.

b. The area of revision encompasses the following types of flooding and structures (check all that apply)

Types of Flooding:	☐ Riverine	☐ Coastal	☒ Shallow Flooding (e.g., Zones AO and AH)
	☐ Alluvial fan	☐ Lakes	☐ Other (Attach Description)
Structures:	☐ Channelization	☐ Levee/Floodwall	☒ Bridge/Culvert
	☒ Dam	☐ Fill	☐ Other, Attach Description

FORM 1 – ADDITIONAL INFORMATION AND EXPLANATION

B. Overview:

1. The NFIP map panel(s) affected for all impacted communities is (are) continued:

Community No.	Community Name	State	Map No.	Panel No.	Effective Date
350001	Bernalillo County, Unincorporated Areas	NM	350001C	0329D	09/20/96
350001	Bernalillo County, Unincorporated Areas	NM	350001C	0337D	09/20/96

5. This LOMR request is in reference to Case No 02-06-1421R. The CLOMR has been reviewed and approved by FEMA by letter dated December 20, 2002 from Lloyd A. Hake, Project Engineer, Hazard Study Branch, Federal Insurance and Mitigation Administration.

   In response to said letter the certified As-Built (Record Drawings) are being submitted herewith as a part of this application.

   This project was constructed as proposed and presented in the CLOMR and therefore the FIRM Maps as were annotated for CLOMR conditions are now applicable for the As-Built project conditions.

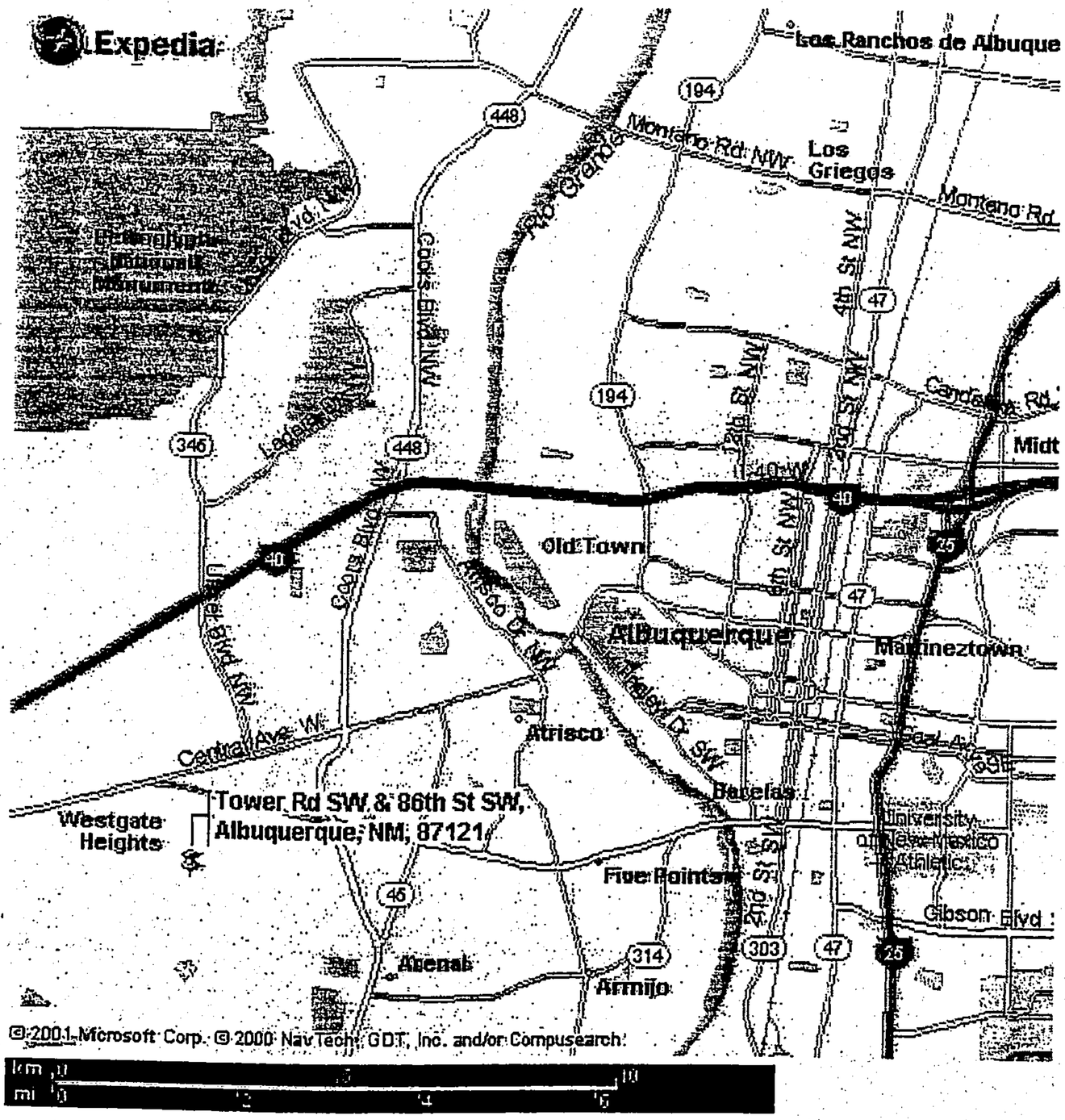
Maintenance and Responsibility:

The operation and maintenance of the Tower/Sage Park, Detention Pond and Outfall Pipe and Storm Drain System will be part of the City Of Albuquerque's numerous other storm water drainage facilities. The City has a maintenance, operation and flood warning plan for all of their facilities.

C. Review Fee:

The review fee has been mailed, in a separate envelope to:

Federal Emergency Management Agency
Revisions Fee-Collection System Administrator
P.O. Box 3173
Merrifield, VA 2116-3173



VICINITY MAP

FORM 1 PLATE 1

***

As-Built Certification

This is to certify, to the best of my knowledge and belief, that the improvements for the Tower/Sage Park Detention Pond and Outfall Pipe, constructed by the Albuquerque Metropolitan Flood Control Authority (AMAFCA), and the Special Assessment District 222 project constructed by the City of Albuquerque, was constructed within substantial compliance of the previously submitted construction drawings, as shown on the included As-Built drawings listed below:

Albuquerque Metropolitan Arroyo Flood Control Authority, Tower/Sage Park, Detention Pond and Outfall Pipe, sheets numbered:

1 2 3 4 5 6 7 8 9 10 11 12
13 14 15 16 17 18 19 20 21 22 23 24
25

City of Albuquerque, Special Assessment District 222, sheets numbered:

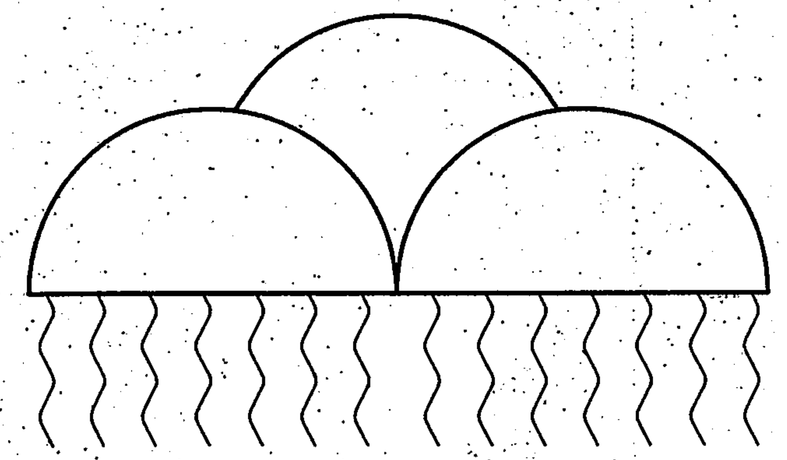
1-1 2-5 10-1 10-2 10-3 10-4 10-5 10-6 10-7 10-8 10-9 10-10
10-10.2 10-11 10-12 10-12.1 10-13 10-13.1 10-14 10-14.1 10-15 10-16 10-17 10-18
10-18.1 10-19 10-19.1 10-20 10-20.1 10-21 10-22 10-23

REGISTERED PROFESSIONAL ENGINEER
STATE OF
No. 6966
NEW MEXICO
JOHN A. ANDREWS

John A. Andrews P.E.

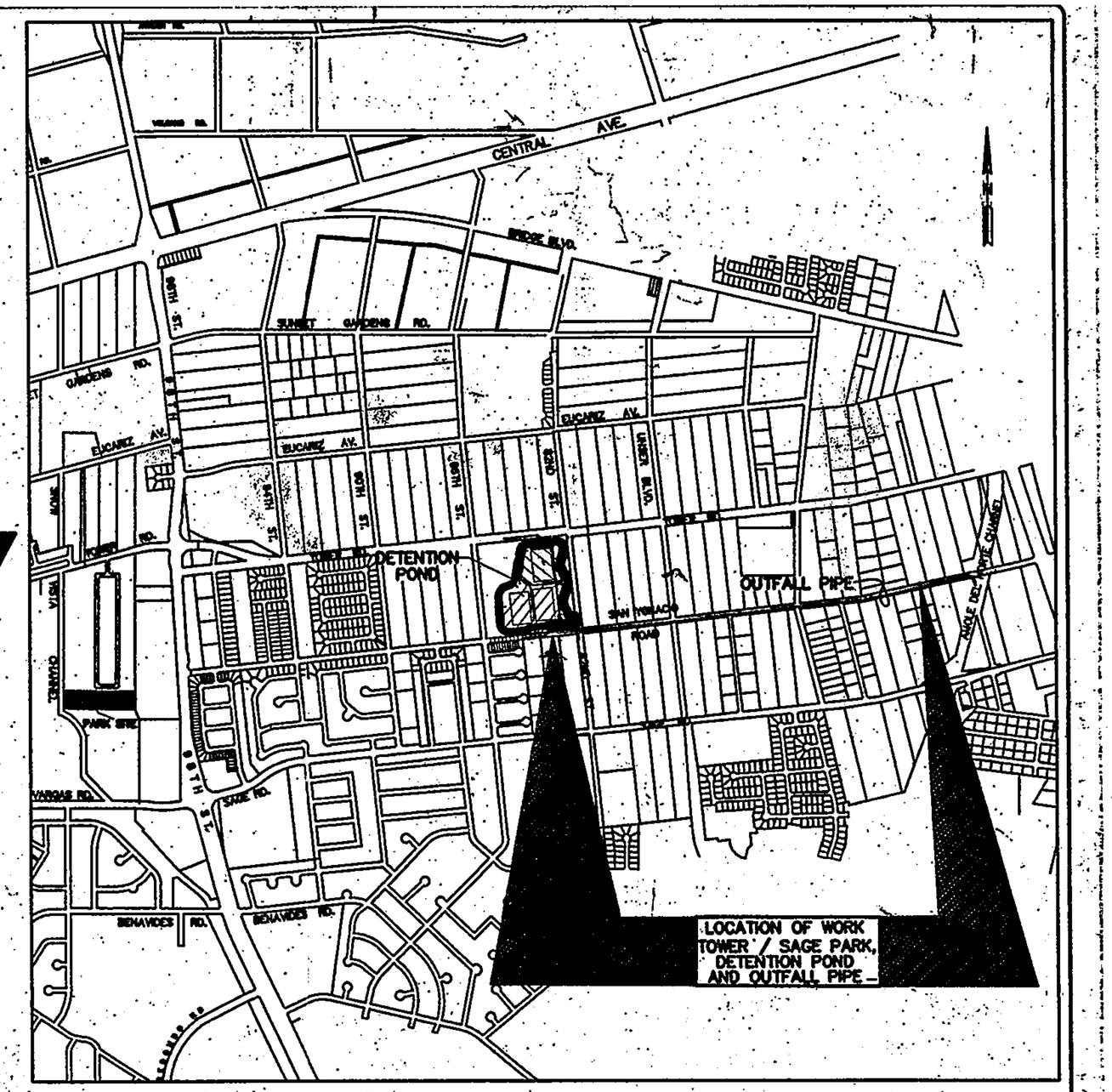
\\ALNM-SV1\ARCHIVE\Projects AL90\AL900572\0052 LOMR\Fema-as-built-cert.doc

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY



Plans for construction of

TOWER/SAGE PARK, DETENTION POND AND OUTFALL PIPE



VICINITY MAP
ZONE ATLAS L-9-Z & M-9-Z
SCALE: 1" = 1000'

RECORD DRAWINGS WERE PREPARED FROM INFORMATION PROVIDED BY THE CONTRACTOR.

RECORD DRAWING
01/02

REGISTERED PROFESSIONAL ENGINEER
STATE OF NEW MEXICO
No. 9667
JOHN A. ANDREWS

THE LARKIN GROUP, P.A.
7. 8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

APPROVED FOR CONSTRUCTION

Dan Hogan 11/29/00

DAN HOGAN PE, PS DATE:
DIVISION MANAGER-HYDROLOGY/PWD, CITY OF ALBUQUERQUE

APPROVED FOR CONSTRUCTION

John P Kelly 11-28-00

JOHN KELLY, P.E. DATE:
EXECUTIVE ENGINEER, AMAFCA

TOWER/SAGE PARK, DETENTION POND AND OUTFALL PIPE

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

SET NO. _____

TOWER/SAGE PARK, DETENTION POND
AND OUTFALL PIPE

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

LOCATED IN BERNALILLO COUNTY, STATE OF NEW MEXICO

ALL COURSES STATE GRID NORTH – SCALE AS SHOWN

The undersigned, Albuquerque Metropolitan Arroyo Flood Control Authority, claimant, whose office address is 2600 Prospect Ave. N. E., Albuquerque 87107, County of Bernalillo, State of New Mexico,, has caused to be drawn up by The Larkin Group inc., the plans and specifications of the Tower/Sage Detention Pond, as hereafter described and indicated, hereby makes these several statements relative thereto, and offers those plans and statements for acceptance and filing in compliance with the laws of the State of New Mexico. No application is being made for use of water.

The reservoir inlet of the principal spillway is in the N.W. 1/4 of the S.W. 1/4 of the projected Section 27, T-10-N, R-2E whose state plane coordinates (NM Central Zone) are: Northing = 1,477,876.77 Eastings= 357,374.74 The Reservoir will receive drainage from the Arnole Del Norte Drainage Basin (via the storm drains in Tower Road and San Ygnacio Road). See sheet 11 for coordinate location.

Discharge from the spillway will be into the Arnole Del Norte Channel west of Coors Boulevard. The Tower/Sage Detention Pond will be constructed of granular native soils present within the proposed reservoir area. Embankment materials will be placed in continuous horizontal lifts blended together to assume a homogeneous embankment. The embankment foundation extends a minimum of 5 feet horizontally beyond the embankment limits. The embankment foundation extends to a minimum depth of 5 feet vertically below the bottom of the pond invert.

Side slopes of 5:1 (horizontal to vertical) for the embankment will be used at all locations. Specifications for the construction of this dam will be "New Mexico State Highway Department Standard Specifications for Road and Bridge Construction, Edition of 1994" plus special provisions for embankment construction, resulting from a comprehensive foundation and materials investigation.

The PROPOSED CONFIGURATION of the Tower/Sage Detention Pond is designed for the following conditions:

A. The principal spillway shall consist of a 36 inch diameter concrete cylinder pipe with a maximum discharge of 28.0 cubic feet per second passing through the principal spillway during the 100 year frequency flood for proposed development conditions upstream of the drainage facility.

B. The crest of the emergency spillway is at an elevation that will not be over topped by the 100 year frequency flood, for proposed development conditions upstream of the drainage facility.

C. The Probable Maximum Flood including the full flow that can be carried by the two storm drains entering the drainage facility will not over top the dam for proposed development conditions up and downstream of the detention dam.

D. The concrete cylinder pipe principal spillway will drain the dam, within 26 hours, to a storage volume of less than 10.0 acre feet following a flood that uses all available storage.

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

I, John A. Andrews, being first a duly sworn, upon my oath state that I am a registered professional engineer, qualified in civil engineering, and that the accompanying plans consisting of 25 sheets were prepared by me or under my direction, and are true and correct to the best of my knowledge and belief.

John A. Andrews
John A. Andrews, P.E.
N.M.P.E. No. 3960

Subscribed and sworn to before me this 28th day of November 2000.

Virginia L. Thomas
Notary Public

OFFICIAL SEAL
VIRGINIA L. THOMAS
NOTARY PUBLIC-STATE OF NEW MEXICO
My commission expires:

My Commission Expires: January 31st, 2004 (SEAL)

Tower/Sage Detention Pond Properties

Dam Hazard Classification	High
Drainage Basin Size 100-year, (From Storm Drain) PMP (Overland Surface)	0.7119-sq.mi. 0.3299-sq.mi.
Peak Inflow to Dam 100-year PMP	1,378.3-cfs 5,859.3-cfs
Peak Outflow from Dam 100-year PMP	28.0-cfs 4,208.6-cfs
Maximum Fill Height*	13.5-ft.
Length	1,650-ft.
Crest Width	15-ft.
Maximum Dike Width at Base	110-ft.
Slope of Embankment	5:1 (Max.)
Top of Dam Effective Elevation	5,093.5-ft.
Emergency Spillway Elevation	5,089.3-ft.
Principal Spillway Dia. (Concrete Cylinder)	36-in.
Principal Spillway Invert	5066.3-ft.
Orifice Area (1'-0" x 1'-3")	180.0-sq.in.
Width of Emergency Spillway	151.0-ft.
Spillway Crest Storage at 5089.3	55.999-ac.ft.
Top of Dam Storage at 5093.5	111.076-ac.ft.
Discharge Capacity at 5089.3	28.4-cfs
Discharge Capacity at 5093.5	4,858.2-cfs
Floodpool Evacuation Time	83-hrs.
100-year Pool Elevation	5088.6-ft.
PMP Pool Elevation	5093.1-ft.
Freeboard	0.4-ft.

* To effective top of Dam at 5093.5

STATE OF NEW MEXICO)
) ss.
COUNTY OF SANTA FE)

I hereby certify that the accompanying map(s) and statements (plans and statements consisting of 25 sheets) have been duly examined by me and are approved as to form and content, and were duly accepted for filing on this 11th day of January 2001.

Elaine C. Pacheco
for State Engineer's Office

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

I, John Kelly on behalf of Albuquerque Metropolitan Arroyo Flood Control Authority being first duly sworn upon my oath, state that I have read and examined the accompanying map and statements (plans and statements consisting of 25 sheets) and know the contents thereof and representations thereon and state that the same are true to the best of my knowledge and belief.

Albuquerque Metropolitan Arroyo Flood Control Authority, Claimant

John P Kelly
John Kelly, P.E.
Executive Engineer AMAFCA

Subscribed and sworn to before me this 28th day of November 2000.

Gwendolyn A. Vigil
Notary Public

OFFICIAL SEAL
Gwendolyn A. Vigil
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires 3-29-03

My Commission Expires: March 29, 2003 (SEAL)

INDEX

SHEET NUMBER	DESCRIPTION
–	TITLE SHEET
1	FILING SHEET AND INDEX
2	HYDROLOGY DATA
3	DRAINAGE AREA MAP
4	SUMMARY OF QUANTITIES
5	GENERAL NOTES / SITE CONTROL
6	SITE AND GRADING PLAN
7	DAM PROFILE WITH BORINGS STA. 10+00 TO STA. 38+00
8	DAM PROFILE STA.38+00 TO STA. 44+52 DAM CROSS SECTIONS 26+00 & 27+00
9	DAM CROSS SECTIONS STA. 10+00 TO STA. 17+00
10	DAM CROSS SECTIONS STA. 18+00 TO STA. 25+00
11	EMERGENCY SPILLWAY PLAN
12	EMERGENCY SPILLWAY SECTIONS AND DETAILS
13	SAN YGNACIO ROAD INLET/OUTLET STRUCTURE– JUNCTION BOX 1
14	TOWER ROAD INLET STRUCTURE – JUNCTION BOX 2
15	JUNCTION BOX GRATE DETAILS
16	AREA INLET DETAILS AND SECTIONS
17	POND STORM DRAIN PLAN AND PROFILE STA. 1+00 TO 13+61.46
18	PRINCIPAL SPILLWAY PLAN AND PROFILE STA. 53+20.14 TO 55+35.79 OUTFALL PLAN AND PROFILE STA. 55+35.79 TO 62+00
19	OUTFALL PLAN AND PROFILE STA. 62+00 TO 72+00
20	OUTFALL PLAN AND PROFILE STA. 72+00 TP 82+00
21	OUTFALL PLAN AND PROFILE STA. 82+00 TO 92+00
22	OUTFALL PLAN AND PROFILE STA. 92+00 TO 2+19.94
23	STORM DRAIN PIPE PENETRATION DETAIL
24	STORM DRAIN DETAILS
25	FENCE DETAILS

REGISTERED PROFESSIONAL ENGINEER
JOHN A. ANDREWS
NEW MEXICO

John A. Andrews
RECORD DRAWING
01/02

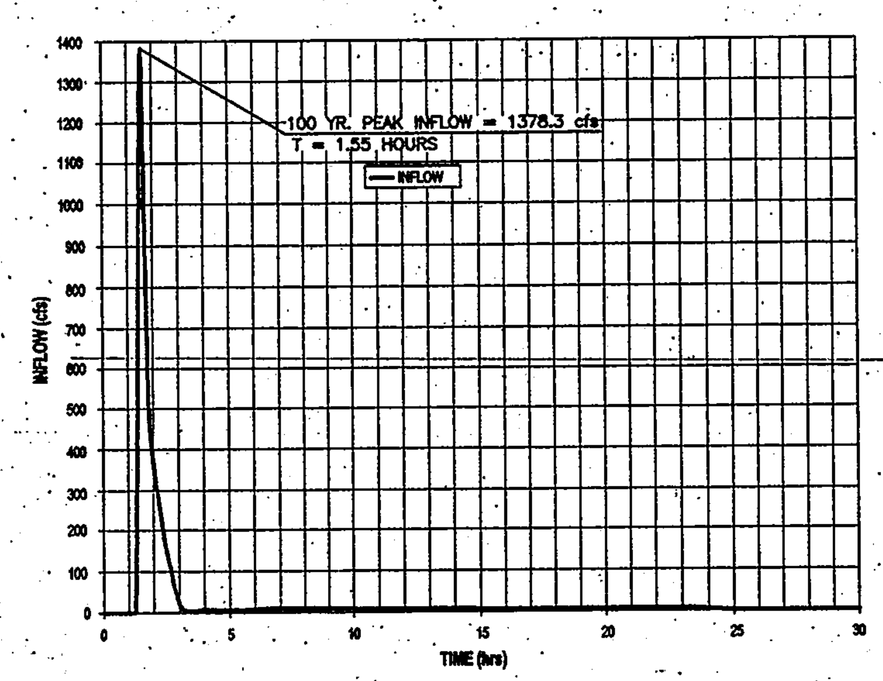
THE LARKIN GROUP
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

ALBUQUERQUE METROPOLITAN
ARROYO FLOOD CONTROL AUTHORITY

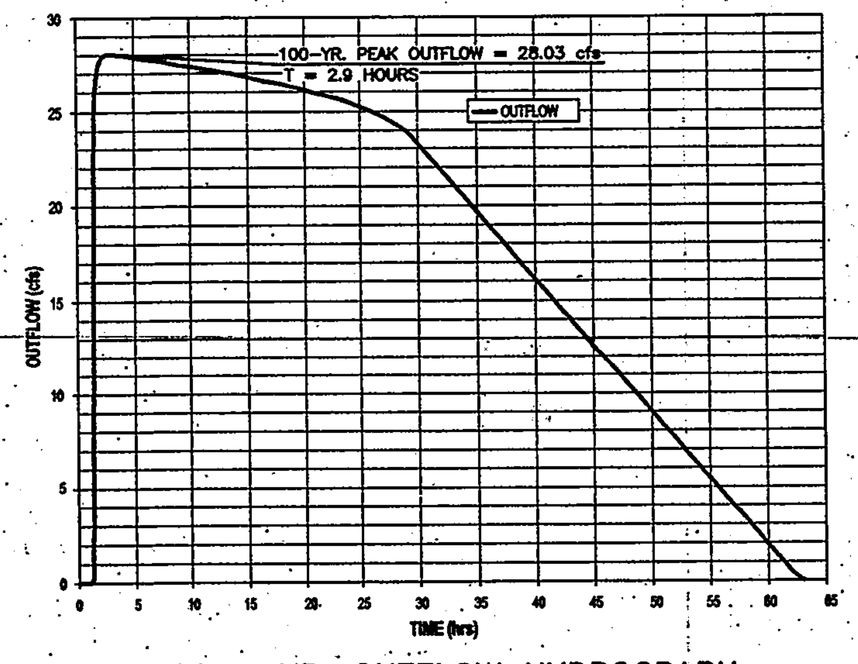
TOWER/SAGE PARK, DETENTION POND AND OUTFALL PIPE

FILING SHEET AND INDEX

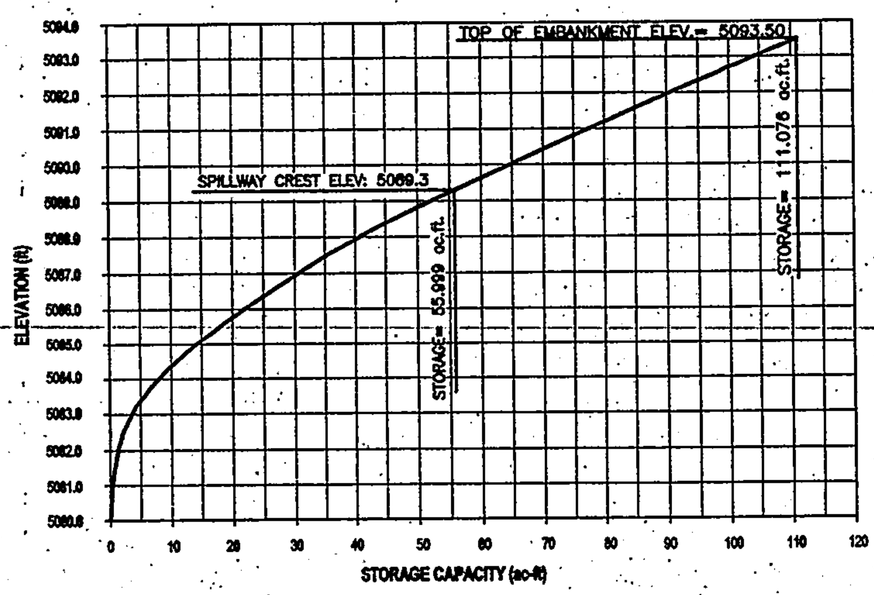
DRAWING NO.*	MAP NO.	SHEET	OF
4188.91	L & M-9	1	25



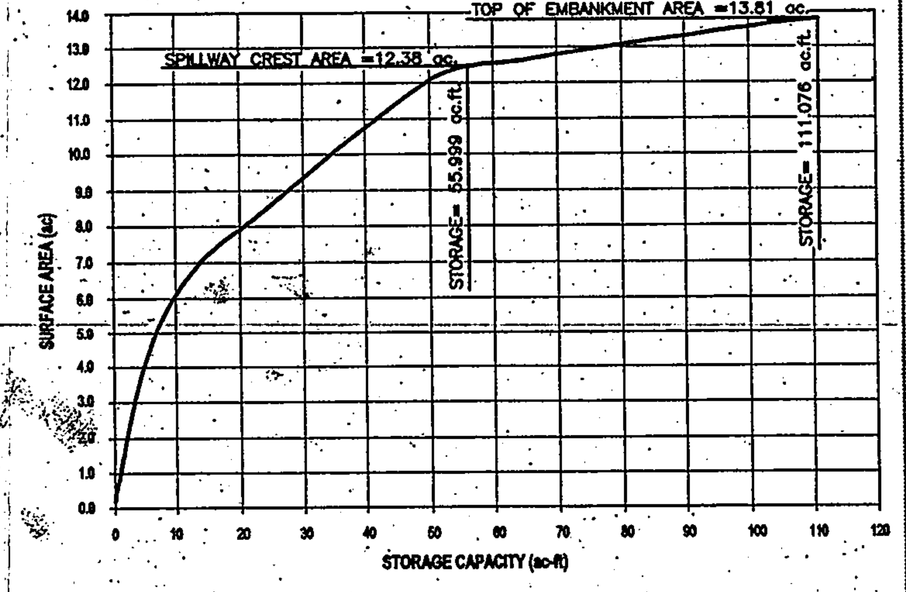
100 – YR. INFLOW HYDROGRAPH



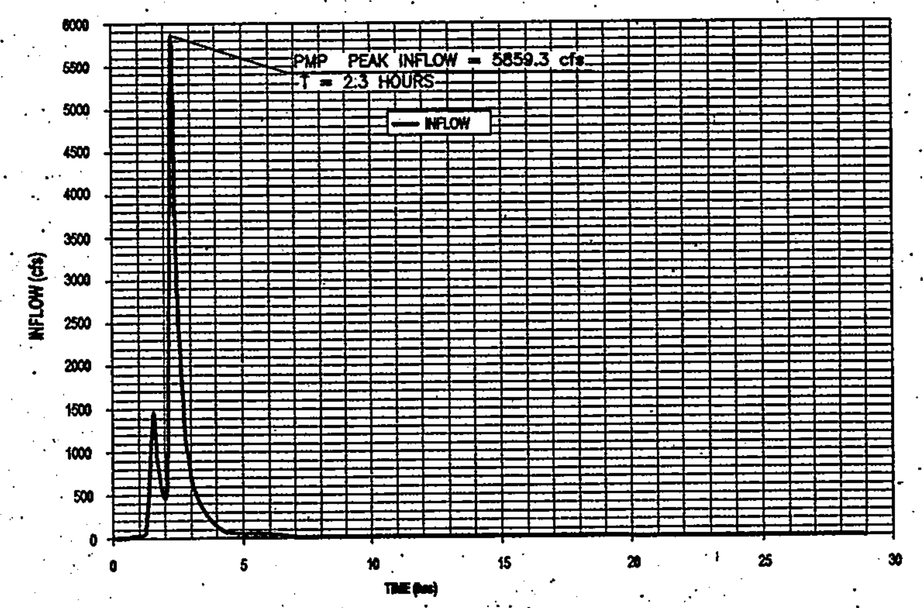
100 – YR. OUTFLOW HYDROGRAPH



RESERVOIR WATER STORAGE CAPACITY CURVE

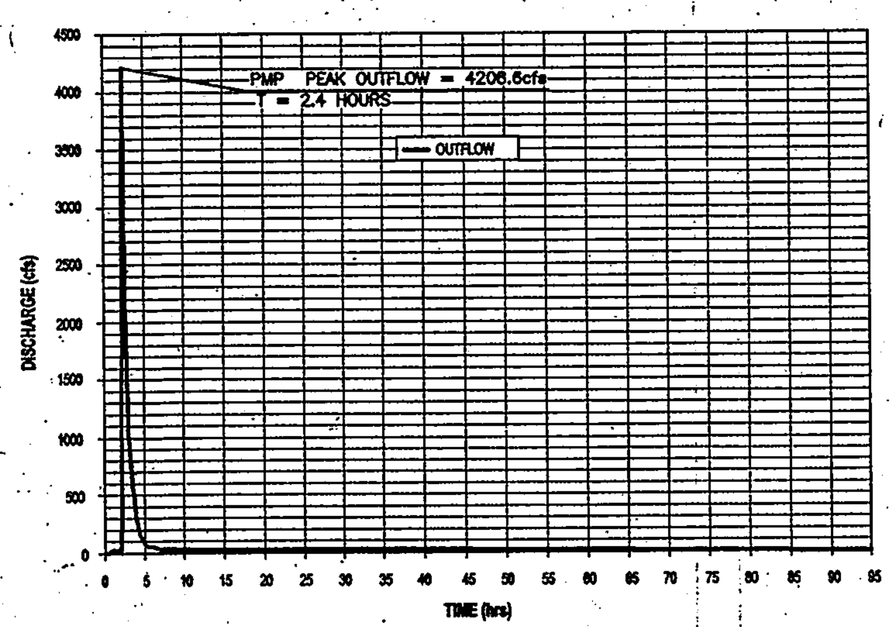


RESERVOIR AREA CAPACITY CURVE

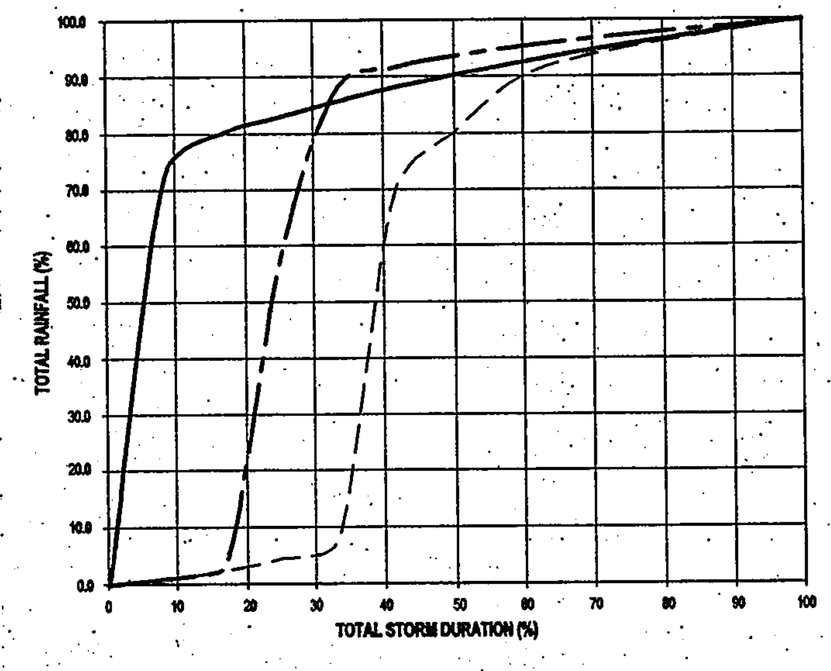


PMP INFLOW HYDROGRAPH

NOTE: PMP INFLOW HYDROGRAPH DEVELOPED FROM MAXIMUM CAPACITY OF STORM DRAIN INLET LINES PLUS RUNOFF FROM PORTION OF DRAINAGE AREA THAT DRAINS TO DETENTION POND BY OVERLAND (SURFACE) MEANS.



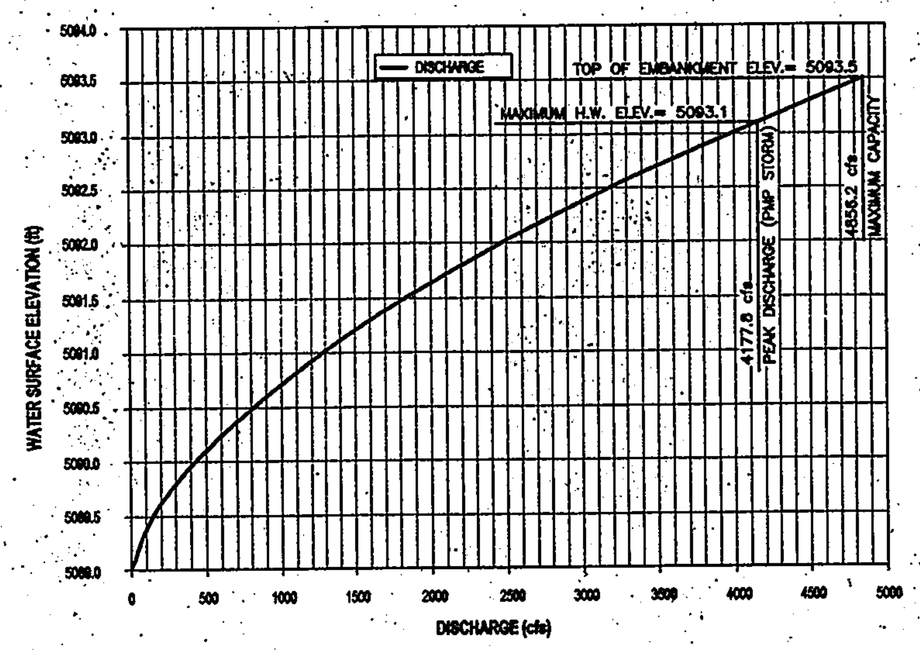
PMP OUTFLOW HYDROGRAPH



RAINFALL DISTRIBUTION – 100 YR. & PMP

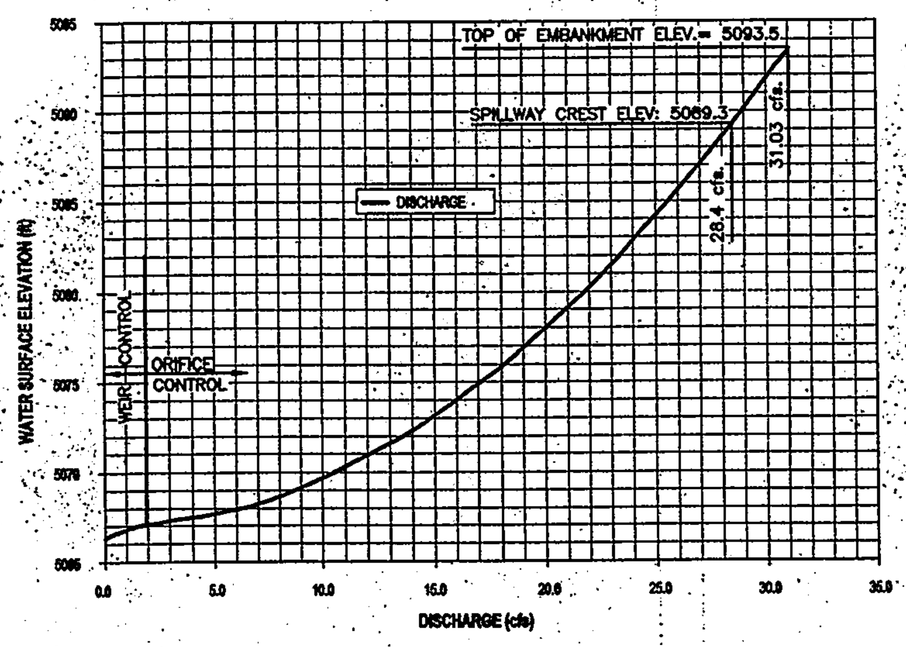
LEGEND

- 100 YR. – 24 HR. (2.66 IN.)
- 100 YR. – 6 HR. (2.21 IN.)
- 6 HR. – PMP (15.73 IN.)



EMERGENCY SPILLWAY DISCHARGE RATING

$Q = (2.689)(L)(H)^{3/2} + (2)(2.689)(12)(L)(1/2H)^{3/2}$
$L = 151$ ft.

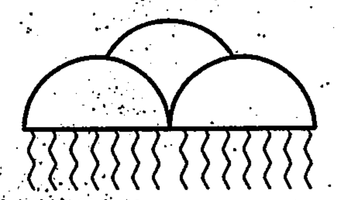


PRINCIPAL SPILLWAY DISCHARGE RATING

WEIR = $Q = (2.63)(L)(H)^{3/2}$ L= 1.00 ft.
ORIFICE = $Q = (0.6)(A)(2GH)^{1/2}$ A= 1.25 sq.ft.

REFERENCE NOTES :

1. SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL VOLUME 2, DESIGN CRITERIA FOR THE CITY OF ALBUQUERQUE, NEW MEXICO, JANUARY 1993.
2. NEW MEXICO DAM SAFETY DESIGN CRITERIA 1999 EDITION.
3. AMOLE–HUBBEL DRAINAGE MANAGEMENT PLAN, LEEDSHILL–HERKENHOFF INC., JULY 1999.
4. TOWER/SAGE DRAINAGE MASTER PLAN ANDREWS, ASBURY & ROBERT, INC., OCTOBER 1997.
5. SPECIAL ASSESSMENT DISTRICT 222 DRAINAGE ANALYSIS, THE LARKIN GROUP, MAY 2000.
6. GEOTECHNICAL ENGINEERING SPECIAL ASSESSMENT DISTRICT 222, GEO–TEST, JULY 1997.



THE LARKIN GROUP, PE
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ALBUQUERQUE, NEW MEXICO 87112
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FAX (505) 275–0748

REGISTERED PROFESSIONAL ENGINEER STATE OF NEW MEXICO JOHN A. ANDREWS

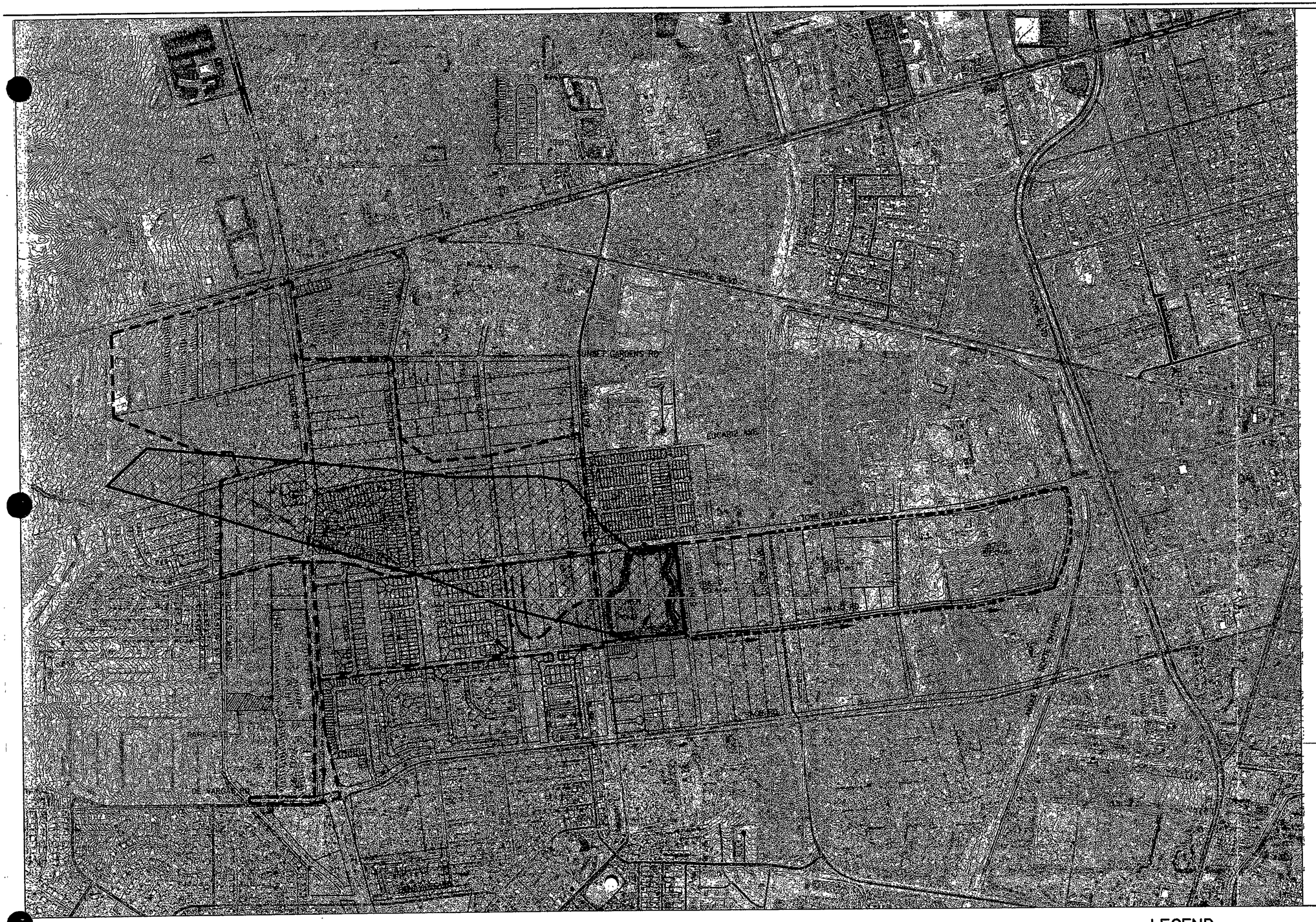
RECORD DRAWING
01/02

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

TOWER/SAGE PARK, DETENTION POND AND OUTFALL PIPE

HYDROLOGY DATA

DRAWING NO.	MAP NO.	SHEET	OF
4188.91	L & M–9	2	25



DRAINAGE AREA MAP
SCALE: 1" = 500'

LEGEND

- DRAINAGE AREA BOUNDARY
- SUB-AREA BOUNDARY
- SURFACE FLOW DIRECTION
- DRAINAGE BASIN BOUNDARY OVERLAND FLOW-PMP STORM

SCALE: 1"=500'

NOTES:
TOTAL DRAINAGE BASIN
AREA = 456 ACRES
OVERLAND FLOW – PMP
STORM = 211 ACRES

CONTRACTOR SHALL HAUL APPROX. 10,000 CY OF "FILL" MATERIAL TO THE PARK SITE. THE PARK SITE SHALL BE CLEARED AND GRUBBED PRIOR TO PLACEMENT OF "FILL" MATERIAL. MATERIAL SHALL BE BE PLACED WITH MOISTURE SUITABLE FOR DUST CONTROL AND WITH NO OTHER COMPACTION REQUIREMENTS. THIS WORK IS CONSIDERED INCIDENTAL TO THE UNCLASSIFIED EXCAVATION AND FILL ITEM NO. 6 AND NO SEPARATE PAYMENT WILL BE MADE THERFOR.

RECORD DRAWING
01/02

AS BUILT INFORMATION
CONTRACTOR CHAVA TRUCKING DATE 06/01
CHECKED BY CHAVA TRUCKING DATE 10/01
SURVEYED BY AMAFCA DATE 10/01
FIELD VERIFICATION BY LARKIN GROUP DATE 10/01
DRAWING BY LARKIN GROUP DATE 01/02
MICRO-FILM INFORMATION
REVIEWED BY ____ DATE ____
ACCEPTED BY ____ DATE ____

BENCH MARKS
CITY OF ALBUQUERQUE CONTROL STATION 7-19.
STATION IS LOCATED 39.2 FT. WEST FROM CENTERLINE OF 98th. ST. AND 31.0 FT. SOUTH FROM CENTERLINE OF TOWER RD. STATION IS A STANDARD C.O.A. BRASS CAP. SET IN CONCRETE 0.4 FT. ABOVE GROUND AND STAMPED "7-19" ELEVATION = 5176.735.

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
1		
2		
3		
4		
5		
6		
7		

ENGINEER'S SEAL
JOHN A. ANDREWS
NEW MEXICO 9680
REGISTERED PROFESSIONAL ENGINEER
STATE OF NEW MEXICO

NO.	DATE	REMARKS	BY
4			
3			
2			
1			

REVISIONS

DESIGN
DESIGNED BY D. Bishop DATE: OCT. 2000
DRAWN BY T. Gennen DATE: OCT. 2000
CHECKED BY J. Andrews DATE: OCT. 2000

THE LARKIN GROUP
6500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7600
FAX (505) 275-0748

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: TOWER / SAGE PARK, DETENTION POND AND OUTFALL PIPE
DRAINAGE AREA MAP

Design Review Committee	City Engineer Approval	Last Design Updates	Mo./Day/Yr.	Mo./Day/Yr.

City Project No. 4188.91 | Zone Map No. L & M-9 | Sheet 3 of 25

K:\ALBQDETS\TOWERPOND\POND\LOCATION.dwg

Map No. 1 - Drainage Area Map

MOBILIZATION

MOBILIZATION IS PAID AS A LUMP SUN ITEM FOR THIS PROJECT.

CONSTRUCTION STAKING

CONSTRUCTION STAKING IS PAID AS A LUMP SUM ITEM FOR THIS PROJECT.

FIELD OFFICE

ONE (1) FIELD OFFICE IS REQ'D AND PAID AS A LUMP SUM ITEM FOR THIS PROJECT.

PROTECTION OF PROJECT FROM WATER DURING CONSTRUCTION

PROTECTION OF PROJECT IS PAID A LUMP SUM AN ITEM FOR THIS PROJECT.

BASE COURSE (6" THICK)

LOCATION SEE SHT 1-6 FOR LOCATIONS	LENGTH (FT)	WIDTH (FT)	QUANTITY (SY)
TOP OF DAM MAINTENANCE ROAD (STA. 10+25 TO STA. 28+25)	1800	15	3000.0
MAINTENANCE ROAD #1	186.7	12	249.0
MAINTENANCE ROAD #2	171.0	12	229.0
PEDESTRIAN ACCESS RAMP 1	173.6	8	155.0
PEDESTRIAN ACCESS RAMP 2	173.6	8	155.0
PEDESTRIAN ACCESS RAMP 3	223.6	8	200.0
PEDESTRIAN ACCESS RAMP 4	107.3	8	96.0
PEDESTRIAN ACCESS RAMP 5	105.2	8	96.0
PEDESTRIAN ACCESS RAMP 6	175.0	8	160.0
PEDESTRIAN ACCESS RAMP 7	175.0	8	160.0
TOTAL			4500.0

* INCLUDES FILLETS

RIPRAP

LOCATION SEE SHEET 1-6 FOR LIMITS	QUANTITY (CY)
AREA INLET 1	10.0
AREA INLET 2	10.0
AREA INLET 3	10.0
TOTAL	30.0

GRANULAR FILTER MATERIAL (FOR RIP RAP)

LOCATION	QUANTITY (CY)
AREA INLET 1	10.0
AREA INLET 2	10.0
AREA INLET 3	10.0
TOTAL	30.0

FENCE GATES

LOCATION	QUANTITY	REMARKS
AT MAINTENANCE ROAD	2	2 GATES WILL BE PAID FOR AS A BID ITEM PER EACH.

EARTHWORK SUMMARY

LOCATION	CUT (CY)	EMBANKMENT (CY)	SHRINK (30%) (CY)	HAUL TO PARK SITE (CY)	WASTE (CY)
DAM EMBANKMENT & POOL INCLUDING ALL ACCESS RAMPS	100,000	24,000	7,200	10,000	62,310*
TOTAL	100,000	24,000	7,200	10,000	62,310*

* WASTE INCLUDES EXCESS MATERIAL FROM STORM DRAIN INSTALLATION

EMBANKMENT FOUNDATION

DESCRIPTION	LOCATION	REMARK
5' (DEPTH) PREWET AND VIBRATORY COMPACT	STA. 10+50 TO 27+00	LS

STORM DRAIN

DESCRIPTION	UNIT	QUANTITY
18" CLASS IV RCP	LF	349
30" CLASS IV RCP	LF	32
36" CLASS IV RCP	LF	1,175
48" CLASS IV RCP	LF	1,025
54" CLASS IV RCP	LF	3,131
90" CLASS IV RCP	LF	199
96" CLASS IV RCP	LF	249

STORM DRAIN MANHOLES

DESCRIPTION	UNIT	QUANTITY
4' DIAMETER TEE TYPE	EA	14
6' DIAMETER MANHOLE	EA	2

PRINCIPAL SPILLWAY

DESCRIPTION	UNIT	QUANTITY
36" CCP	LF	272

EMERGENCY SPILLWAY BOULDERS

LOCATION	UNIT	QUANTITY
EACH SIDE OF SPILLWAY	CY	37

STRUCTURAL CONCRETE (CLASS A)

LOCATION	QUANTITY (CY)
* INLET / OUTLET STRUCTURE JUNCTION BOX 1	30
* INLET STRUCTURE-JUNCTION BOX 2	27
* ANTI-SEEP COLLARS	
(36" PRINCIPAL SPILLWAY-1.1 CY EA)	4.4
TOTAL	61.4

* INCLUDES CONCRETE, REINF., FORMS FINISH, DOWELS, CURING WATER STOPS AND OTHER CONCRETE ACCESSORIES.

CONCRETE FOR INLET PAD (CLASS A)

LOCATION	QUANTITY (cy)
INLET / OUTLET STRUCTURE JUNCTION BOX 1	30
INLET STRUCTURE-JUNCTION BOX 2	26
TOTAL	56

CONCRETE CUT-OFF WALLS (CLASS A)

LOCATION	QUANTITY (cy)
EDGE OF ROADWAY (WITH OUT REINFORCING)	38
EMERGENCY SPILLWAY	49
TOTAL	87

6-INCH SHOTCRETE

LOCATION	QUANTITY (SY)
EMERGENCY SPILLWAY	1200

PATTERNED CONCRETE

LOCATION	QUANTITY (SY)
BETWEEN SIDEWALK AND CURB	260

CLEARING AND GRUBBING

LOCATION	QUANTITY (AC)
WITHIN DAM AND PARK SITE	7.0

REVEGETATIVE SEEDING

LOCATION	QUANTITY (AC)
ALL DISTURBED AREAS; EXCLUDING AREAS COVERED BY STRUCTURES.	20.0

GRAVEL MULCH

LOCATION	QUANTITY (SY)
DOWNSTREAM FACE	4,900

NOTE: FOR INFORMATION ONLY, SEE BID PROPOSAL FOR SPECIFIC PAY ITEMS

AS BUILT INFORMATION
CONTRACTOR: CHAVA TRUCKING
STAKED BY: CHAVA TRUCKING DATE: 06/01
INSPECTED BY: AMAFCA DATE: 10/01
FIELD VERIFICATION BY: LARKIN GROUP DATE: 09/01
REVIEWED BY: LARKIN GROUP DATE: 01/02
CORRECTED BY: MICRO-FILM INFORMATION
RECORDED BY: DATE:
RECORDED BY: DATE:
RECORDED BY: DATE:

BENCH MARKS
CITY OF ALBUQUERQUE CONTROL STATION 7-L9.
STATION IS LOCATED 30.2 FT. WEST FROM CENTERLINE OF 98th. ST. AND 31.0 FT. SOUTH FROM CENTERLINE OF TOWER RD. STATION IS A STANDARD C.O.A BRASS CAP SET IN CONCRETE 0.4 FT. ABOVE GROUND AND STAMPED "7-L9" ELEVATION = 5175.735.

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
1		
2		
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ENGINEER'S SEAL
STATE OF NEW MEXICO — PROFESSIONAL ENGINEER — No. 9781 — JOHN A. ANDREWS

John A. Andrews
RECORD DRAWING
01/02

NO.	DATE	REVISIONS	BY
1	Oct. 2000	DESIGN	
2	Oct. 2000	DESIGNED BY: D. Bishop	
3	Oct. 2000	DRAWN BY: T. Carmen	
		CHECKED BY: J. Andrews	

THE LARKIN GROUP, P.A.
8500 MENAUL NE, SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: TOWER / SAGE PARK, DETENTION POND AND OUTFALL PIPE
SUMMARY OF QUANTITIES

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No.	Zone Map No.	Sheet	of
4188.91	L-10-Z	4	25

K:\AL900572\TOWERPOND\TITLE\QUANTITY.dwg

GENERAL NOTES :

1. New Mexico State Highway Department "Standard Specifications for Road and Bridge Construction, edition of 1994," and supplemental specifications and special provisions thereto shall govern construction of this project.

2. Elevations are shown in feet above mean sea level datum.

3. All stationing for the dam and outfall pipe refer to the measured horizontal distance. Left and right of centerline are looking in the direction of increasing station.

4. Prior to construction, the Contractor shall excavate and verify the horizontal and vertical locations of all obstructions. Should a conflict exist, notify the Project Manager so that locations of all obstructions. the conflict can be resolved with a minimum amount of delay. This item shall be considered incidental and no separate payment will be made therefor.

5. When coordinates are shown herein (N,E) they refer to the New Mexico State Plane Coordinate System. Coordinates are based on true ground distances and state grid bearings. Grid Distance = Field Distance x 0.99967727

6. Right-of-way shown on the plans define "Limits of Work" for this project. The Contractor shall confine his operations to the construction limits of the project and will be held responsible for any agreements necessary or damage by his operation to public or private property including utilities.

7. Fill materials from excavation which require more than one handling prior to final placement, including stockpiling and blending to meet gradation requirements or stockpiling for later disposal, will be considered incidental to the contract unit price for unclassified excavation. No separate payment shall be made for blending or multiple handling and final payment shall be made on the basis of quantities removed from the original location.

8. The Contractor, at their expense, shall provide and make arrangements for water and other utilities required. The contractor shall be responsible for the coordination of all utilities.

9. Contractors' yard, and any other disturbed areas not included on the plans, shall be treated with Class "A" seeding, and no measurement or payment will be made therefor.

10. The Air Pollution Control Regulations of the Albuquerque – Bernalillo County Air Quality Control Board limit emission of particulate matter and the use of cut back asphalt. It is the responsibility of the Contractor to clarify these restrictions with the Environmental Health Department prior to submittal of bids to avoid conflicts with regulations.

11. Watering, as required for construction and dust control, shall be considered incidental to construction and no measurement or payment shall be made therefor. Construction areas shall be watered with equipment for dust pollution abatement as directed by the Engineer. The Contractor shall be responsible for locating and supplying water as required.

12. The Contractor will be responsible to replace at his own expense any and all property corners destroyed in the process of construction. All property corners must be set by a Registered Professional Surveyor.

13. No payment above the cost of excavation will be made for placement of surplus fill to any designated waste areas or the Contractor located disposal site. Contractor shall haul 10,000 CY of material to the Park Site designated on Sheet 3, no separate payment for the hauling of material to the Park Site will be made therefor.

14. Place strippings over dam slopes and other disturbed areas prior to seeding as directed by the Project Manager. Cost of this work shall be incidental to the cost of the item clearing and grubbing.

15. This project is constructed under the authority of the State Engineer, State of New Mexico. The State Engineer, or his designated agent, shall have full power regarding inspection during construction, and full power to act if specifications are not met.

16. Minor changes in elevations and slopes for excavation and fill may be made to suit field conditions, as approved by the Project Manager.

TOWER / SAGE DETENTION POND
CENTERLINE CURVE DATA TABLE

NO.	RADIUS (FT)	LENGTH (FT)	TANGENT (FT)	DELTA	DIRECTION
1	300.00	42.89	21.38	8°09'14"	RIGHT
2	300.00	42.89	21.38	8°09'14"	LEFT
3	150.00	46.00	23.18	17°34'13"	RIGHT
4	150.00	45.85	23.00	17°28'08"	LEFT
5	40.50	55.28	33.76	79°37'11"	LEFT
6	69.42	46.56	24.19	38°25'21"	LEFT
7	150.00	163.19	90.73	62°20'09"	RIGHT
8	250.00	281.45	157.75	64°30'14"	LEFT
9	195.48	63.04	31.79	18°28'35"	RIGHT
10	93.00	77.32	41.41	48°00'28"	RIGHT
11	231.89	140.88	72.89	34°48'29"	LEFT
12	113.50	183.00	118.32	92°22'59"	LEFT
13	250.00	19.37	9.69	4°26'21"	LEFT
14	250.00	19.37	9.69	4°26'21"	RIGHT
15	100.00	39.31	19.91	22°31'13"	RIGHT
16	120.00	195.92	127.89	93°32'36"	LEFT
17	25.00	26.03	14.34	59°40'00"	RIGHT
18	150.00	195.09	114.10	74°31'08"	LEFT
19	120.00	204.17	136.80	97°29'09"	LEFT
20	100.00	40.74	20.66	23°20'38"	LEFT
21	100.00	46.23	23.53	26°29'09"	RIGHT

TOWER / SAGE DETENTION POND
CENTERLINE DATA TABLE

NO.	STATION	BEARING	DISTANCE
BOP	10+00.00	N83°42'30"E	152.05
1	11+52.05	S88°06'16"E	42.77
2	11+94.75	N63°42'30"E	93.91
3	12+88.58	S78°43'17"E	46.18
4	13+34.49	N83°59'3"E	126.37
5	14+60.42	N04°13'26"E	107.18
6	15+66.38	N34°11'56"W	208.47
7	17+63.00	N28°08'14"E	248.48
8	19+93.22	N36°21'00"W	180.54
9	21+48.71	N11°33'22"W	73.21
10	22+21.37	N30°00'03"E	114.1
11	23+30.57	N04°41'26"W	191.01
12	25+17.07	S82°56'36"W	128.01
13	25+91.45	S78°28'18"W	59.36
14	26+10.82	S48°52'53"W	202.72
15	28+13.52	N74°33'06"W	147.57
16	29+60.58	S11°54'46"W	507.77
17	34+08.34	S71°34'17"W	196.81
18	36+02.91	S02°36'51"E	562.49
19	41+32.29	N78°34'02"E	322.49
20	43+45.36	N58°13'22"E	44.19
21	44+28.98	N82°42'36"E	23.53
EOP	44+51.67		

MAINTENANCE ROAD #2
CURVE DATA TABLE

NO.	RADIUS (FT)	LENGTH (FT)	TANGENT (FT)	DELTA	DIRECTION
1	57.00	1.89	0.95	1°42'02"	LEFT
2	36.00	23.09	11.96	36°44'34"	RIGHT

MAINTENANCE ROAD #2
CENTERLINE DATA TABLE

NO.	STATION	BEARING	DISTANCE
BOP	5+00.00	N75°55'00"W	23.82
1	5+23.82	N77°37'02"W	128.42
2	6+50.24	N46°52'23"W	37.25
EOP	* 6+86.86		

* Sta. 6+86.86 = Sta. 28+91.85 on Centerline

MAINTENANCE ROAD #1
CURVE DATA TABLE

NO.	RADIUS (FT)	LENGTH (FT)	TANGENT (FT)	DELTA	DIRECTION
1	50.00	31.08	16.07	35°37'32"	RIGHT
2	50.00	28.38	15.13	33°46'10"	LEFT

MAINTENANCE ROAD #1
CENTERLINE DATA TABLE

NO.	STATION	BEARING	DISTANCE
BOP	5+00.00	S34°14'37"W	50.57
1	5+50.57	S69°52'08"W	97.38
2	6+46.81	S36°11'59"W	24.83
EOP	* 6+70.96		

* Sta. 6+70.96 = Sta. 111+62.52, 7.5' Lt. of Centerline

PEDESTRIAN ACCESS #1
CURVE DATA TABLE

NO.	RADIUS (FT)	LENGTH (FT)	TANGENT (FT)	DELTA	DIRECTION
1	100.00	28.47	14.31	15°9'00"	LEFT
2	25.00	25.03	13.88	57°21'58"	RIGHT

PEDESTRIAN ACCESS ROAD #1
CENTERLINE DATA TABLE

NO.	STATION	BEARING	DISTANCE
BOP	5+00.00	N5°30'09"W	72.36
1	5+72.36	N30°30'09"W	81.66
2	6+53.86	N38°51'50"E	22.11
EOP	* 6+73.65		

* Sta. 6+73.65 = Sta. 21+76.82, 7.5' Lt. of Centerline

PEDESTRIAN ACCESS #2
CURVE DATA TABLE

NO.	RADIUS (FT)	LENGTH (FT)	TANGENT (FT)	DELTA	DIRECTION
1	100.00	28.47	14.31	15°9'00"	RIGHT
2	25.00	25.03	13.88	57°21'58"	LEFT

PEDESTRIAN ACCESS #2
CENTERLINE DATA TABLE

NO.	STATION	BEARING	DISTANCE
BOP	5+00.00	S05°25'41"E	72.36
1	5+72.36	S09°44'59"W	81.66
2	6+53.86	S47°37'49"E	22.11
EOP	* 6+73.65		

* Sta. 6+73.65 = Sta. 17+98.28, 7.5' Lt. of Centerline

PEDESTRIAN ACCESS #3
CURVE DATA TABLE

NO.	RADIUS (FT)	LENGTH (FT)	TANGENT (FT)	DELTA	DIRECTION
1	100.00	28.47	14.31	15°10'00"	RIGHT
2	25.00	25.03	13.88	57°21'58"	LEFT

PEDESTRIAN ACCESS ROAD #3
CENTERLINE DATA TABLE

NO.	STATION	BEARING	DISTANCE
BOP	5+00.00	N14°15'51"W	122.36
1	6+22.36	N00°54'09"E	81.66
2	7+03.86	N58°27'50"W	22.11
EOP	* 7+23.65		

* Sta. 7+23.65 = Sta. 32+18.24, 7.5' Lt. of Centerline

PEDESTRIAN ACCESS #4
CURVE DATA TABLE

NO.	RADIUS (FT)	LENGTH (FT)	TANGENT (FT)	DELTA	DIRECTION
1	25.00	12.54	6.49	28°44'06"	RIGHT
2	25.00	8.71	4.40	19°57'22"	RIGHT
3	25.00	17.96	9.39	41°10'08"	RIGHT

PEDESTRIAN ACCESS #4
CENTERLINE DATA TABLE

NO.	STATION	BEARING	DISTANCE
BOP	* 12+73.15	N59°19'47"E	10.34
1	12+83.49	N84°03'57"E	61.67
2	13+45.10	S75°58'42"E	25.55
3	13+70.58	S05°46'34"E	10.71
EOP	13+80.46		

* Sta. 12+73.15, 7.5' Lt. of Centerline

PEDESTRIAN ACCESS #5
CURVE DATA TABLE

NO.	RADIUS (FT)	LENGTH (FT)	TANGENT (FT)	DELTA	DIRECTION
1	25.00	17.96	9.39	41°10'08"	RIGHT
2	25.00	11.83	6.03	27°06'47"	RIGHT
3	50.00	9.15	4.59	10°29'21"	RIGHT

PEDESTRIAN ACCESS ROAD #5
CENTERLINE DATA TABLE

NO.	STATION	BEARING	DISTANCE
BOP	* 15+27.75	N82°17'45"W	10.71
1	15+38.46	N41°07'37"W	27.66
2	15+65.30	N14°00'36"W	52.17
3	16+17.25	N03°31'29"W	15.78
EOP	16+33.00		

PEDESTRIAN ACCESS #6
CURVE DATA TABLE

NO.	RADIUS (FT)	LENGTH (FT)	TANGENT (FT)	DELTA	DIRECTION
1	75.00	10.88	5.35	8°09'44"	RIGHT

PEDESTRIAN ACCESS ROAD #6
CENTERLINE DATA TABLE

NO.	STATION	BEARING	DISTANCE
BOP	* 5+00.00	N11°32'12"E	75.21
1	5+75.21	N19°41'58"E	31.13
EOP	6+06.32		

* Sta. 5+00.00 = Sta. 34+38.91, 7.5' Rt. of Centerline

PEDESTRIAN ACCESS #7
CURVE DATA TABLE

NO.	RADIUS (FT)	LENGTH (FT)	TANGENT (FT)	DELTA	DIRECTION
1	75.00	14.91	7.48	11°23'32"	LEFT

PEDESTRIAN ACCESS ROAD #7
CENTERLINE DATA TABLE

NO.	STATION	BEARING	DISTANCE
BOP	* 5+00.00	N73°43'19"E	78.84
1	5+78.84	N62°19'48"E	33.62
EOP	6+12.46		

* Sta. 5+00.00 = Sta. 25+38.76, 7.5' Rt. of Centerline

AS BUILT INFORMATION
CONTRACTOR CHAVA TRUCKING
WORK STAKED BY CHAVA TRUCKING DATE 8/01
ACCEPTANCE BY AMAFCA DATE 10/01
FIELD VERIFICATION BY LARKIN GROUP DATE 10/01
DRAWINGS COMPILED BY LARKIN GROUP DATE 01/02
MICRO-FILM INFORMATION
ACCEPTED BY DATE
ACCEPTED BY DATE
ACCEPTED BY DATE

BENCH MARKS
. CITY OF ALBUQUERQUE CONTROL STATION 7-L9.
STATION IS LOCATED 36.2 FT. WEST FROM CENTERLINE OF 98th. ST. AND 31.0 FT. SOUTH FROM CENTERLINE OF TOWER RD. STATION IS A STANDARD C.O.A BRASS CAP SET IN CONCRETE 0.4 FT. ABOVE GROUND AND STAMPED "7-L9" ELEVATION = 5175.735.

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
1		
2		
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ENGINEER'S SEAL
JOHN A. ANDREWS
NEW MEXICO
10918
REGISTERED PROFESSIONAL ENGINEER
STATE OF NEW MEXICO

RECORD DRAWING 01/02

NO.	DATE	REVISIONS	BY
1	OCT. 2000	DESIGN	
2	OCT. 2000		
3	OCT. 2000		

DESIGNED BY: D.B.
DRAWN BY: T.C.
CHECKED BY: J.A.

THE LARKIN GROUP, P.A.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
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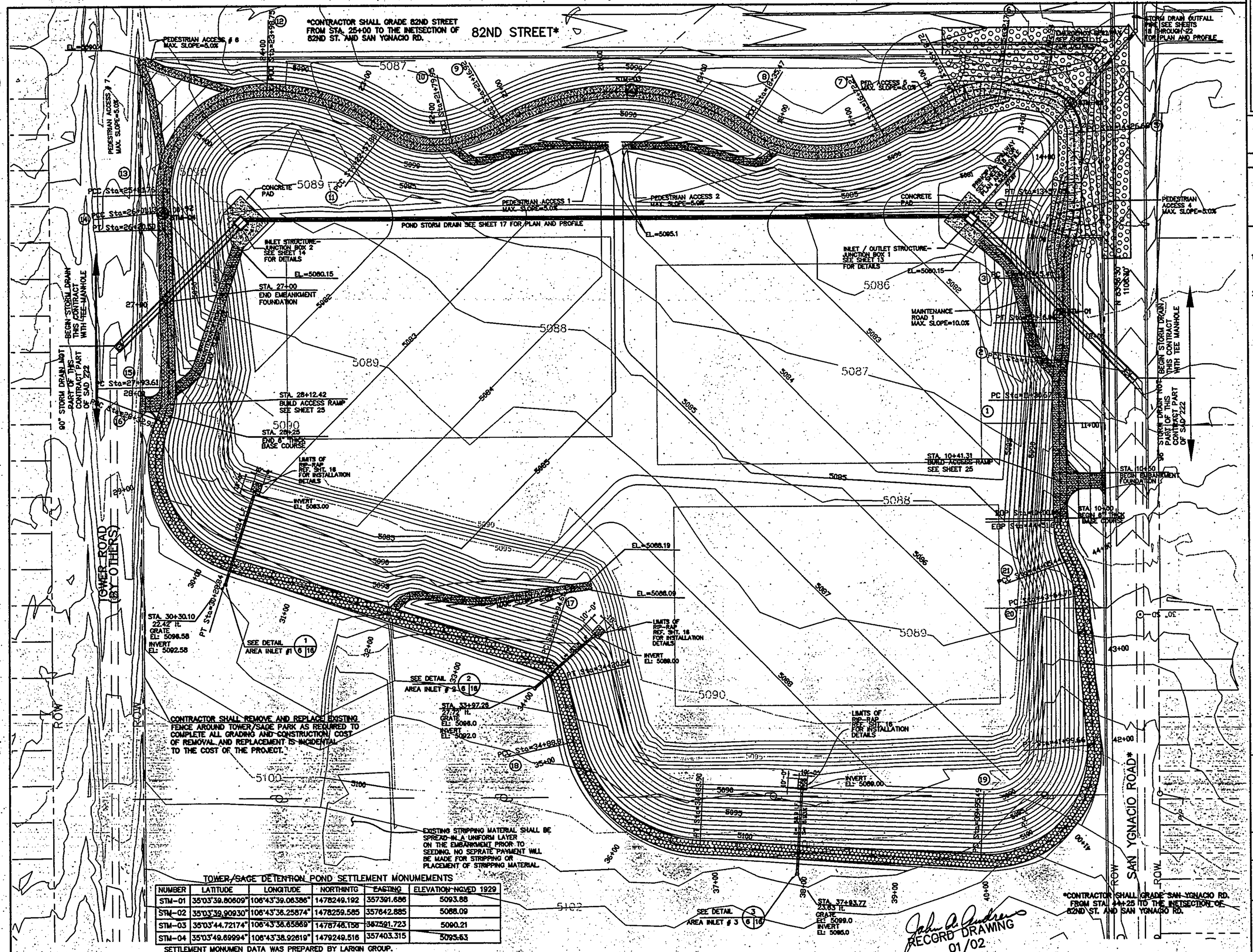
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: **TOWER / SAGE PARK, DETENTION POND AND OUTFALL PIPE**
GENERAL NOTES / SITE CONTROL

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No. 4188.91 | Zone Map No. L-10-Z | Sheet 5 of 25

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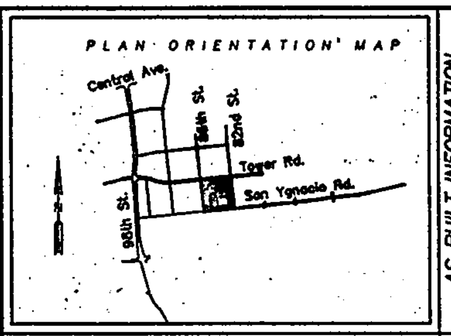


TOWER/SAGE DETENTION POND SETTLEMENT MONUMEMENTS

NUMBER	LATITUDE	LONGITUDE	NORTHINTG	EASTING	ELEVATION-NGVED 1929
STM-01	35°03'39.80609"	106°43'39.06386"	1478249.192	357391.686	5093.88
STM-02	35°03'39.90930"	106°43'36.25874"	1478259.585	357642.885	5088.09
STM-03	35°03'44.72174"	106°43'36.65869"	1478748.158	357591.723	5090.21
STM-04	35°03'49.69994"	106°43'38.92619"	1479249.516	357403.315	5093.53

SETTLEMENT MONUMEN DATA WAS PREPARED BY LARKIN GROUP.

PLAN ORIENTATION MAP



FLOOD STATISTICS

2 – yr. – ws.=	5084.8
5 – yr. – ws.=	5085.8
10 – yr. – ws.=	5086.5
25 – yr. – ws.=	5087.4
50 – yr. – ws.=	5088.0
100 – yr. – ws.=	5088.6
pmp – yr. – ws.=	5093.1

GENERAL NOTES:

1. CONTRACTOR SHALL GRADE SAN YGNACIO RD. AND 82ND ST. AS NOTED. COST IS INCIDENTAL AND NO SEPARATE MEASUREMINET AND PAYMENT WILL BE MADE THEREFOR.
2. REINFORCED CONCRETE STRUCTURES SHALL HAVE REINFORCING STEEL CONTINUOUS AT ALL CORNERS.
3. DOWELS SHALL BE PROVIDED AT ALL CONNECTIONS OF REINFORCED CONCRETE CONSTRUCTION.
4. CONCRETE STRUCTURES SHALL BE CONSTRUCTED WITH A ¾" CHAMFER ON ALL EXPOSED EDGES.
5. ALL EXPOSED CONCRETE SURFACES, EXCEPT FOR SHOTCRETE TO A MINIMUM OF 6" BELOW FINISH GRADE, SHALL BE FINISHED WITH "THOROSEAL" OR APPROVED EQUAL COLOR.
6. CONTRACTOR SHALL PROVIDE 6" SUBGRADE PREPARATION UNDER ALL NEW CONCRETE STRUCTURES, FOOTINGS AND SLABS.
7. SEE SHEET 5 FOR POND CENTERLINE AND CURVE DATA.

LEGEND

- R.O.W. — RIGHT OF WAY
- 5095 — EXISTING ELEVATIONS
- 5080 — NEW CONSTRUCTION FINISH GRADE
- ℄ TOP OF BERM WITH OUT BASE COURSE
- PEDESTRIAN ACCESS WITH 6" BASE COURSE
- ℄ TOP OF BERM WITH WITH 6" BASE COURSE
- CONCRETE PADS
- ℄ TOP OF BERM @ EMERGENCY SPILLWAY
- LIMITS OF RIPRAP
- BOULDERS
- (1) CURVE NUMBER SEE SHEET 5

SCALE 1"=50'

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FAX (505) 275-0748

AS BUILT INFORMATION
CONTRACTOR: CHAVA TRUCKING — DATE: 08/01
WORK STAKED BY: CHAVA TRUCKING — DATE: 08/01
ACCEPTED BY: AMAFCA — DATE: 10/01
FIELD INSPECTION BY: LARKIN GROUP — DATE: 10/01
CORRECTIONS BY: LARKIN GROUP — DATE: 01-02
MICRO-FILM INFORMATION
RECORDED BY — DATE
RECORDED BY — DATE
RECORDED BY — DATE

BENCH MARKS
CITY OF ALBUQUERQUE CONTROL STATION 7-I-9.
STATION IS LOCATED 39.2 FT. WEST FROM CENTERLINE OF 98th. ST. AND 31.0 FT. SOUTH FROM CENTERLINE OF TOWER RD. STATION IS A STANDARD C.O.A. BRASS CAP SET IN CONCRETE 0.4 FT. ABOVE GROUND AND STAMPED "7-I-9" ELEVATION = 5175.735.

SURVEY INFORMATION
FIELD NOTES BY — DATE

NO.	BY	DATE
1		
2		
3		
4		
5		
6		
7		

ENGINEER'S SEAL
JOHN A. ANDREWS — NEW MEXICO — No. 9672 — REGISTERED PROFESSIONAL ENGINEER — STATE OF NEW MEXICO

NO.	DATE	REVISIONS	BY
1		DESIGN	
2		REMARKS	
3		DATE: OCT. 2000	
4		DATE: OCT. 2000	
		DATE: OCT. 2000	

DESIGNED BY: D. BISHOP
DRAWN BY: T. CARMAN
CHECKED BY: J. ANDREWS

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

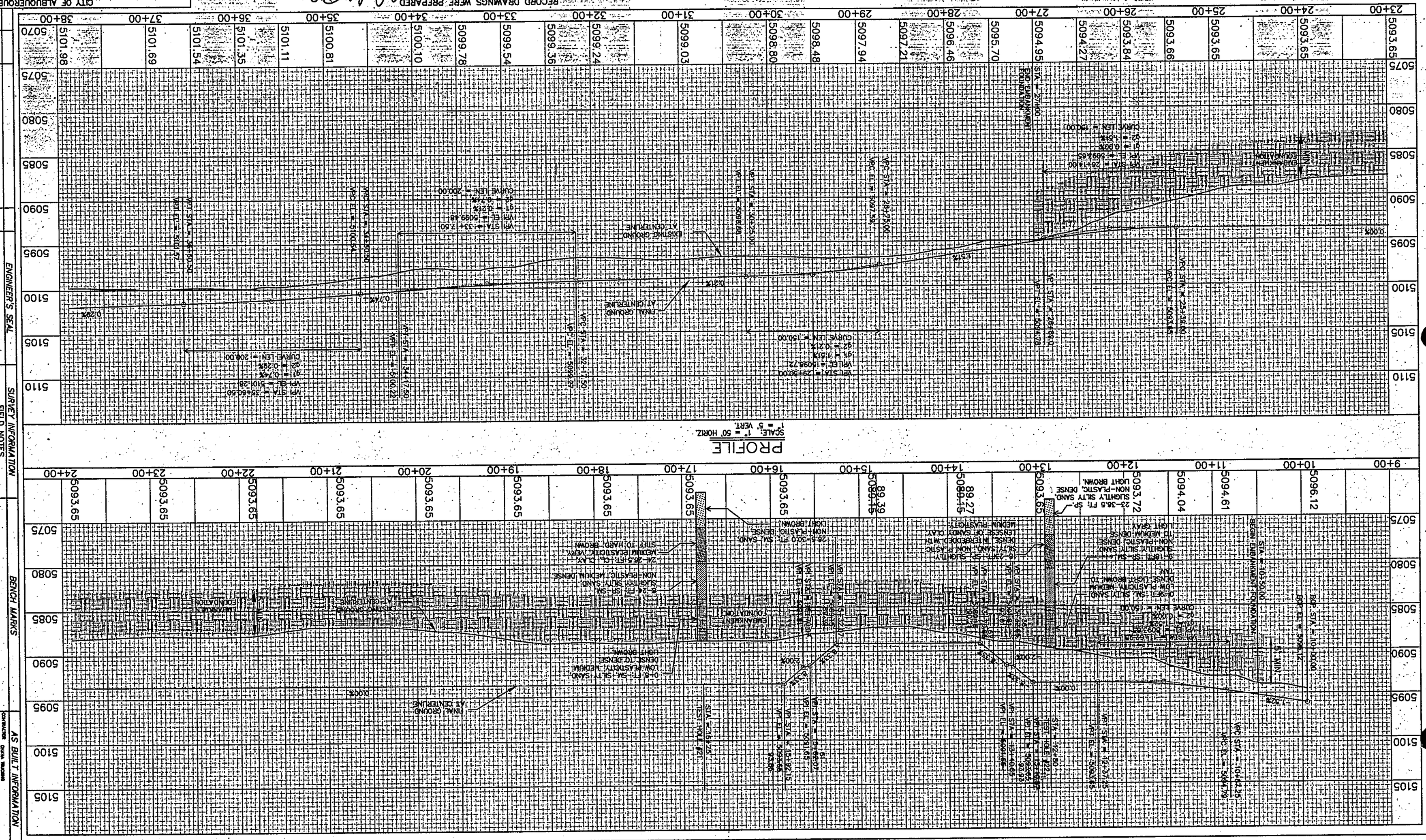
TITLE: TOWER / SAGE PARK, DETENTION POND AND OUTFALL PIPE
SITE AND GRADING PLAN

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

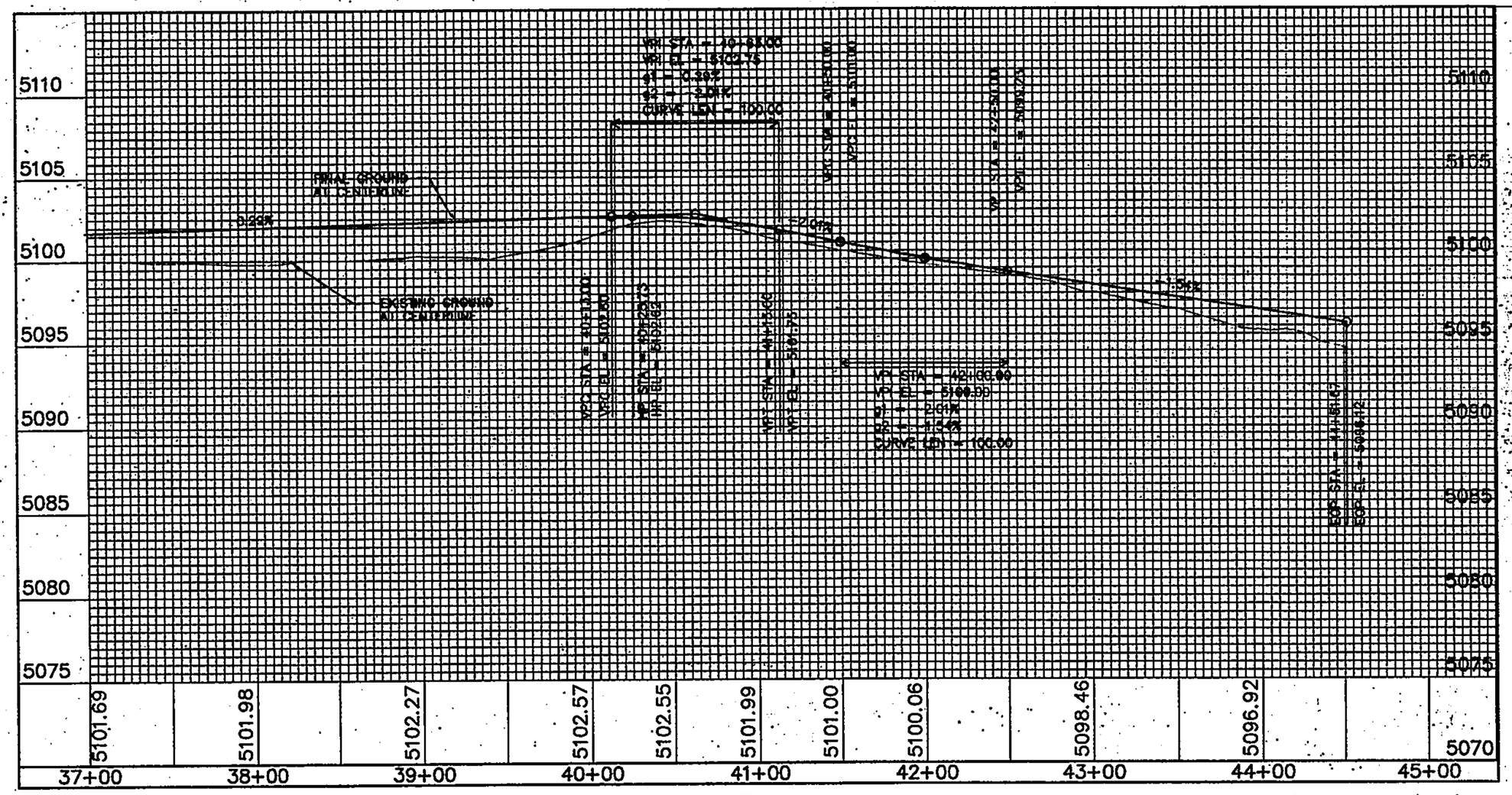
City Project No. 4188.91 — Zone Map No. L-10-Z — Sheet 6 of 25

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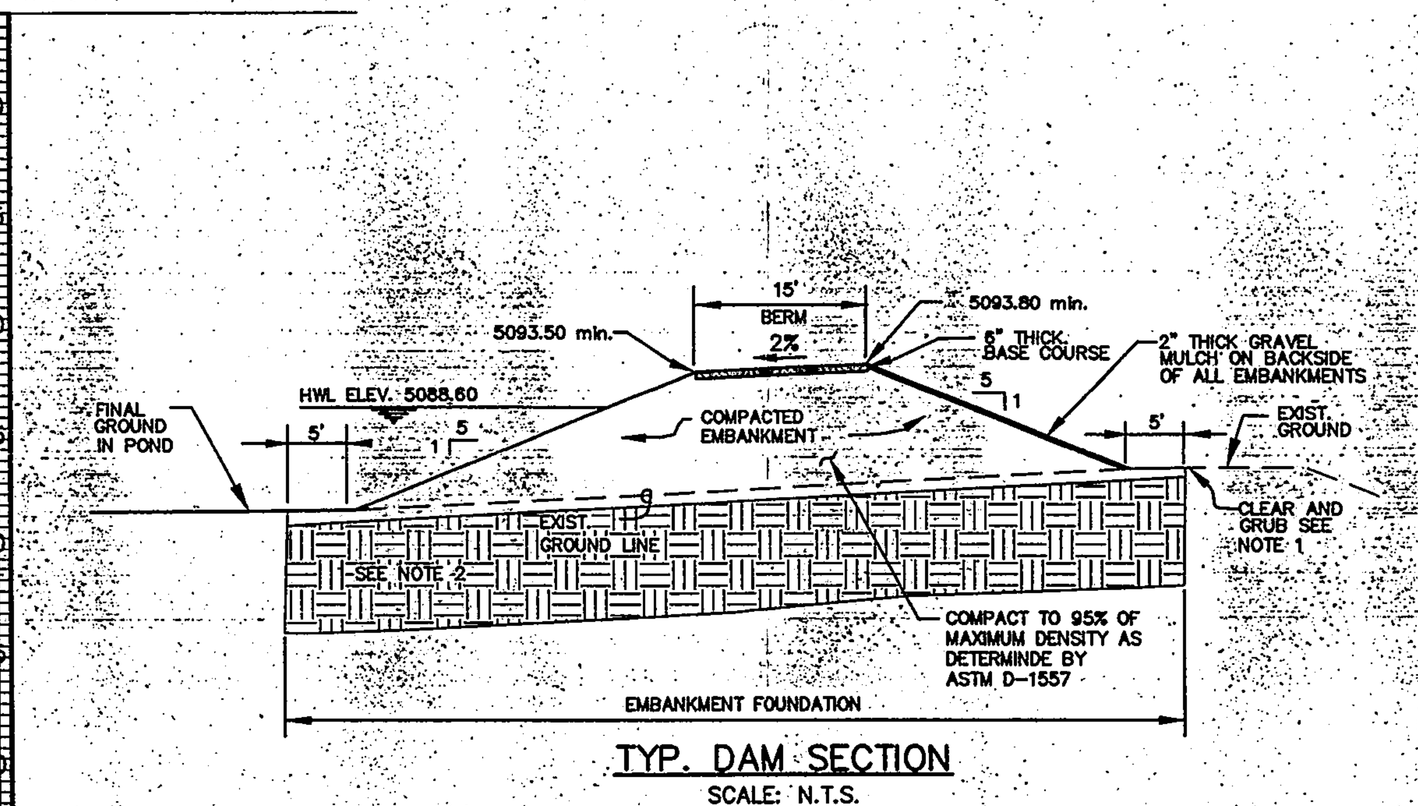


PROFILE
SCALE: 1" = 50' HORIZ.
1" = 5' VERT.
9+00
10+00
11+00
12+00
13+00
14+00
15+00
16+00
17+00
18+00
19+00
20+00
21+00
22+00
23+00
24+00
5093.65
5096.12
5094.61
5094.04
5093.72
89.39
89.15
89.27
89.15
5093.65
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5093.65
5093.65
5070
5075
5080
5085
5090
5095
5100
5105
BEGIN SUBGRADE EXCAVATION
STA = 10+50.00
BOR. EL = 5096.12
BOR. STA = 10+00.00
STA = 12+24.80
TEST HOLE #2
STA = 16+42.25
BOR. EL = 5094.78
STA = 18+57.15
BOR. EL = 5094.95
STA = 22+57.15
BOR. EL = 5094.95
STA = 15+39.15
BOR. EL = 5095.66
STA = 13+57.65
BOR. EL = 5095.65
TEST HOLE #1
VPC STA = 11+38.00
VPC EL = 5095.65
VPI STA = 11+88.00
VPI EL = 5095.65
VPC STA = 12+38.00
VPC EL = 5095.65
VPI STA = 13+57.65
VPI EL = 5095.65
VPC STA = 14+77.30
VPC EL = 5095.65
VPI STA = 15+39.15
VPI EL = 5095.65
VPC STA = 16+01.00
VPC EL = 5095.65
VPI STA = 16+42.25
VPI EL = 5094.78
VPC STA = 16+83.50
VPC EL = 5094.78
VPI STA = 17+57.65
VPI EL = 5095.65
VPC STA = 18+31.80
VPC EL = 5095.65
VPI STA = 18+57.15
VPI EL = 5094.95
VPC STA = 19+82.50
VPC EL = 5094.95
VPI STA = 22+57.15
VPI EL = 5094.95
CURVE LEN = 150.00
CURVE LEN = 150.00
CURVE LEN = 150.00



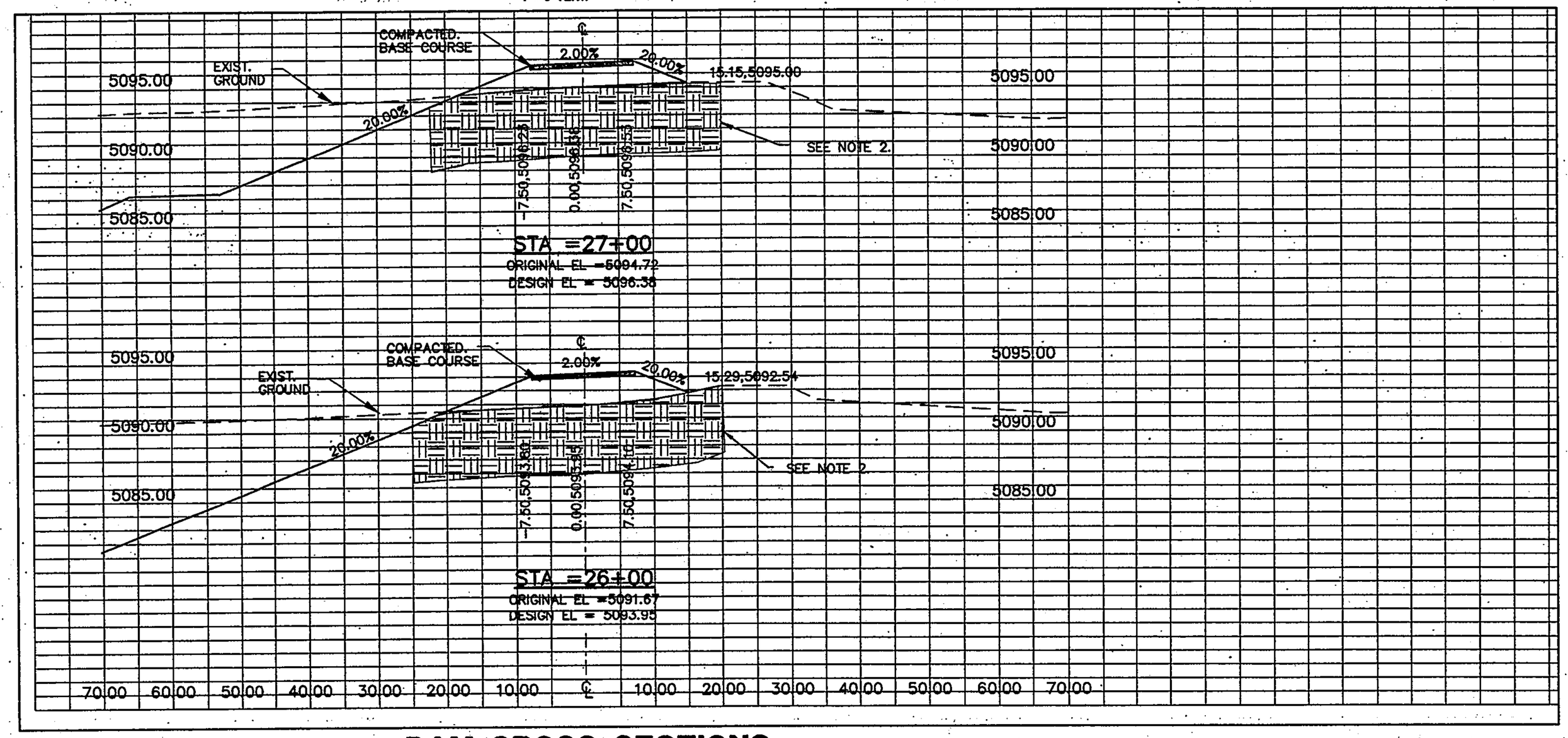
PROFILE

SCALE: 1" = 60' HORIZ.
1" = 5' VERTICAL.



TYP. DAM SECTION

SCALE: N.T.S.



DAM CROSS SECTIONS

SCALE: 1" = 10' HORIZ.
1" = 5' VERTICAL.

GENERAL NOTES

1. CLEAR GRUB AND STRIP AREAS TO RECEIVE EMBANKMENT PLACEMENT (EMBANKMENT FOUNDATION) TO A MINIMUM OF 5 FEET HORIZONTALLY BEYOND EMBANKMENT LIMITS AND TO A MINIMUM OF 6 INCHES DEEP. THIS AREA SHALL THEN BE SCARIFIED TO A DEPTH OF 8 INCHES.
2. SCARIFIED AREA TO RECEIVE EMBANKMENT PLACEMENT (EMBANKMENT FOUNDATION) SHALL BE MOISTURE CONDITIONED TO A DEPTH OF FIVE FEET. THIS AREA SHALL THEN BE COMPACTED TO A MINIMUM OF 95% OF ASTM D-1557 MAXIMUM DRY DENSITY WITH A MINIMUM OF 20 PASSES WITH A MINIMUM OF 20 TON (COMBINED STATIC AND DYNAMIC COMPACTIVE EFFORT) VIBRATORY ROLLER.

LEGEND

6" THICK BASE COARSE

EMBANKMENT FOUNDATION

RECORD DRAWING
01/02

AS BUILT INFORMATION
CONTRACTOR CHAVA TRUCKING
WORK STAKED BY CHAVA TRUCKING DATE 04/01
INSPECTIONS BY AMAFCA DATE 10/01
FIELD VERIFICATION BY LARKIN GROUP DATE 10/01
CORRECTED BY LARKIN GROUP DATE 01/02
MICRO-FILM INFORMATION

BENCH MARKS

CITY OF ALBUQUERQUE CONTROL STATION 7-L9.
STATION IS LOCATED 39.2 FT. WEST FROM CENTERLINE OF 98th. ST. AND 31.0 FT. SOUTH FROM CENTERLINE OF TOWER RD. STATION IS A STANDARD C.O.A. BRASS CAP SET IN CONCRETE 0.4 FT. ABOVE GROUND AND STAMPED "7-L9" ELEVATION = 5175.735.

SURVEY INFORMATION
FIELD NOTES

NO.	BY:	DATE
1		
2		
3		
4		
5		
6		
7		

RECORDED BY ____ DATE ____

ENGINEER'S SEAL
PROFESSIONAL ENGINEER
STATE OF NEW MEXICO
JOHN A. ANDREWS
10783
REGISTERED

NO.	DATE	REVISIONS	BY
1	OCT. 2000	DESIGN	
2	OCT. 2000	REMARKS	
3	OCT. 2000		

DESIGNED BY: D. Bishop
DRAWN BY: T. Carman
CHECKED BY: J. Andrews

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

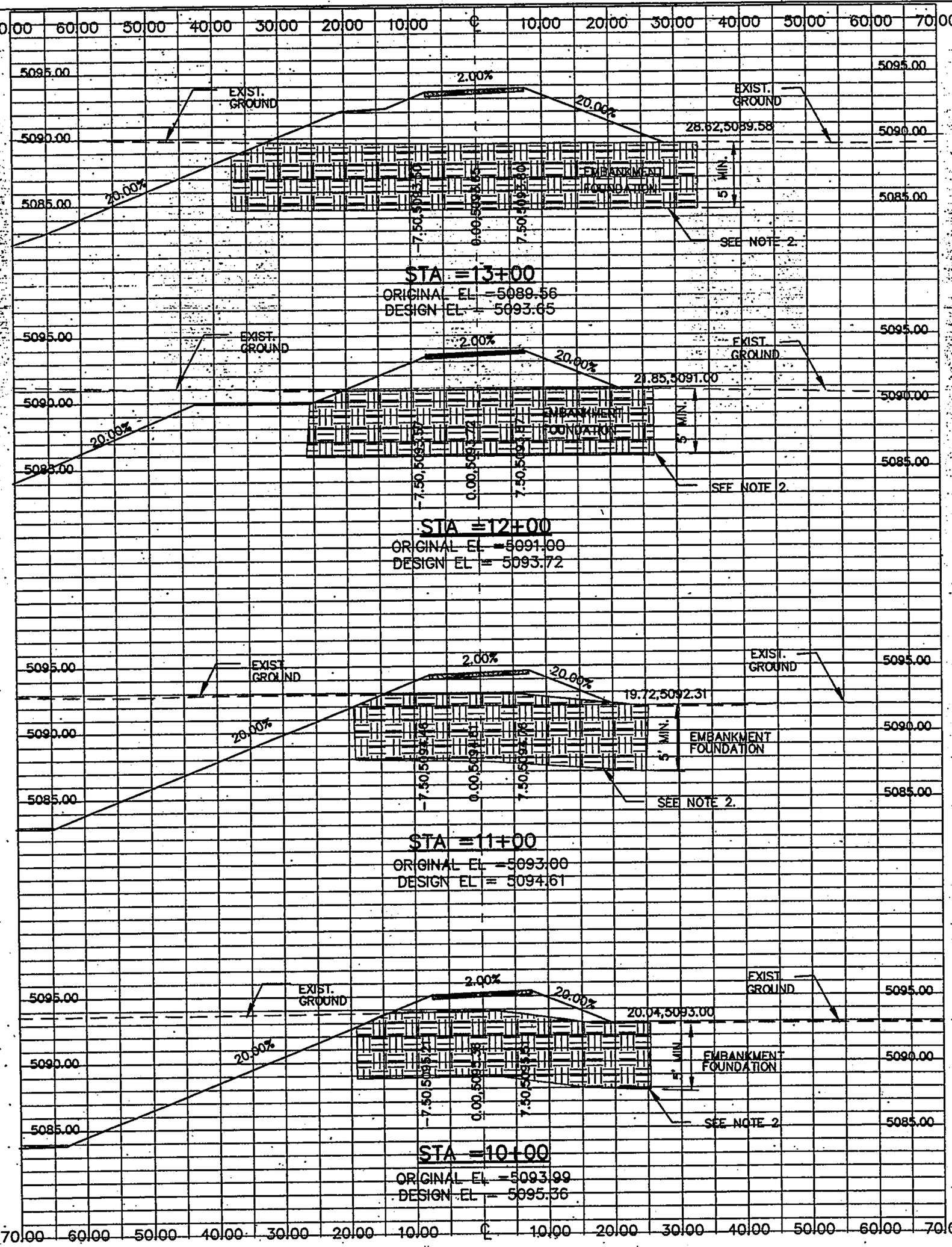
TITLE: TOWER / SAGE PARK, DETENTION POND AND OUTFALL PIPE
DAM PROFILE STA. 38+00 TO 44+52 AND DAM CROSS SECTIONS

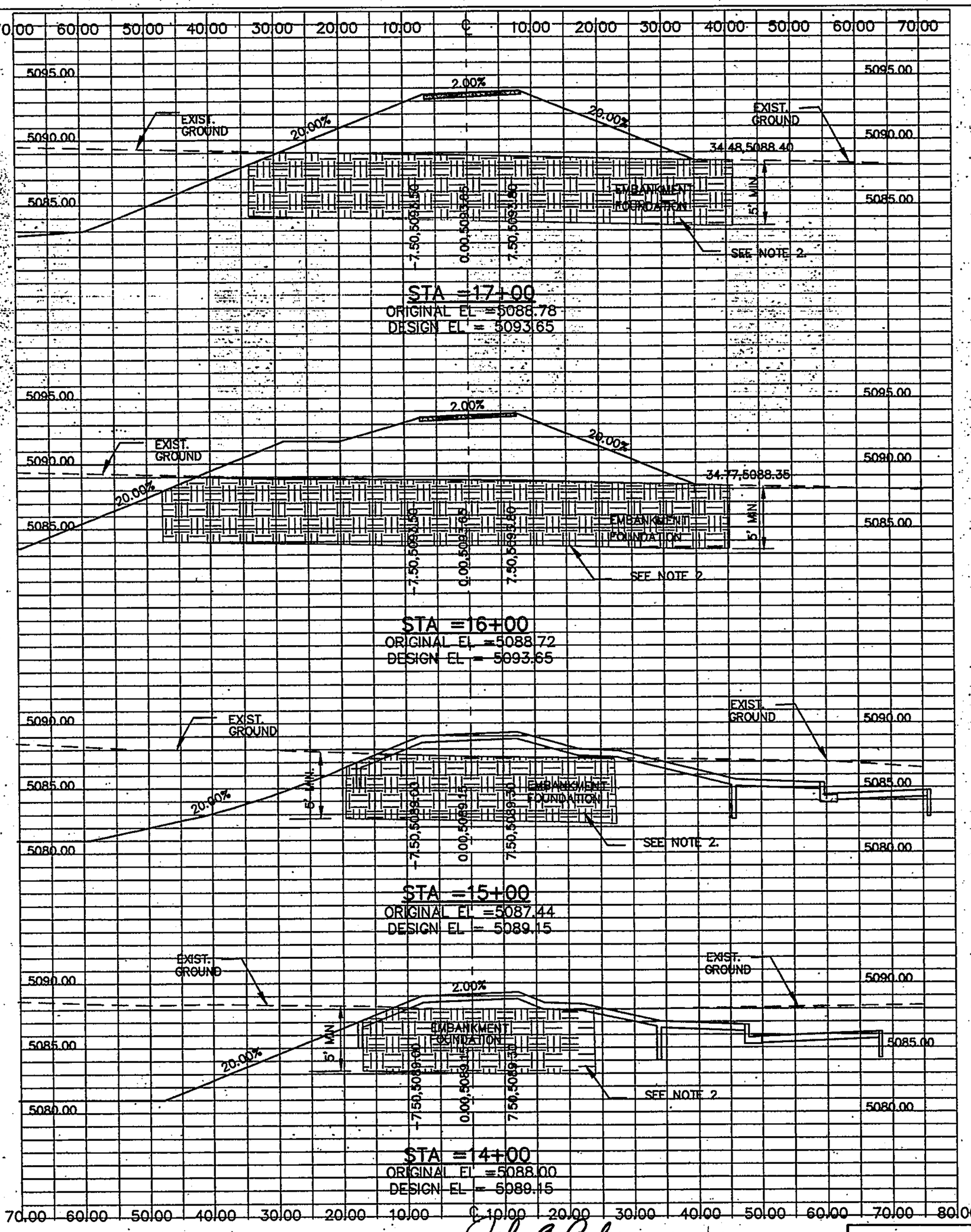
Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

THE LARKIN GROUP, INC.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

City Project No. 4188.91 | Zone Map No. L-10-Z | Sheet 8 of 25

K:\AL900572\TOWERPOND\POND\PONDP&P2.dwg





DAM CROSS SECTIONS STA 10+00 TO 17+00

SCALE: T = 10' HORIZ.
T = 5' VERT.

LEGEND

EMBANKMENT FOUNDATION

6" THICK BASE COURSE

GENERAL NOTES

1. CLEAR GRUB AND STRIP AREAS TO RECEIVE EMBANKMENT PLACEMENT (EMBANKMENT FOUNDATION) TO A MINIMUM OF 5 FEET HORIZONTALLY BEYOND EMBANKMENT LIMITS AND TO A MINIMUM OF 6 INCHES DEEP. THIS AREA SHALL THEN BE SCARIFIED TO A DEPTH OF 8 INCHES.
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AS BUILT INFORMATION
CONTRACTOR CHAVA TRUCKING
WORK STAKED BY CHAVA TRUCKING DATE 06/01
ACCEPTANCE BY AMAFCA DATE 10/01
FIELD VERIFICATION BY LARKIN GROUP DATE 10/01
DRAWING COMPILED BY LARKIN GROUP DATE 01/02
MICRO-FILM INFORMATION
RECORDED BY DATE
RECORDED BY DATE
RECORDED BY DATE

BENCH MARKS
CITY OF ALBUQUERQUE CONTROL STATION 7-L9.
STATION IS LOCATED 39.2 FT. WEST FROM CENTERLINE OF 98th. ST. AND 31.0 FT. SOUTH FROM CENTERLINE OF TOWER RD. STATION IS A STANDARD C.O.A BRASS CAP SET IN CONCRETE. 0.4 FT. ABOVE GROUND AND STAMPED "7-L9" ELEVATION = 5175.735.

SURVEY INFORMATION
FIELD NOTES

NO.	BY:	DATE
1		
2		
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6		
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ENGINEER'S SEAL
JOHN A. ANDREWS 10959 REGISTERED PROFESSIONAL ENGINEER STATE OF NEW MEXICO

NO.	DATE	REMARKS	BY
1		REVISIONS	
2			
3			
4		DESIGN	

DESIGNED BY: D. Bishop DATE: OCT. 2000
DRAWN BY: T. Carman DATE: OCT. 2000
CHECKED BY: J. Jaramillo DATE: OCT. 2000

John A. Andrews
RECORD DRAWING
01/02

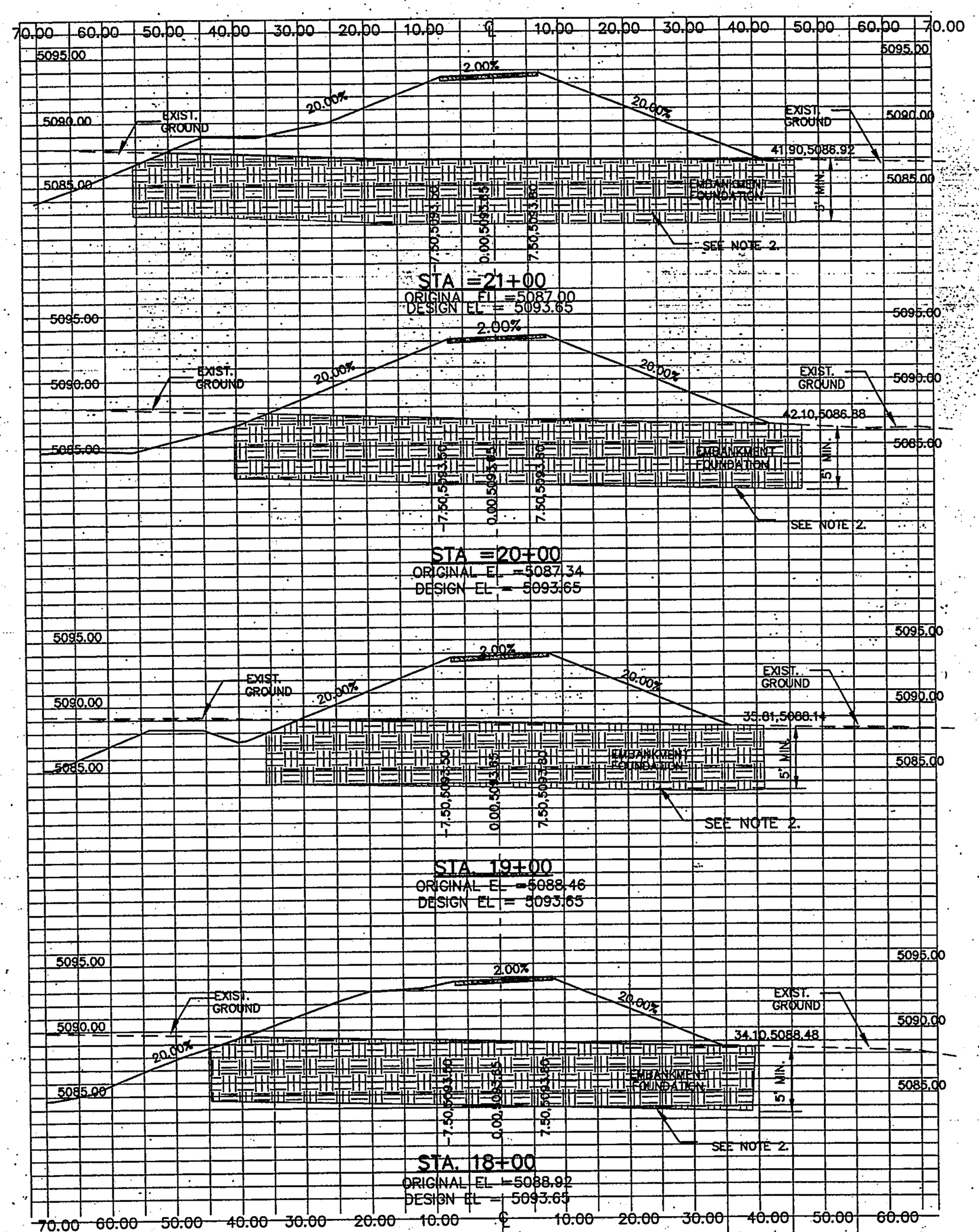
THE LARKIN GROUP, P.A.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

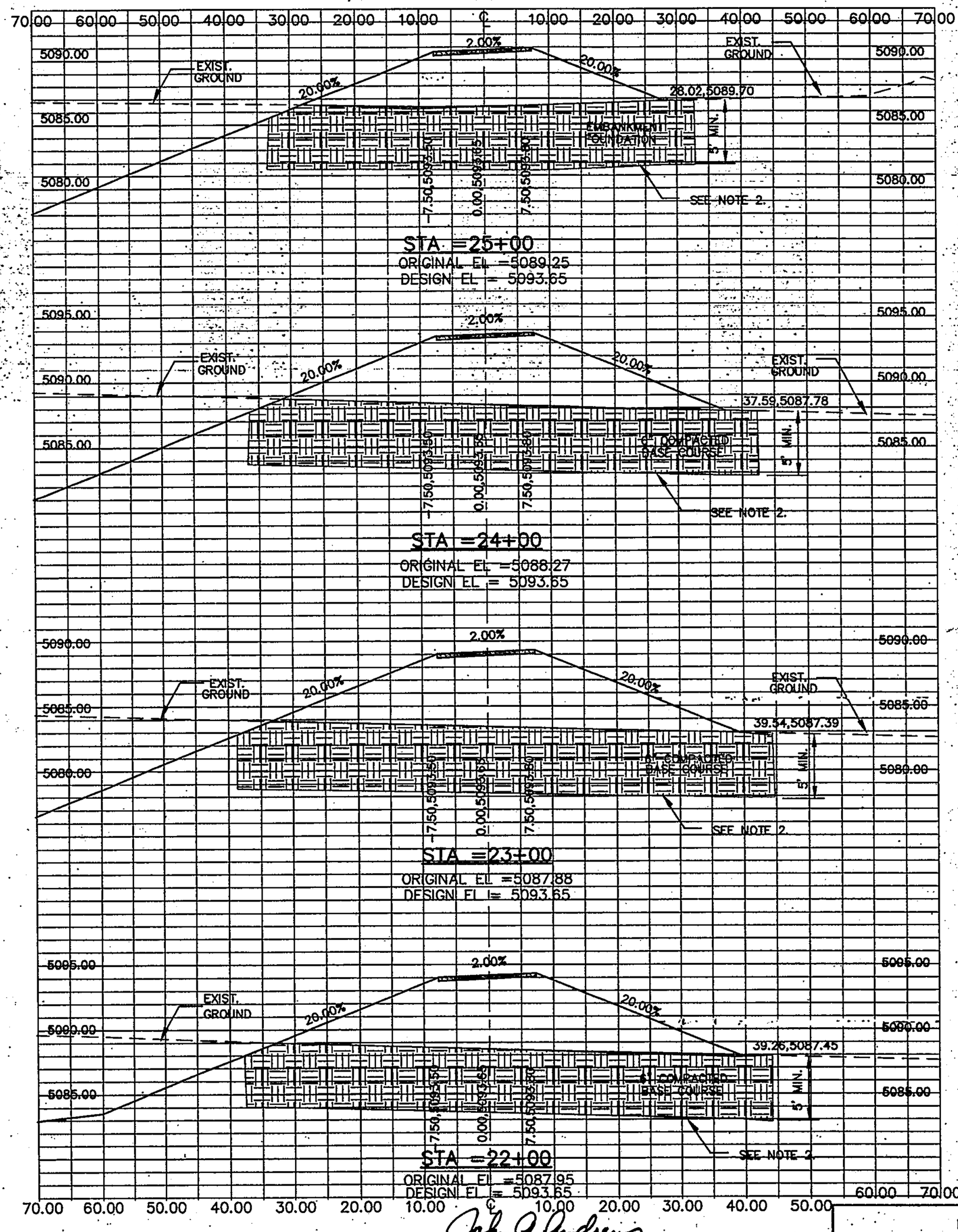
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: TOWER/SAGE PARK, DETENTION POND AND OUTFALL PIPE
DAM CROSS SECTIONS STA. 10+00 TO 17+00

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No. 7188.91 | Zone Map No. L-10-Z | Sheet 9 No 25





DAM CROSS SECTIONS STA 18+00 TO 25+0000

SCALE: 1" = 80' HORIZ.
1" = 8' VERT.

LEGEND

EMBANKMENT FOUNDATION

6" THICK BASE COURSE

GENERAL NOTES

1. CLEAR GRUB AND STRIP AREAS TO RECEIVE EMBANKMENT PLACEMENT (EMBANKMENT FOUNDATION) TO A MINIMUM OF 5 FEET HORIZONTALLY BEYOND EMBANKMENT LIMITS AND TO A MINIMUM OF 6 INCHES DEEP. THIS AREA SHALL THEN BE SCARIFIED TO A DEPTH OF 8 INCHES.

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Jack A. Andrews
RECORD DRAWING
01/02

THE LARKIN GROUP, PC
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

AS BUILT INFORMATION
CONTRACTOR CHAVA TRUCKING
WORK PERFORMED BY: CHAVA TRUCKING DATE 5/6/01
FIELD ACCEPTANCE BY: AMAFCA DATE 10/01
FIELD VERIFICATION BY: LARKIN GROUP DATE 01/02
DRAWINGS COMPILED BY: LARKIN GROUP DATE 01/02
MICRO-FILM INFORMATION
RECORDED BY DATE
RECORDED BY DATE
RECORDED BY DATE

BENCH MARKS
CITY OF ALBUQUERQUE CONTROL STATION 7-L9.
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SURVEY INFORMATION
FIELD NOTES BY:

NO.	DATE
1	
2	
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ENGINEER'S SEAL
PROFESSIONAL ENGINEER STATE OF NEW MEXICO JACK A. ANDREWS REGISTERED

NO.	DATE	REVISIONS	BY
4			
3			
2			
1			

DESIGN
DESIGNED BY: D. Bishop DATE: OCT. 2000
DRAWN BY: T. Comeau DATE: OCT. 2000
CHECKED BY: J. Landavazo DATE: OCT. 2000

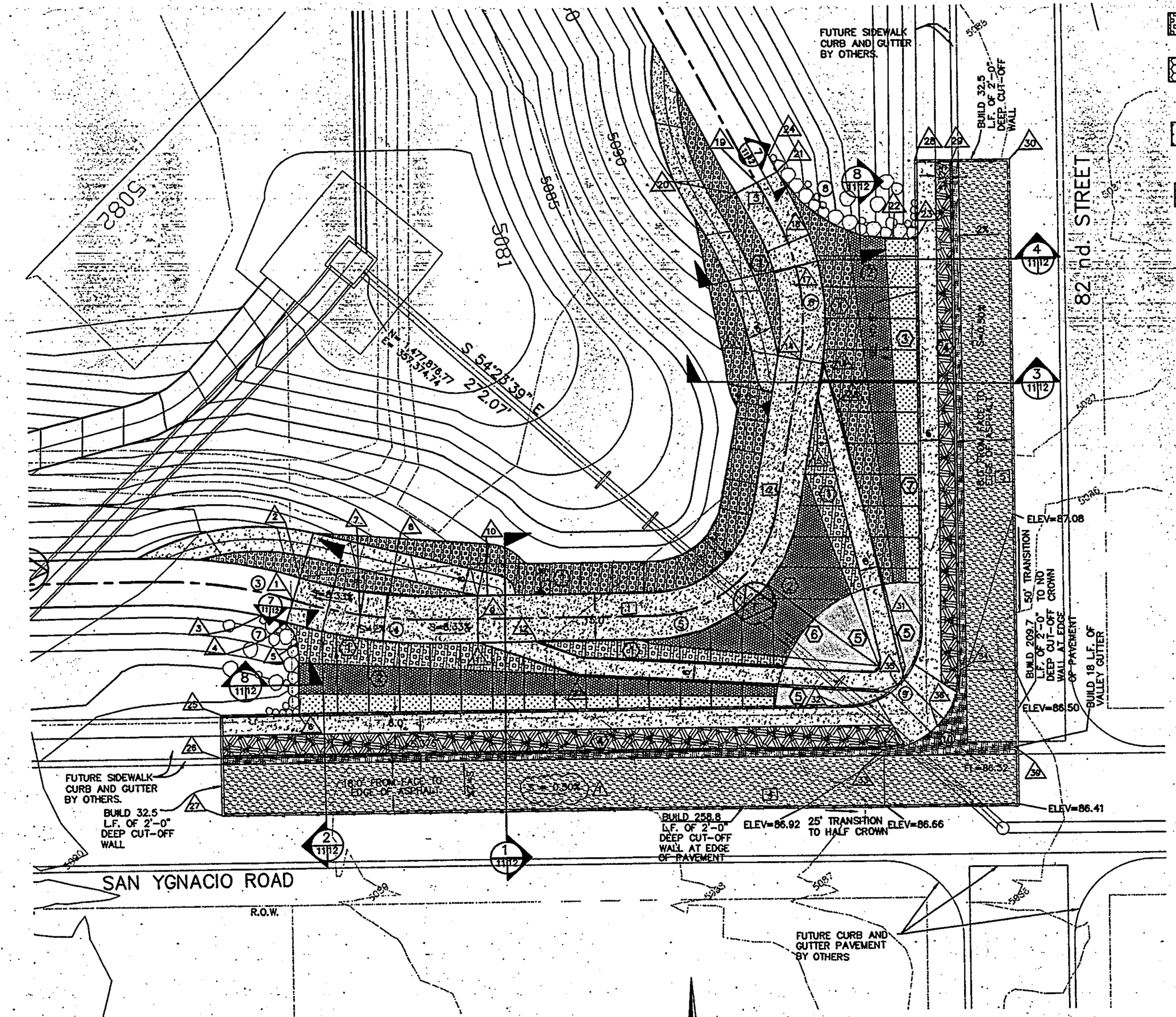
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

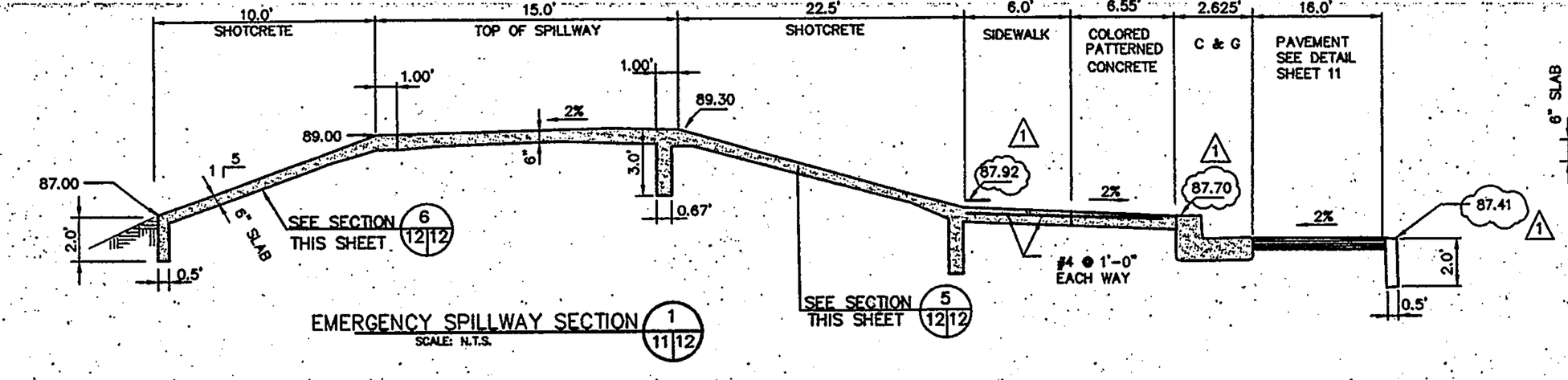
TITLE: TOWER/SAGE PARK, DETENTION POND AND OUTFALL PIPE
DAM CROSS SECTIONS STA. 18+00 TO 25+00

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

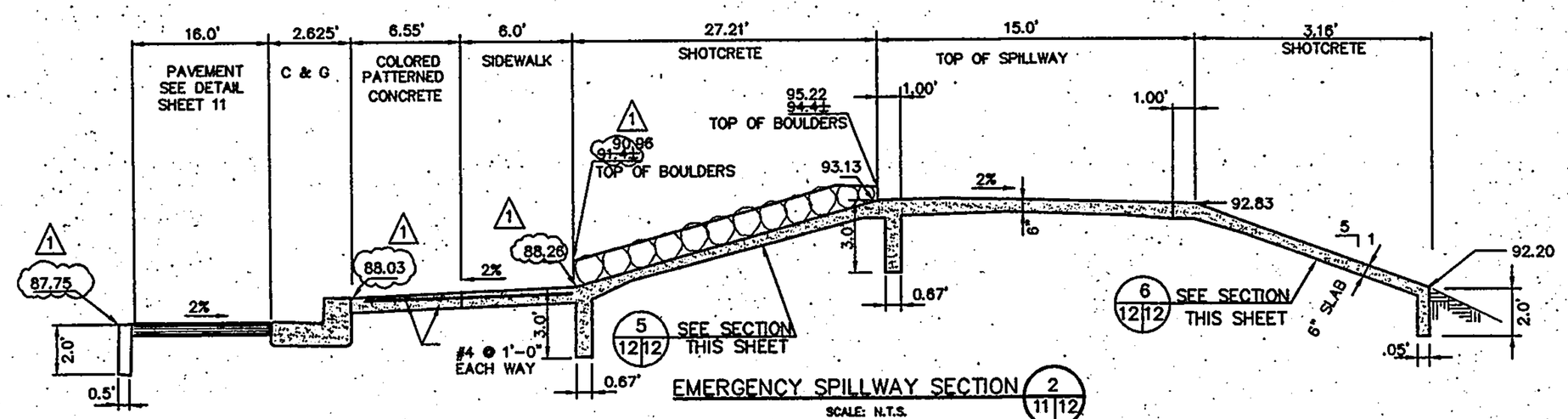
City Project No. 7188.91 | Zone Map No. L-10-Z | Sheet 10 of 25

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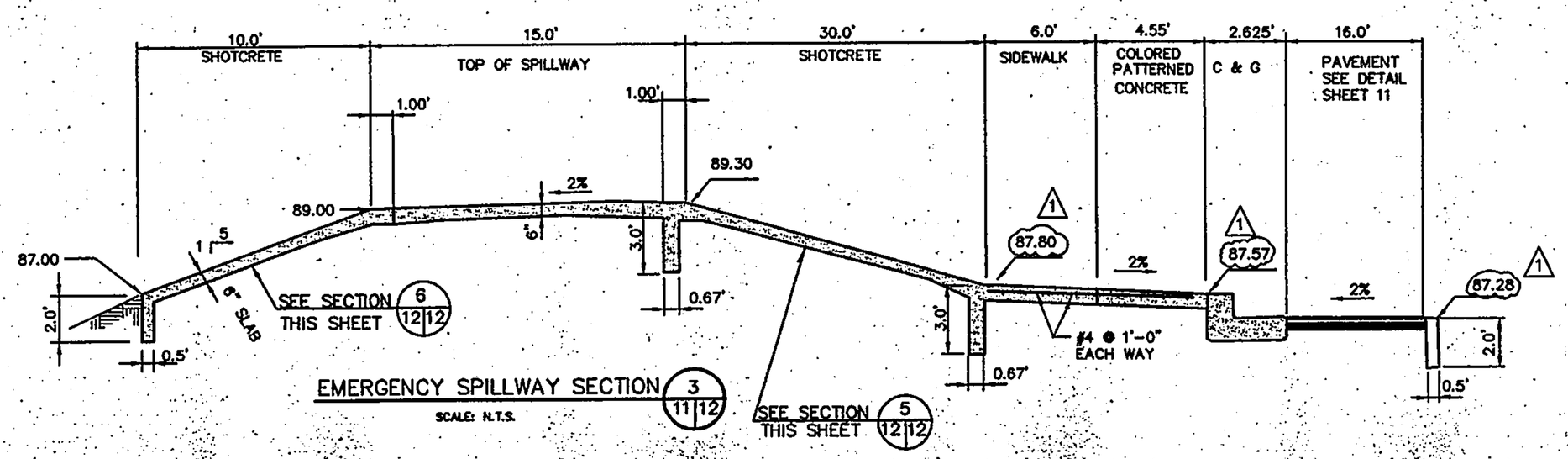

FUTURE SIDEWALK CURB AND GUTTER BY OTHERS.
BUILD 32.5 L.F. OF 2'-0" DEEP CUT-OFF WALL
82nd. STREET
BUILD 209.7 L.F. OF 2'-0" DEEP CUT-OFF WALL AT EDGE OF PAVEMENT
50' TRANSITION TO NO CROWN
BUILD 18 L.F. OF VALLEY GUTTER
ELEV=87.08
ELEV=88.50
ELEV=86.32
ELEV=86.41
FUTURE SIDEWALK CURB AND GUTTER BY OTHERS.
BUILD 32.5 L.F. OF 2'-0" DEEP CUT-OFF WALL
BUILD 258.8 L.F. OF 2'-0" DEEP CUT-OFF WALL AT EDGE OF PAVEMENT
ELEV=86.92
25' TRANSITION TO HALF CROWN
ELEV=86.66
SAN YGNACIO ROAD
R.O.W.
FUTURE CURB AND GUTTER PAVEMENT BY OTHERS
S 54°25'39" E
207.07
N 477,876.77
E 357,314.74
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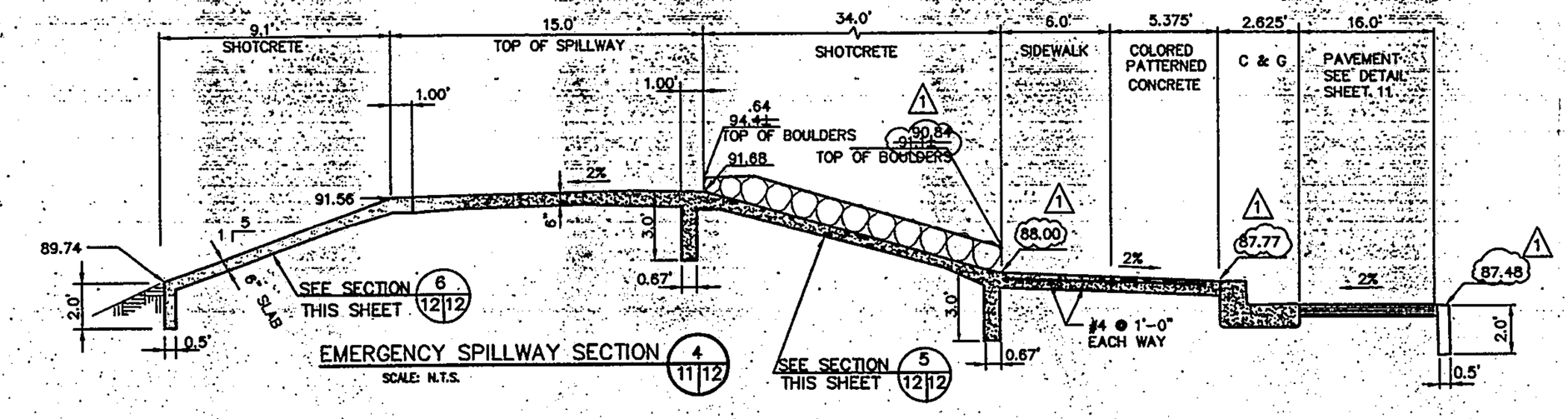
EMERGENCY SPILLWAY SECTION 1 11|12
SCALE: N.T.S.



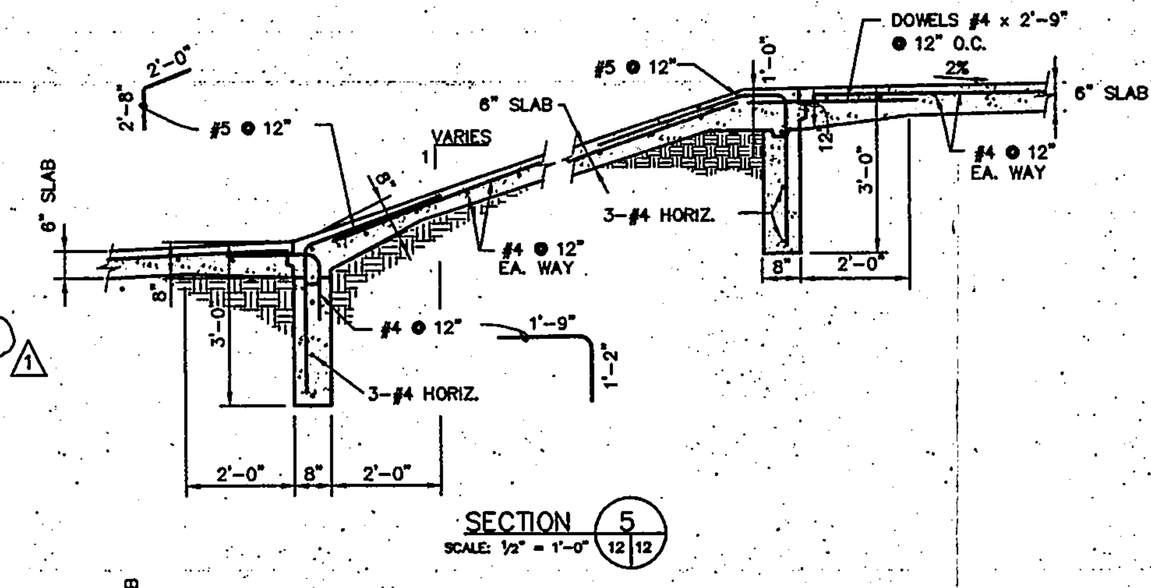
EMERGENCY SPILLWAY SECTION 2 11|12
SCALE: N.T.S.



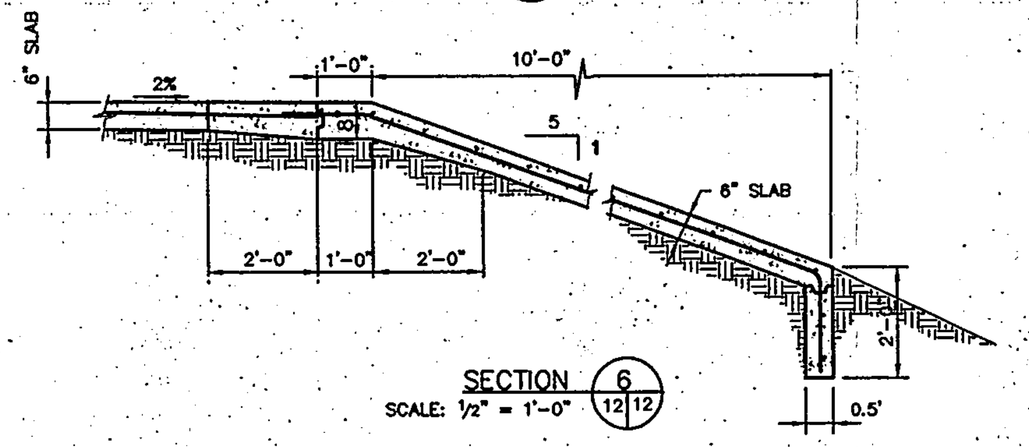
EMERGENCY SPILLWAY SECTION 3 11|12
SCALE: N.T.S.



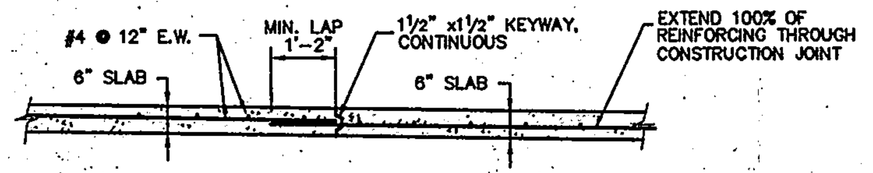
EMERGENCY SPILLWAY SECTION 4 11|12
SCALE: N.T.S.



SECTION 5 12|12
SCALE: ½" = 1'-0"



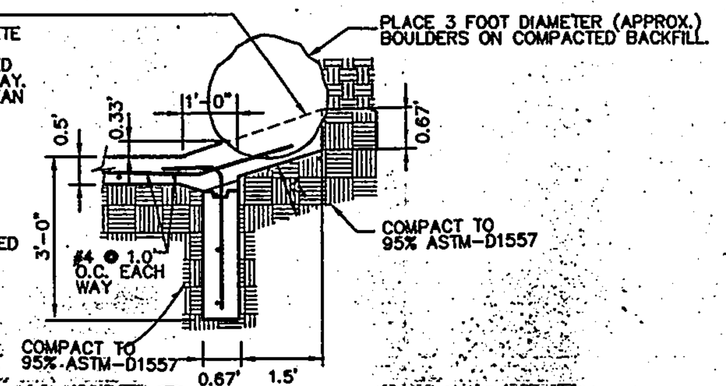
SECTION 6 12|12
SCALE: ½" = 1'-0"



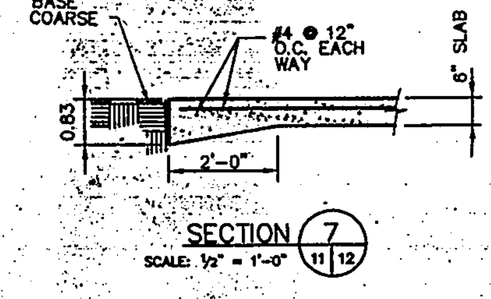
SLAB ON GRADE
TYPICAL CONSTRUCTION JOINT
SCALE: ½" = 1'-0"

OPTION 1: HAND PLACE AND GROUT BOULDER FLUSH WITH SHOTCRETE SPILLWAY 10" MINIMUM GROUT DEPTH. GROUT SHALL BE TINTED TO MATCH SHOTCRETE SPILLWAY. BOULDERS SHALL BE KEPT CLEAN HAND PLACE BOULDERS AFTER REINFORCING IS IN PLACE.

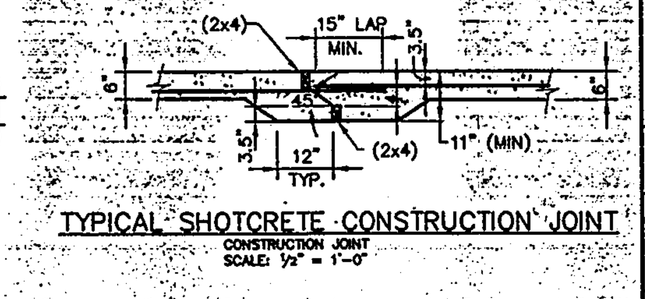
OPTION 2: SHOTCRETE SPILLWAY AND INTERSTICES AND OPENINGS BETWEEN THE BOULDERS TO ACHIEVE A CONTINUOUS SPILLWAY. BOULDERS SHALL BE CLEANED OF ALL SPLATTERED SHOTCRETE.



SECTION 8 11|12
SCALE: ½" = 1'-0"



SECTION 7 11|12
SCALE: ½" = 1'-0"



TYPICAL SHOTCRETE CONSTRUCTION JOINT
CONSTRUCTION JOINT
SCALE: ½" = 1'-0"

RECORD DRAWINGS WERE PREPARED FROM INFORMATION PROVIDED BY THE CONTRACTOR.

RECORD DRAWING
01/02

AS BUILT INFORMATION

CONTRACTOR CHAVA TRUCKING DATE 10/01
SURVEYED BY CHAVA TRUCKING DATE 10/01
INSPECTIONS BY JAMCA DATE 10/01
FIELD VERIFICATION BY LARKIN GROUP DATE 10/01
DRAWINGS CORRECTED BY LARKIN GROUP DATE 01-02

BENCH MARKS

CITY OF ALBUQUERQUE CONTROL STATION 7-L9.
STATION IS LOCATED 39.2 FT. WEST FROM CENTERLINE OF 98th. ST. AND 31.0 FT. SOUTH FROM CENTERLINE OF TOWER RD. STATION IS A STANDARD C.O.A BRASS CAP SET IN CONCRETE 0.4 FT. ABOVE GROUND AND STAMPED "7-L9" ELEVATION = 5175.735.

MICRO-FILM INFORMATION

DATE
RECORDED BY
DATE
RECORDED BY
DATE
RECORDED BY

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
1		
2		
3		
4		
5		
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ENGINEER'S SEAL
PROFESSIONAL ENGINEER
STATE OF NEW MEXICO
No. 9460
JOHN A. ANDERSON

NO.	DATE	REVISIONS	BY
1	5/11/01	REVISED CURB AND GUTTER	D.B.
2		REMARKS	
3		DESIGN	
4			

DESIGNED BY: D.B. DATE: AUG. 2000
DRAWN BY: T.C. DATE: AUG. 2000
CHECKED BY: J.A. DATE: AUG. 2000

THE LARKIN GROUP
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

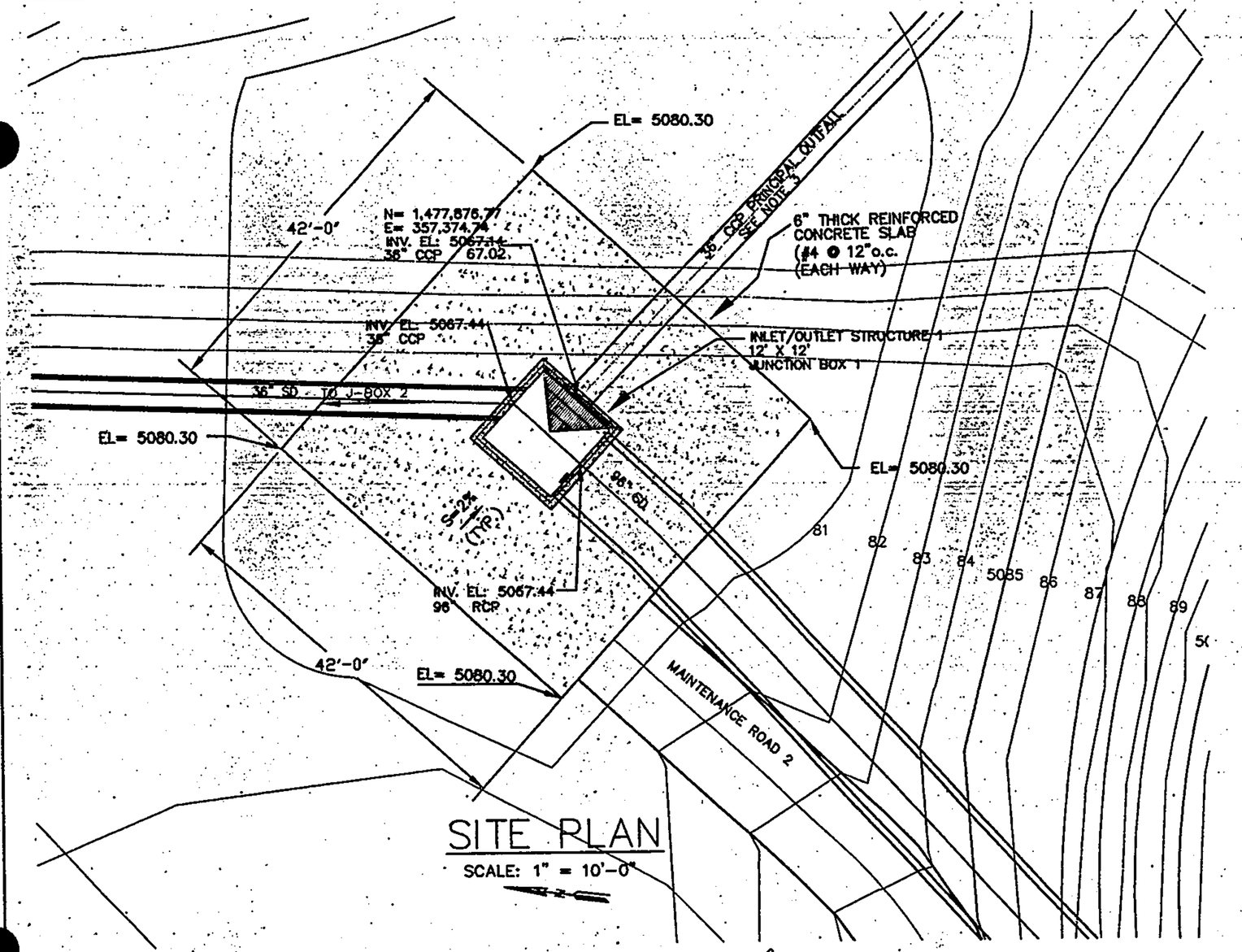
TITLE: TOWER/SAGE PARK, DETENTION POND AND OUTFALL PIPE
EMERGENCY SPILLWAY SECTIONS AND DETAILS

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No. 4188.91
Zone Map No. L-10-Z
Sheet 12 Of 25

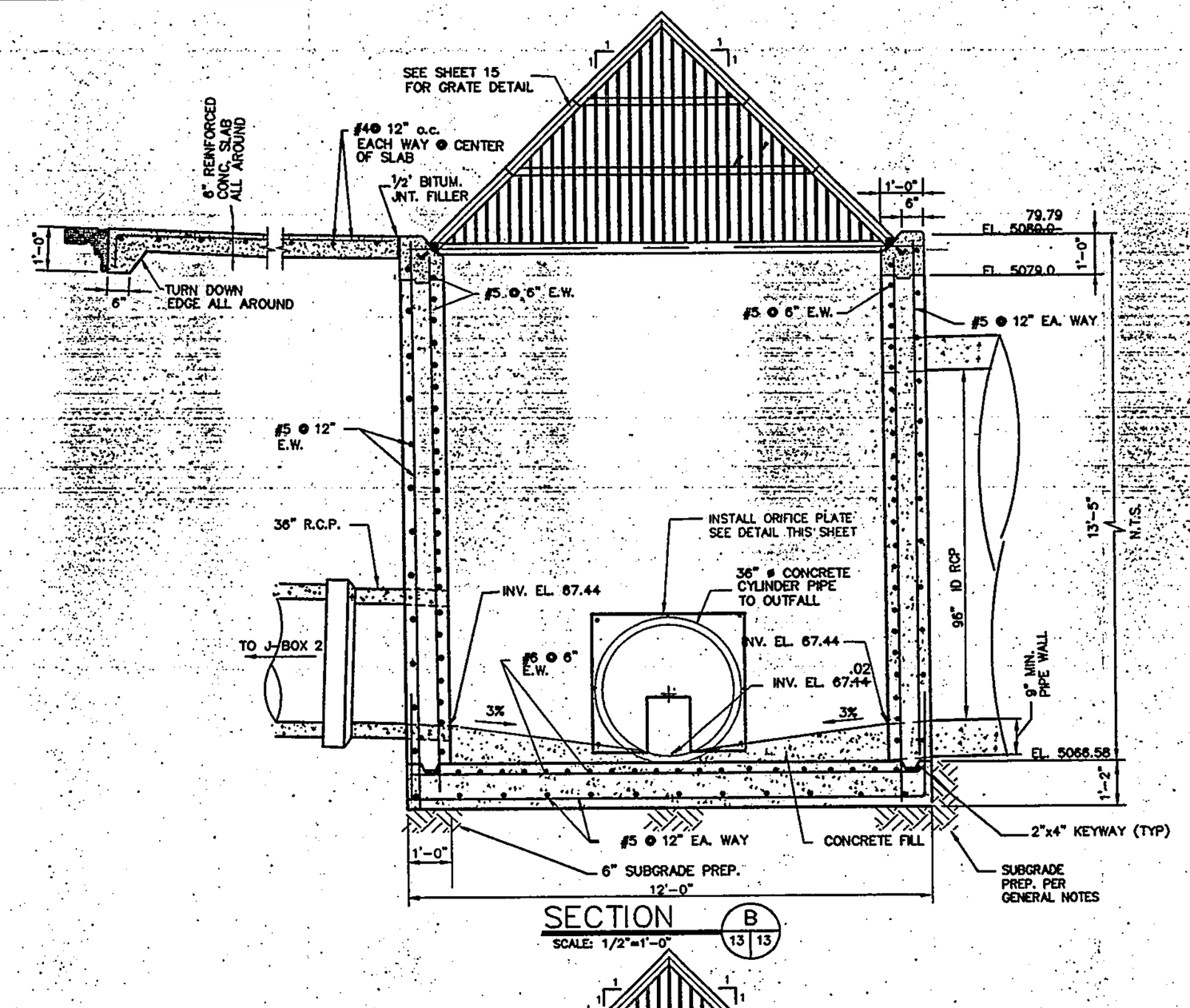
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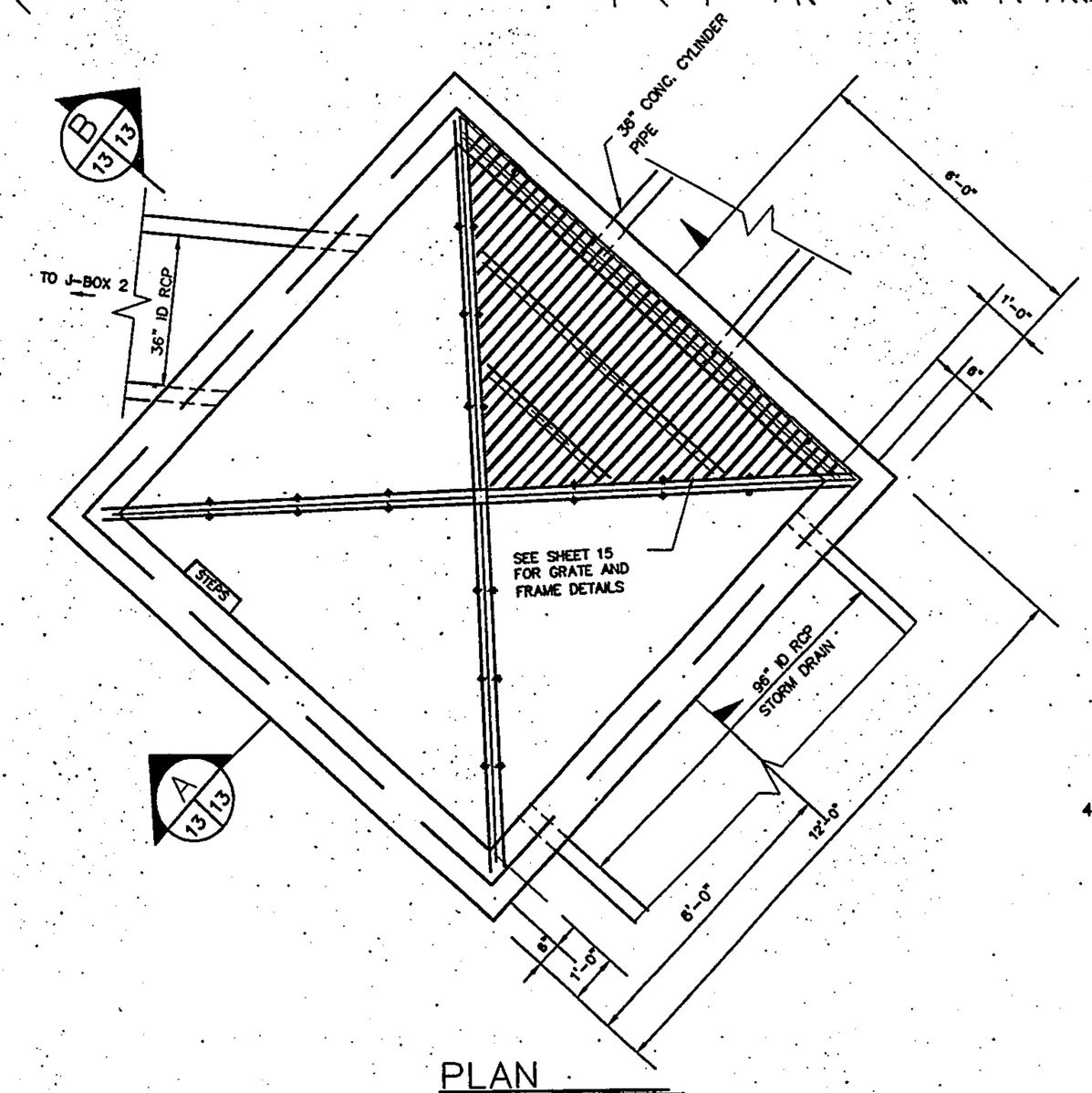
SITE PLAN

SCALE: 1" = 10'-0"



SECTION B (13 | 13)

SCALE: 1/2"=1'-0"

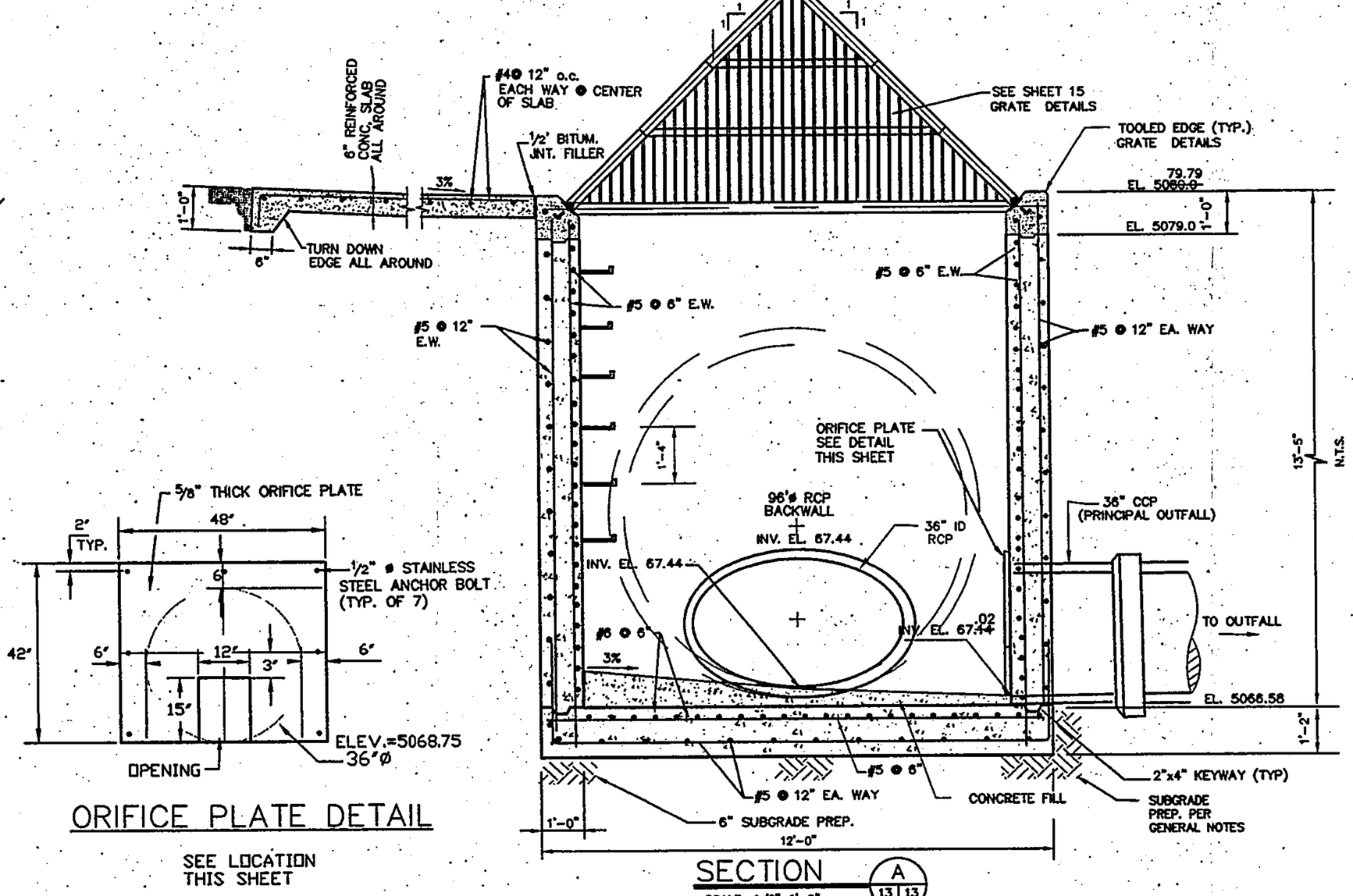


PLAN

SCALE: 1" = 1/2"

ORIFICE PLATE DETAIL

SEE LOCATION THIS SHEET



SECTION A (13 | 13)

SCALE: 1/2"=1'-0"

GENERAL NOTES

1. ORIFICE PLATE SHALL BE 5/8" THICK STEEL PLATE OR APPROVED EQUAL.
2. SEE SHEET 17 FOR POND STORM DRAIN PLAN AND PROFILE.
3. SEE SHEET 18 FOR PRINCIPAL OUTFALL PLAN AND PROFILE.
4. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI IN 28 DAYS.
5. REINFORCING STEEL SHALL BE GRADE 60.
6. SEAL ALL JOINTS WITH SONOLASTIC NP-1 AS MANUFACTURED BY SONOBORN OR APPROVED EQUAL.
7. EARTH SIDE OF JUNCTION BOX SHALL BE DAMP PROOFED. USE HYDROSIDE TO BE MANUFACTURED BY SONOBORN OR APPROVED EQUAL.
8. ALL EXPOSED CONCRETE SURFACES, EXECEPT FOR SHOTECRETE, TO A MINIMUM 6" BELOW FINISH GRADE, SHALL BE FINISHED WITH "THOROSEAL" OR APPROVED EQUAL.
9. ALL FOUNDATIONS SHALL BE FOUNDED UPON 18" SUBGRADE PREPARATION AT 95% MAXIMUM DRY DENSITY. ASTM D-1557
10. THE COST OF THE GRATE IS CONSIDERED INCIDENTAL TO THE COST OF THE INLET/OUTLET STRUCTURE JUNCTION BOX. NO SEPARATE MEASUREMENT AND PAYMENT WILL BE MADE FOR THE GRATE.
11. THE COST OF THE ORIFICE PLATE CONSIDERED INCIDENTAL TO THE COST OF THE INLET/OUTLET STRUCTURE JUNCTION BOX. NO SEPARATE MEASUREMENT AND PAYMENT WILL BE MADE FOR THE ORIFICE PLATE.

RECORD DRAWINGS WERE PREPARED FROM INFORMATION PROVIDED BY THE CONTRACTOR.

RECORD DRAWING 01/02

THE LARKIN GROUP, INC.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

AS BUILT INFORMATION
CONTRACTOR CHAVA TECHNOS DATE 05/01
WORK STAKED BY CHAVA TECHNOS DATE 05/01
ACCEPTANCE BY AMAFCA DATE 10/01
FIELD REVISION BY LARKIN GROUP DATE 10/01
DRAWINGS BY LARKIN GROUP DATE 01-02
MICRO-FILM INFORMATION
RECORDED BY DATE
RECORDED BY DATE

BENCH MARKS
CITY OF ALBUQUERQUE CONTROL STATION 7-LG.
STATION IS LOCATED 39.2 FT. WEST FROM CENTERLINE OF 98th. ST. AND 31.0 FT. SOUTH FROM CENTERLINE OF TOWER RD. STATION IS A STANDARD C.O.A BRASS CAP SET IN CONCRETE 0.4 FT. ABOVE GROUND AND STAMPED "7-LG" ELEVATION = 5175.735.

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
1		
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ENGINEER'S SEAL
PROFESSIONAL ENGINEER STATE OF NEW MEXICO 9346 JOHN A. ANDREWS REGISTERED

NO.	DATE	REMARKS	BY
1		REVISIONS	
2			
3			

DESIGNED BY: D. Bishop DATE: DEC. 2000
DRAWN BY: T. Cannon DATE: DEC. 2000
CHECKED BY: J. Andrews DATE: DEC. 2000

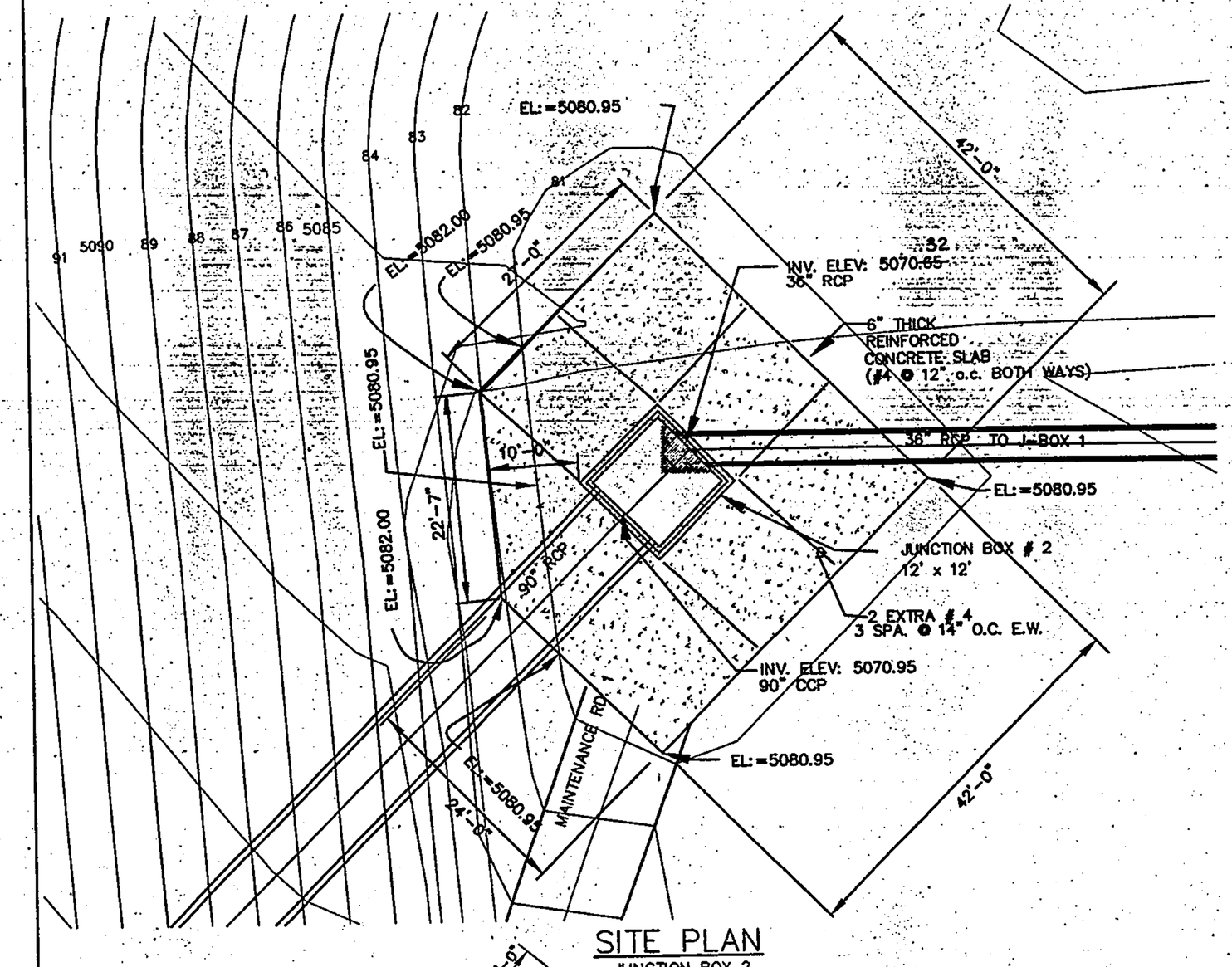
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: TOWER/SAGE PARK, DETENTION POND AND OUTFALL PIPE
SAN YGNACIO RD. INLET/OUTLET STRUCTURE-JUNCTION BOX 1

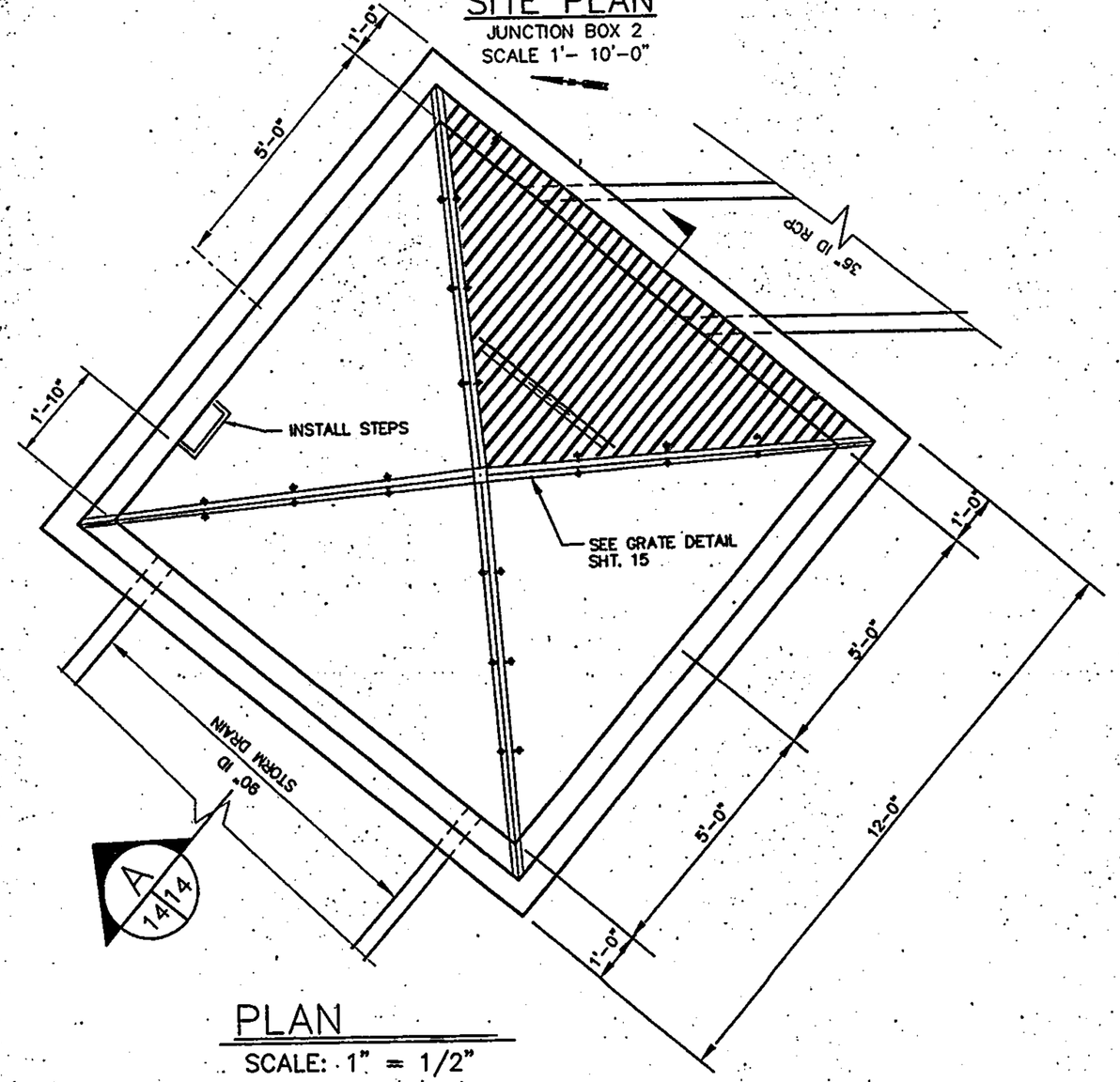
Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No. 4188.91 | Zone Map No. L-10-Z | Sheet 13 Of 25

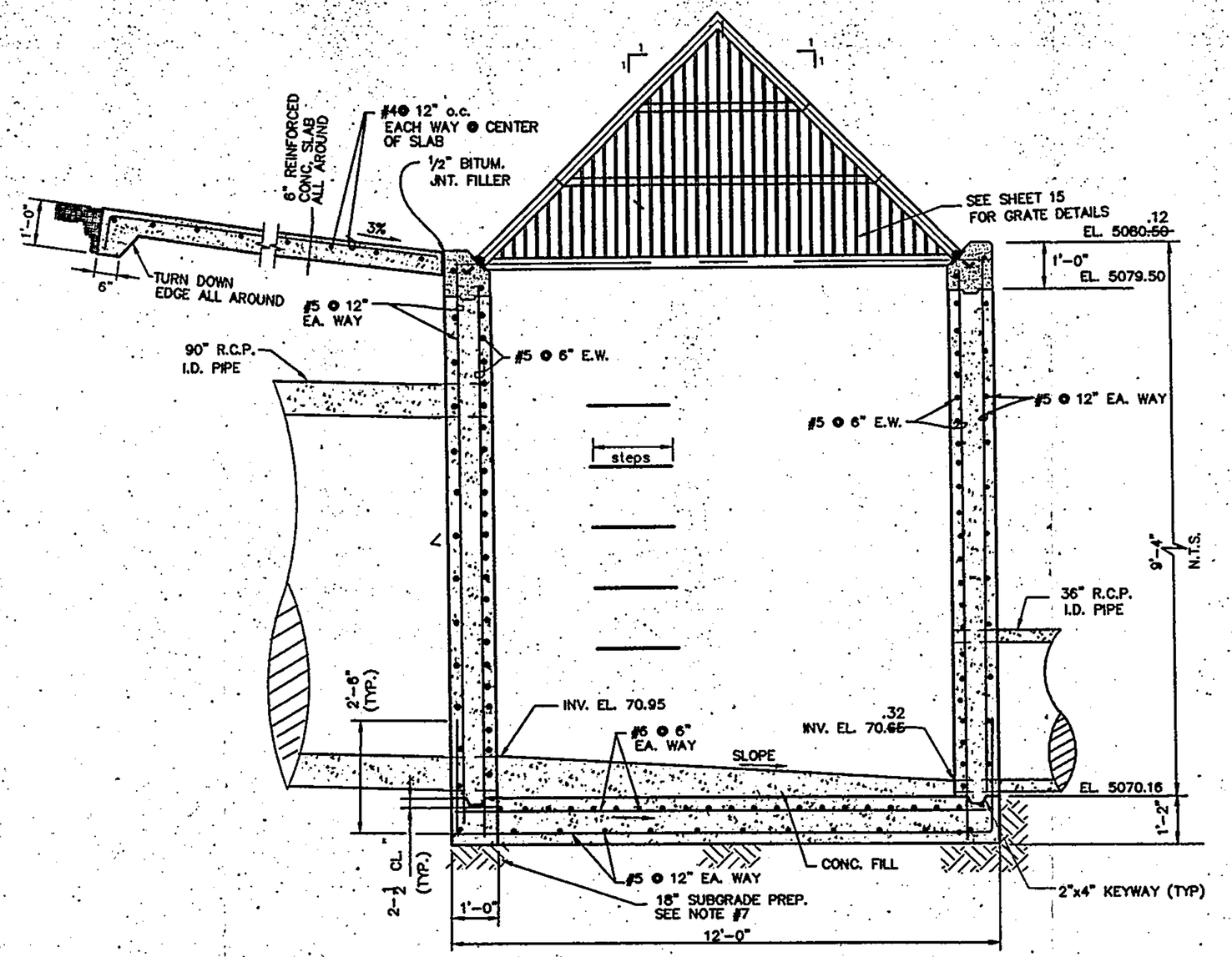
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SITE PLAN
JUNCTION BOX 2
SCALE 1"- 10'-0"



PLAN
SCALE: 1" = 1/2"



SECTION A
SCALE: 1/2"=1'-0"
14/14

GENERAL NOTES

1. SEE SHEET 17 FOR POND STORM DRAIN PLAN AND PROFILE.
2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI IN 28 DAYS.
3. REINFORCING STEEL SHALL BE GRADE 60.
4. SEAL ALL JOINTS WITH SONOLASTIC NP-1 AS MANUFACTURED BY SONOBORN OR APPROVED EQUAL.
5. EARTH SIDE OF JUNCTION BOX SHALL BE DAMP PROOFED. USE HYDROSIDE TO BE MANUFACTURED BY SONOBORN OR APPROVED EQUAL.
6. ALL EXPOSED CONCRETE SURFACES, EXECEPT FOR SHOTECRETE, TO A MINIMUM 6" BELOW FINISH GRADE, SHALL BE FINISHED WITH "THOROSEAL" OR APPROVED EQUAL.
7. ALL FOUNDATIONS SHALL BE FOUNDED UPON 18" SUBGRADE PREPARATION AT 95% MAXIMUM DRY DENSITY. ASTM D-1557
8. THE COST OF THE GRATE IS CONSIDERED INCIDENTAL TO THE COST OF THE INLET/OUTLET STRUCTURE JUNCTION BOX. NO SEPARATE MEASUREMENT AND PAYMENT WILL BE MADE FOR THE GRATE.

AS BUILT INFORMATION
CONTRACTOR CHAR. TRUCKING
DATA PROVIDED BY: DAVID TRUCKING - DATE: 05/01
SURVEYOR'S ACCEPTANCE BY: JARATA - DATE: 10/01
VERIFICATION BY: LARKIN GROUP - DATE: 10/01
OBTAINED BY: LARKIN GROUP - DATE: 01-02

BENCH MARKS
CITY OF ALBUQUERQUE CONTROL STATION 7-L9.
STATION IS LOCATED 39.2 FT. WEST FROM CENTERLINE OF 98th. ST. AND 31.0 FT. SOUTH FROM CENTERLINE OF TOWER RD. STATION IS A STANDARD C.O.A BRASS CAP SET IN CONCRETE. 0.4 FT. ABOVE GROUND. AND STAMPED "7-L9" ELEVATION = 5175.735.

MICRO-FILM INFORMATION
RECORDED BY: - DATE:
RECORDED BY: - DATE:
RECORDED BY: - DATE:

SURVEY INFORMATION
FIELD NOTES

NO.	DATE	BY
1		
2		
3		
4		
5		
6		
7		

ENGINEER'S SEAL
PROFESSIONAL ENGINEER STATE OF NEW MEXICO No. 9672 JOHN A. ANDREWS REGISTERED

RECORD DRAWINGS WERE PREPARED FROM INFORMATION PROVIDED BY THE CONTRACTOR.

John A. Andrews
RECORD DRAWING
01/02

NO.	DATE	REVISIONS	BY
1		DESIGN	
2		DESIGNED BY: D. Bishop	DATE: DEC. 2000
3		DRAWN BY: T. Carmon	DATE: DEC. 2000
		CHECKED BY: J. Andrews	DATE: DEC. 2000

THE LARKIN GROUP, P.A.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

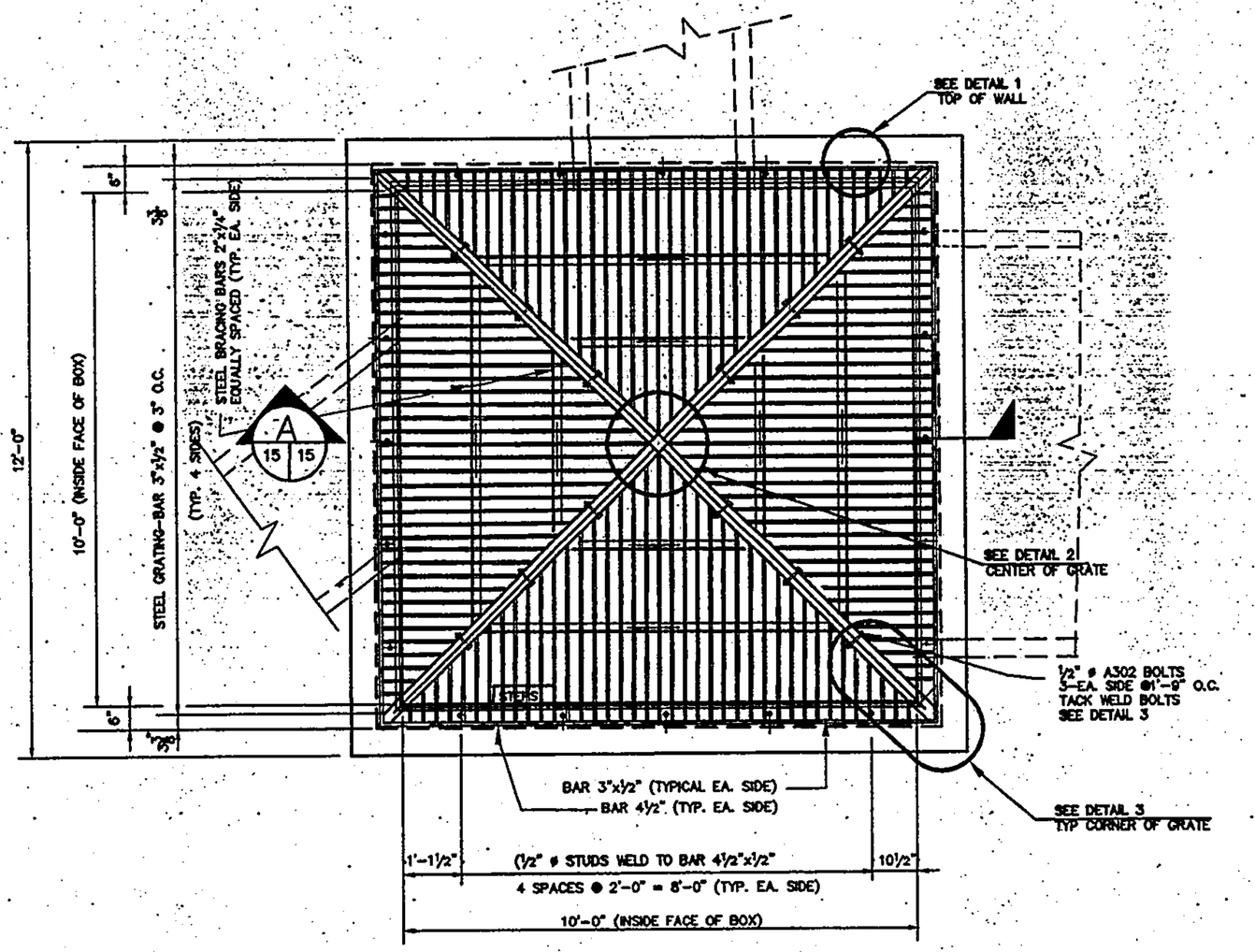
TITLE: TOWER/SAGE PARK, DETENTION POND AND OUTFALL PIPE
TOWER, INLET STRUCTURE JUNCTION BOX 2

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No.	Zone Map No.	Sheet	of
4188.91	L-10-Z	14	25

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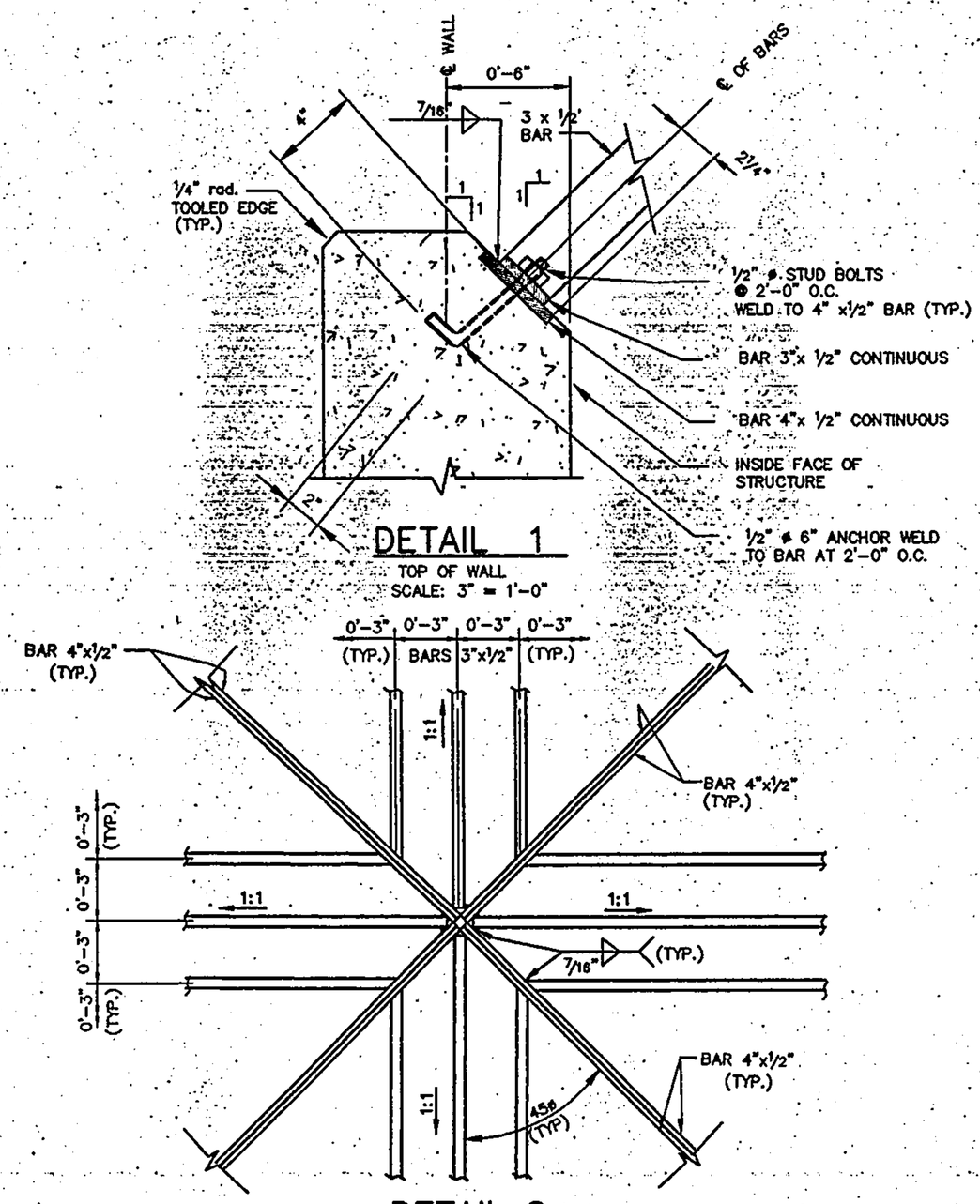


GRATE PLAN

SCALE: ½" = 1'-0"

GRATE SECTION A

SCALE: ½" = 1'-0"

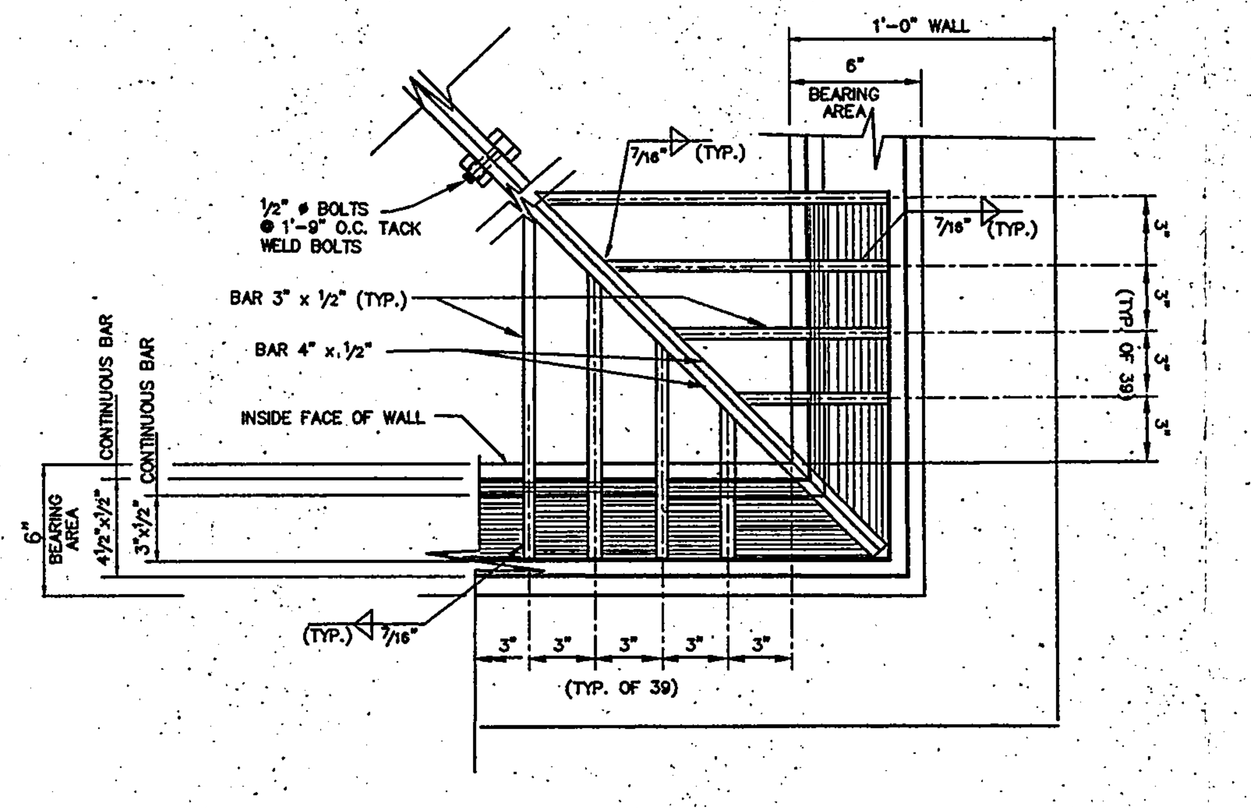


DETAIL 1

TOP OF WALL
SCALE: 3" = 1'-0"

DETAIL 2

CENTER OF GRATE
SCALE: 3" = 1'-0"



DETAIL 3

TYP CORNER OF GRATE
SCALE: 3" = 1'-0"

GENERAL NOTES

1. GRATE SHALL BE PAINTED. COLOR AS DETERMINED BY OWNER.

AS BUILT INFORMATION
CONTRACTOR CHAVA TRUCKING
BEGIN STAKED BY CHAVA TRUCKING DATE 06/01
ACCEPTANCE BY AMAFCA DATE 10/01
FIELD REVISION BY LARKIN GROUP DATE 10/01
DRAWINGS COMPILED BY LARKIN GROUP DATE 01/02
MICRO-FILM INFORMATION
RECORDED BY DATE
RECORDED BY DATE

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
1		
2		
3		
4		
5		
6		
7		

BENCH MARKS

CITY OF ALBUQUERQUE CONTROL STATION 7-L9.
STATION IS LOCATED 39.2 FT. WEST FROM CENTERLINE OF 98th. ST. AND 31.0 FT. SOUTH FROM CENTERLINE OF TOWER RD. STATION IS A STANDARD C.O.A BRASS CAP SET IN CONCRETE 0.4 FT. ABOVE GROUND AND STAMPED "7-L9" ELEVATION = 5175.735.

ENGINEER'S SEAL

PROFESSIONAL ENGINEER STATE OF NEW MEXICO 9698 JOHN A. ANDREWS REGISTERED

John A. Andrews
RECORD DRAWING
01/02

THE LARKIN GROUP
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

NO.	DATE	REMARKS	BY
1	OCT. 2000	DESIGN	
2	OCT. 2000		
3	OCT. 2000		
4			

DESIGNED BY: D. Bishop
DRAWN BY: T. Damien
CHECKED BY: J. Andrews

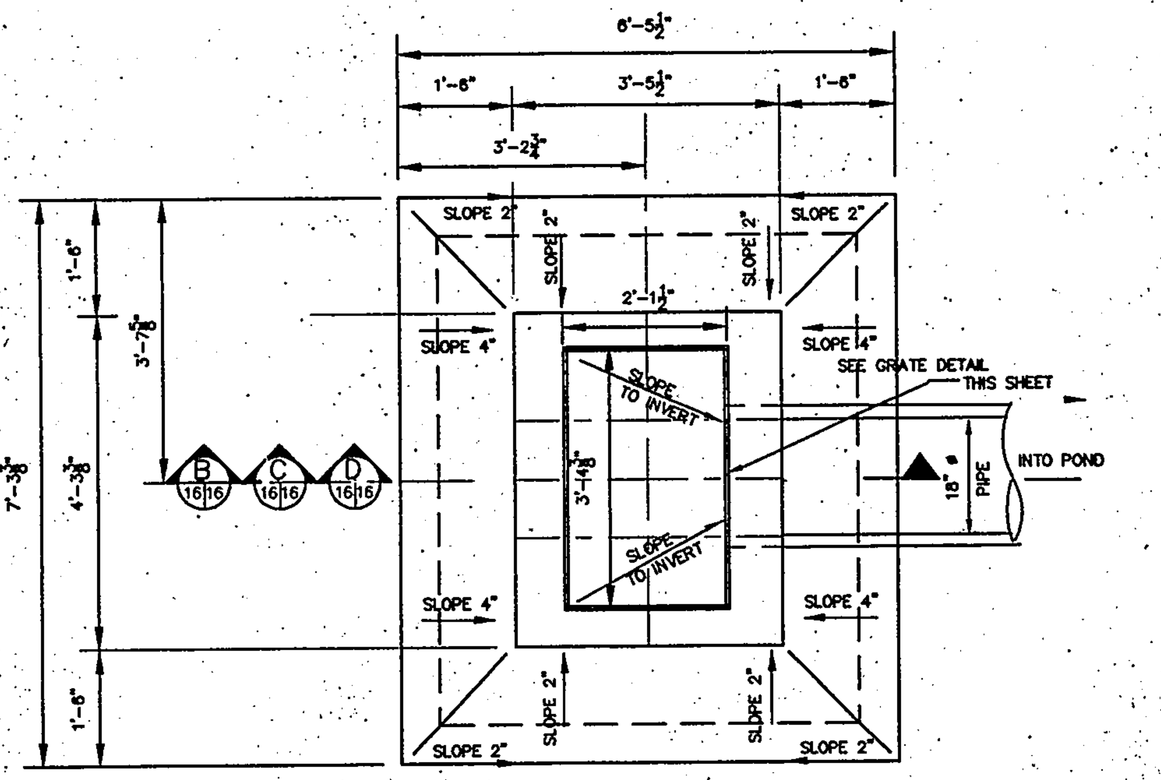
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: TOWER/SAGE PARK DETENTION POND AND OUTFALL PIPE
JUNCTION BOX GRATE DETAILS

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No. 4188.91 | Zone Map No. L-10-Z | Sheet 15 of 25

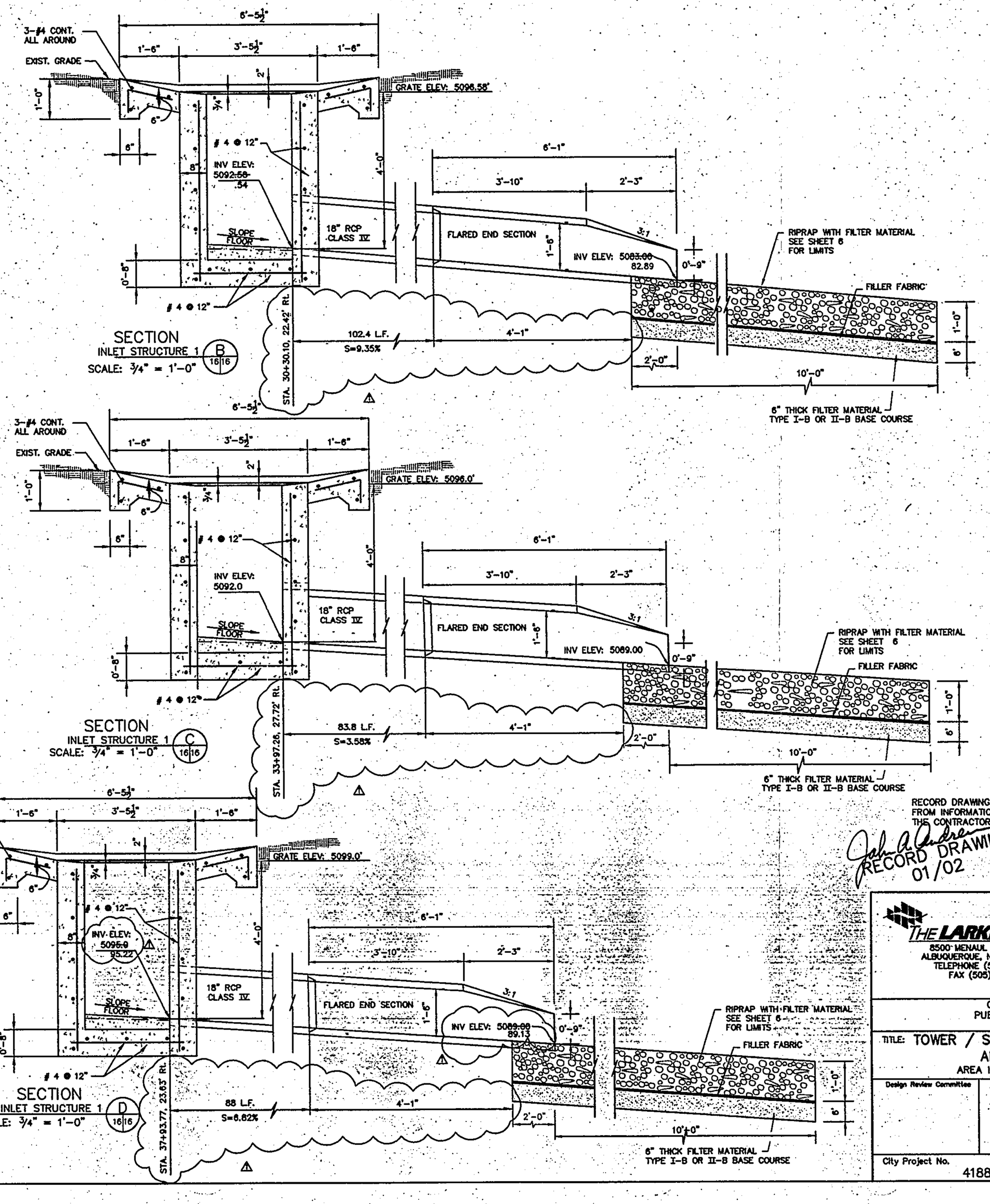
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PLAN

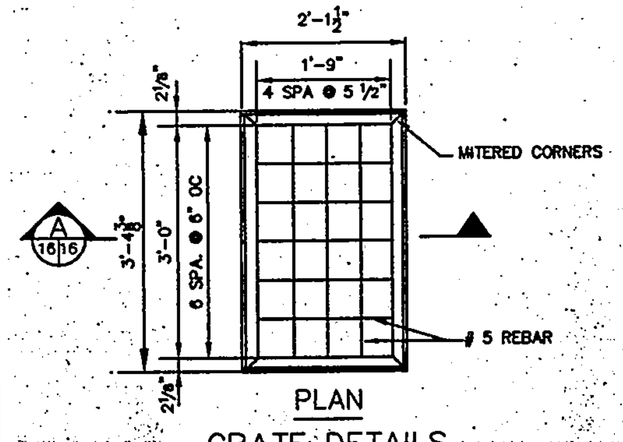
AREA INLET DETAILS (1 6|16) (2 6|16) (3 6|16)

TYPICAL FOR 3 INLET STRUCTURES
REFERENCE SHEET 6 FOR LOCATIONS
SCALE: ¾" = 1'-0"

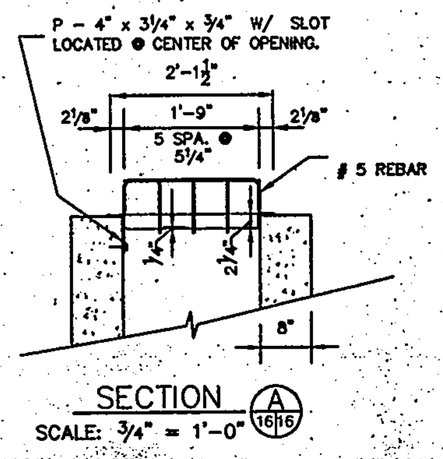


SECTION
INLET STRUCTURE 1 (B 16|16)
SCALE: ¾" = 1'-0"

SECTION
INLET STRUCTURE 1 (C 16|16)
SCALE: ¾" = 1'-0"

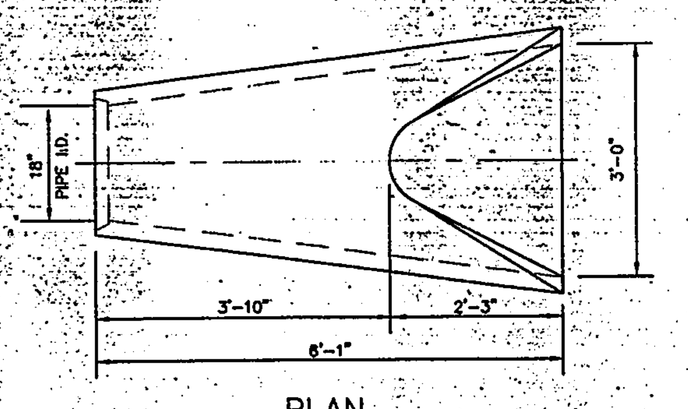


PLAN
GRATE DETAILS
SCALE: ¾" = 1'-0"



SECTION
SCALE: ¾" = 1'-0" (A 16|16)

NOTE: SAME GRATE TYPICAL FOR ALL 3 INLET STRUCTURES



PLAN
FLARED END SECTION
SCALE: ¾" = 1'-0"

SECTION
INLET STRUCTURE 1 (D 16|16)
SCALE: ¾" = 1'-0"

RECORD DRAWINGS WERE PREPARED FROM INFORMATION PROVIDED BY THE CONTRACTOR.

RECORD DRAWING
01/02

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SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
1		
2		
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BENCH MARKS

AS BUILT INFORMATION
CONTRACTOR: CHAVA TRUCKING
SURVEYED BY: CHAVA TRUCKING — DATE: 08/01
INSPECTED BY: AMARCA — DATE: 10/01
ACCEPTANCE BY: AMARCA — DATE: 10/01
FIELD VERIFICATION BY: LARKIN GROUP — DATE: 10/01
DRAWINGS BY: LARKIN GROUP — DATE: 01-02

CITY OF ALBUQUERQUE CONTROL STATION 7-LG.
STATION IS LOCATED 39.2 FT. WEST FROM CENTERLINE OF 98th. ST. AND 31.0 FT. SOUTH FROM CENTERLINE OF TOWER RD. STATION IS A STANDARD C.O.A. BRASS CAP SET IN CONCRETE. 0.4 FT. ABOVE GROUND AND STAMPED "7-LG" ELEVATION = 5175.735.

MICRO-FILM INFORMATION
RECORDED BY: — DATE:
RECORDED BY: — DATE:
RECORDED BY: — DATE:

ENGINEER'S SEAL
PROFESSIONAL ENGINEER — STATE OF NEW MEXICO — 9580 — REGISTERED

NO.	DATE	REMARKS	BY
1	3/6/01	CORRECTED 18" RCP LENGTHS	D.E.B.
2			
3			

REVISIONS
DESIGNED BY: D. Bishop — DATE: OCT. 2000
DRAWN BY: T. Cannon — DATE: OCT. 2000
CHECKED BY: J. Andrews — DATE: OCT. 2000

THE LARKIN GROUP, P.A.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: TOWER / SAGE PARK, DETENTION POND AND OUTFALL PIPE
AREA INLET DETAILS AND SECTIONS

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No.	Zone Map No.	Sheet	of
4188.91	L-10-Z	16	25

PI Sta = 2+99.91
N = 1479158.689
E = 357404.98
I = 44°57'16"R

PI Sta = 11+02.47
N = 1478360.80
E = 357489.11
I = 40°15'40"R

PI Sta = 11+24.40
4.78° BEND (96' SD)
N = 1478342.67
E = 357476.78

S 06°01'04" E
802.56 FT

STA. 2+94.91
12" X 12" J-BOX 2
SEE SHEET 14

STA. 11+07.47
12" X 12" J-BOX 1
SEE SHEET 13

STA 11+09.00
TEE MANHOLE

STA. 13+49.40
TEE MANHOLE W/ PLUG

PROJECT ENDED AT TEE MANHOLE. LAST SECTION OF PIPE WAS NOT BUILT.

EOP = 1291.16
E = 357537.55
N = 1478158.50
END 96" SD TIE TO 96" SD ON SAN YGNACIO
STA. 51+30.27, 4.39' RT.

PLAN
SCALE: 1" = 50'

STA: 1+00 TO STA: 2+89.91
BUILD 189 LF. OF 90" CLASS IV RCP
@ S=3.66% W/ SPECIAL BEDDING

STA: 2+99.91 TO STA: 6+86.67
BUILD 387 LF. OF 36" CLASS IV RCP
@ S=10.40% TYPE "C" BEDDING

STA: 6+86.67 TO STA: 9+02.67
BUILD 216 LF. OF 36" CLASS V RCP
@ S=0.40% TYPE "C" BEDDING

STA: 9+02.67 TO STA: 11+02.47
BUILD 200 LF. OF 36" CLASS IV RCP
@ S=0.40% TYPE "C" BEDDING

STA: 11+12.47 TO STA: 12+06.00 BUILD
93 LF OF 96" CLASS IV RCP
@ S=3.23% W/ SPECIAL BEDDING

STA: 12+06.00 TO STA: 13+10.00 BUILD
104 LF OF 96" CLASS IV RCP
@ S=3.23% W/ SPECIAL BEDDING

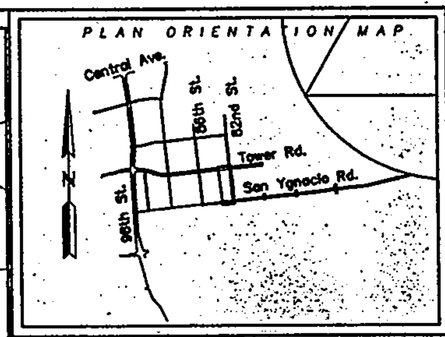
STA: 13+10.00 TO STA: 13+61.46 BUILD
51.46 LF OF 96" CLASS IV RCP
@ S=3.23% W/ SPECIAL BEDDING

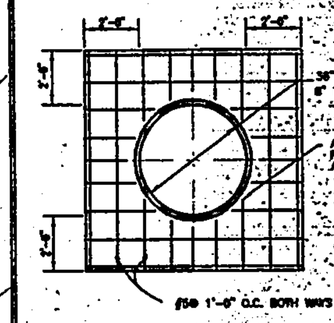
EXISTING GROUND @ CENTERLINE OF POND STORM DRAIN

FINAL GROUND @ CENTERLINE OF POND STORM DRAIN

PROFILE
SCALE: 1" = 50' HORIZ.
1" = 5' VERT.

PLAN ORIENTATION MAP





DETAIL 1 (V21)
CONCRETE SEEP COLLAR
SCALE: NOT TO SCALE

1. SEE SPECIAL BEDDING SECTION ON SHEET 24 FOR TYPICAL PIPE SECTION ON ALL PIPE UNDER POND EMBANKMENT.

AS BUILT INFORMATION

BENCH MARKS
CITY OF ALBUQUERQUE CONTROL STATION 7-I.S.
STATION IS LOCATED 39.2 FT. WEST FROM CENTERLINE OF 98th. ST. AND 31.0 FT. SOUTH FROM CENTERLINE OF TOWER RD. STATION IS A STANDARD C.O.A BRASS CAP SET IN CONCRETE. 0.4 FT. ABOVE GROUND AND STAMPED "7-I.S" ELEVATION = 5175.735.

CONTRACTOR CHAN TROSSBB
WORK STAKED BY CHAN TROSSBB DATE 08/01
INSPECTION BY AMAYA DATE 10/01
FIELD DOWN BY LARKIN GROUP DATE 10/01
DRAWINGS COMPILED BY LARKIN GROUP DATE 01-02
MICRO-FILM INFORMATION
RECORDED BY DATE
RECORDED BY DATE

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
1		
2		
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ENGINEER'S SEAL



RECORD DRAWINGS WERE PREPARED FROM INFORMATION PROVIDED BY THE CONTRACTOR.
RECORD DRAWING 01/02

NO.	DATE	REVISIONS	BY
3			
2	1/16/01	REVISED 96" SD SLOPE (SAD 222)	DEB
1		REMARKS	
		DESIGN	

DESIGNED BY: DATE: DEC. 2000
DRAWN BY: DATE: DEC. 2000
CHECKED BY: DATE: DEC. 2000

THE LARKIN GROUP, PC
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

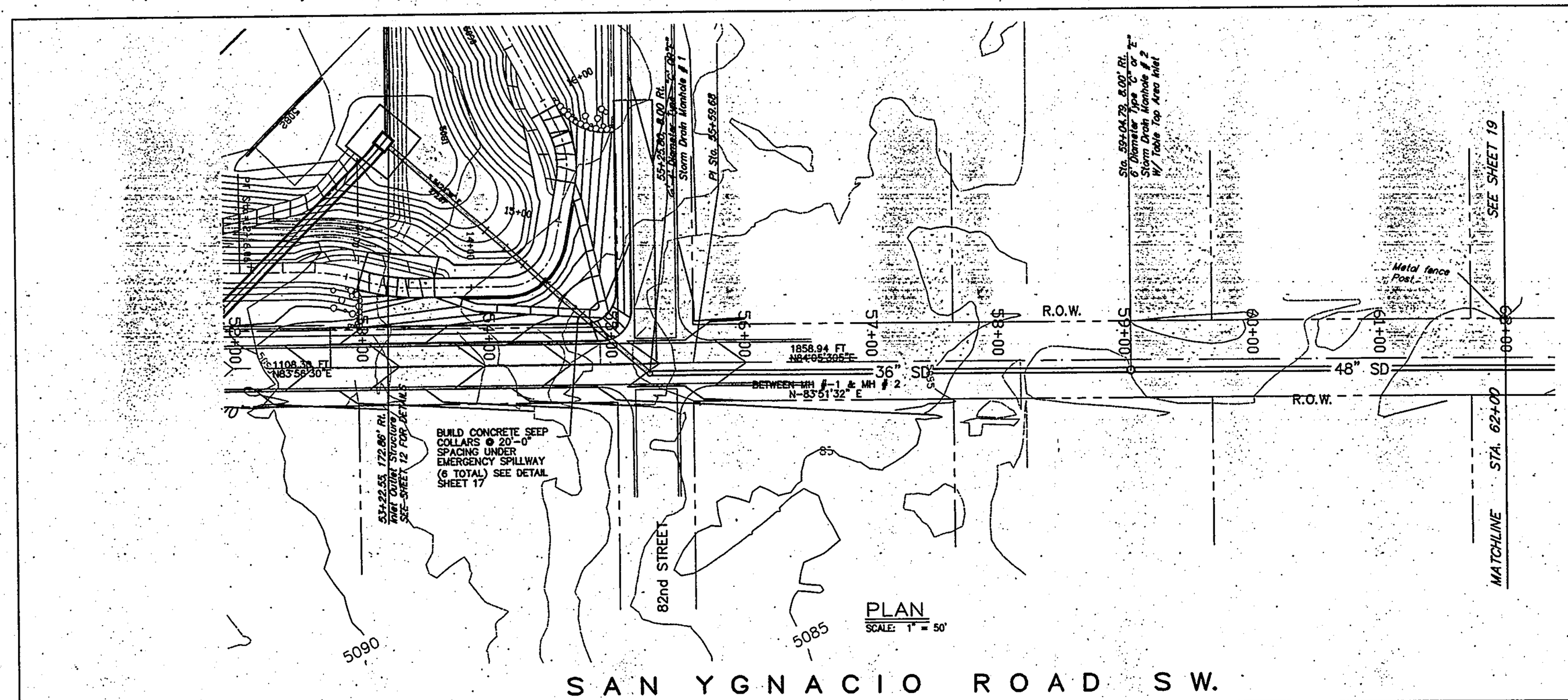
TITLE: TOWER / SAGE PARK, DETENTION POND AND OUTFALL PIPE
POND STORM DRAIN PLAN AND PROFILE STA. 1+00 TO 13+61.46

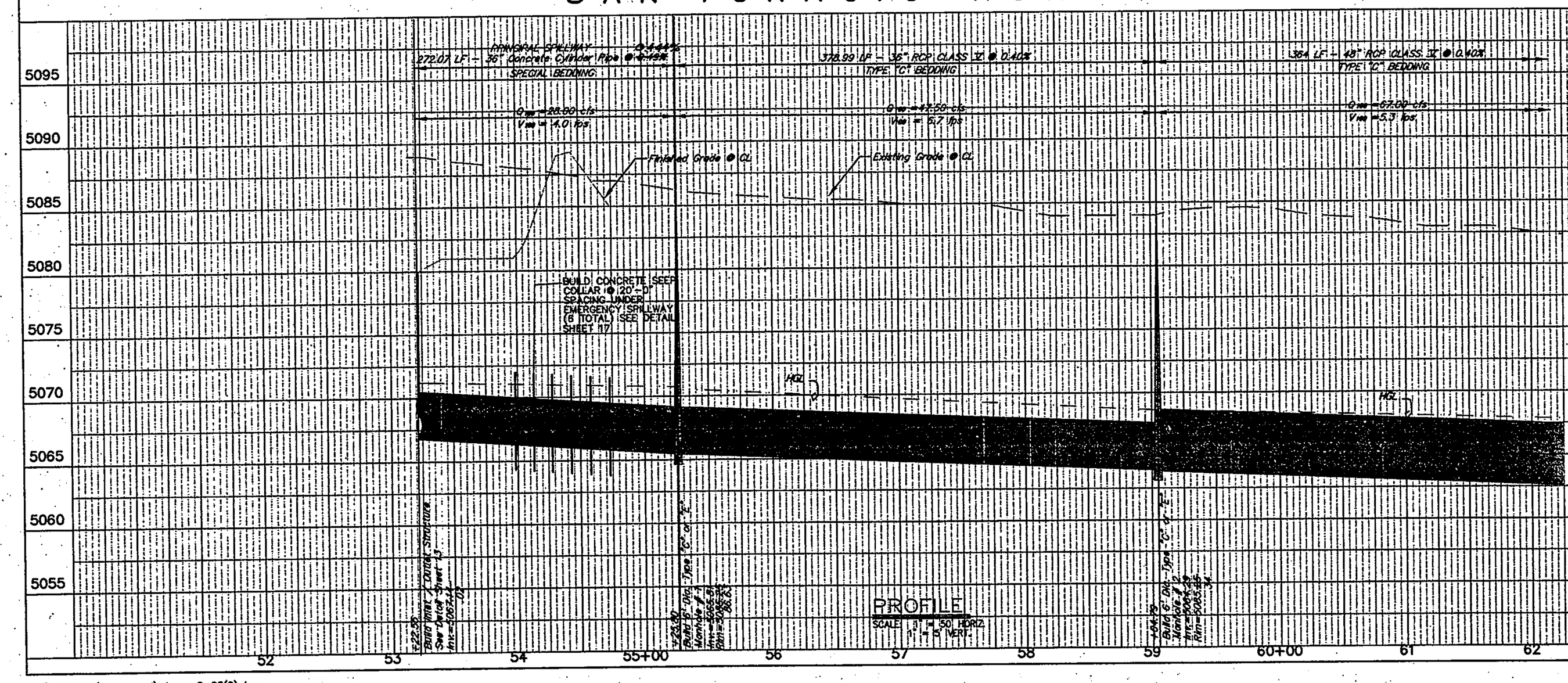
Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

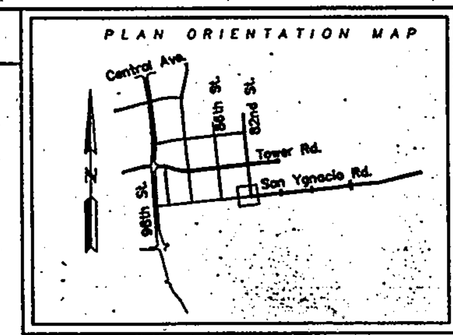
City Project No.	Zone Map No.	Sheet	Of
4188.91	L-10-Z	17	25

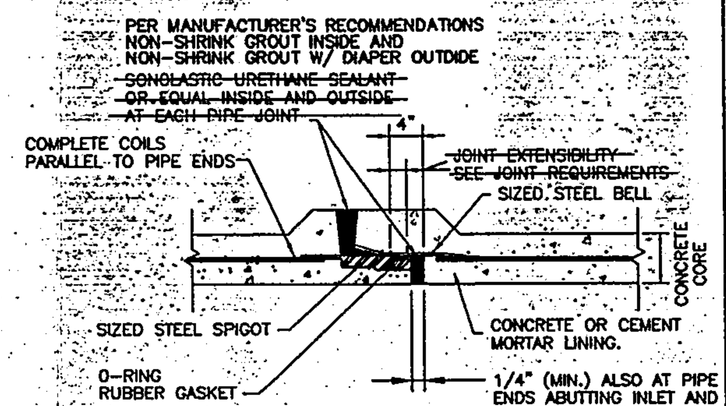
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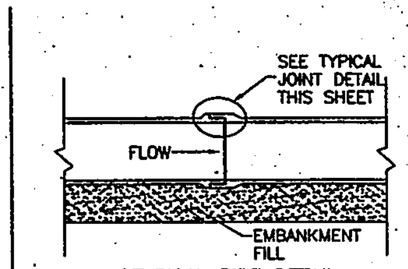








TYPICAL PIPE JOINT DETAIL



TYPICAL PIPE DETAIL

SEE MANUFACTURER'S SUBMITTALS

JOINT REQUIREMENTS				
NUMBER OF EACH REQUIRED	1	1	1	12
LENGTH OF PIPE SECTION (FEET)	9.07	10	13.0	20
MINIMUM JOINT LENGTH (INCHES)	4	4	4	4
MINIMUM EXTENSIBILITY (INCHES)	1.52	1.52	1.94	2.28

NOTE:

1. THE CONTRACTOR SHALL REPAIR AT HIS COST ANY DAMAGE TO PRIVATE PROPERTY OUTSIDE OF THE SAN YGNACIO RIGHT OF WAY (R.O.W.) CAUSED DURING CONSTRUCTION.

RECORD DRAWINGS WERE PREPARED FROM INFORMATION PROVIDED BY THE CONTRACTOR.

John D. Andrews

RECORD DRAWING
01/02

THE LARKIN GROUP, P.C.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

AS BUILT INFORMATION

CONTRACTOR CHAN. TRUCKING

WORK STARTED BY:	CHAN. TRUCKING	DATE 08/01
WORK ACCEPTED BY:	AMAFCA	DATE 10/01
FIELD INSPECTION BY:	LARKIN GROUP	DATE 10/01
DRAWINGS CORRECTED BY:	LARKIN GROUP	DATE 01-02
MICRO-FILM INFORMATION		
RECORDED BY:		DATE
RECORDED BY:		DATE
RECORDED BY:		DATE

BENCH MARKS

CITY OF ALBUQUERQUE CONTROL STATION 7-L9.
STATION IS LOCATED 39.2 FT. WEST FROM CENTERLINE OF 98th. ST. AND 31.0 FT. SOUTH FROM CENTERLINE OF TOWER RD. STATION IS A STANDARD C.O.A. BRASS CAP SET IN CONCRETE 0.4 FT. ABOVE GROUND AND STAMPED "7-L9" ELEVATION = 5175.735.

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE
1		
2		
3		
4		
5		
6		
7		

ENGINEER'S SEAL



NO.	DATE	REVISIONS	BY
1		REMARKS	
2		DESIGN	
3			

DESIGNED BY: D. Bishop DATE: DEC. 2000
DRAWN BY: T. Carman DATE: DEC. 2000
CHECKED BY: J. Andrews DATE: DEC. 2000

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: TOWER/SAGE PARK, DETENTION POND AND OUTFALL PIPE

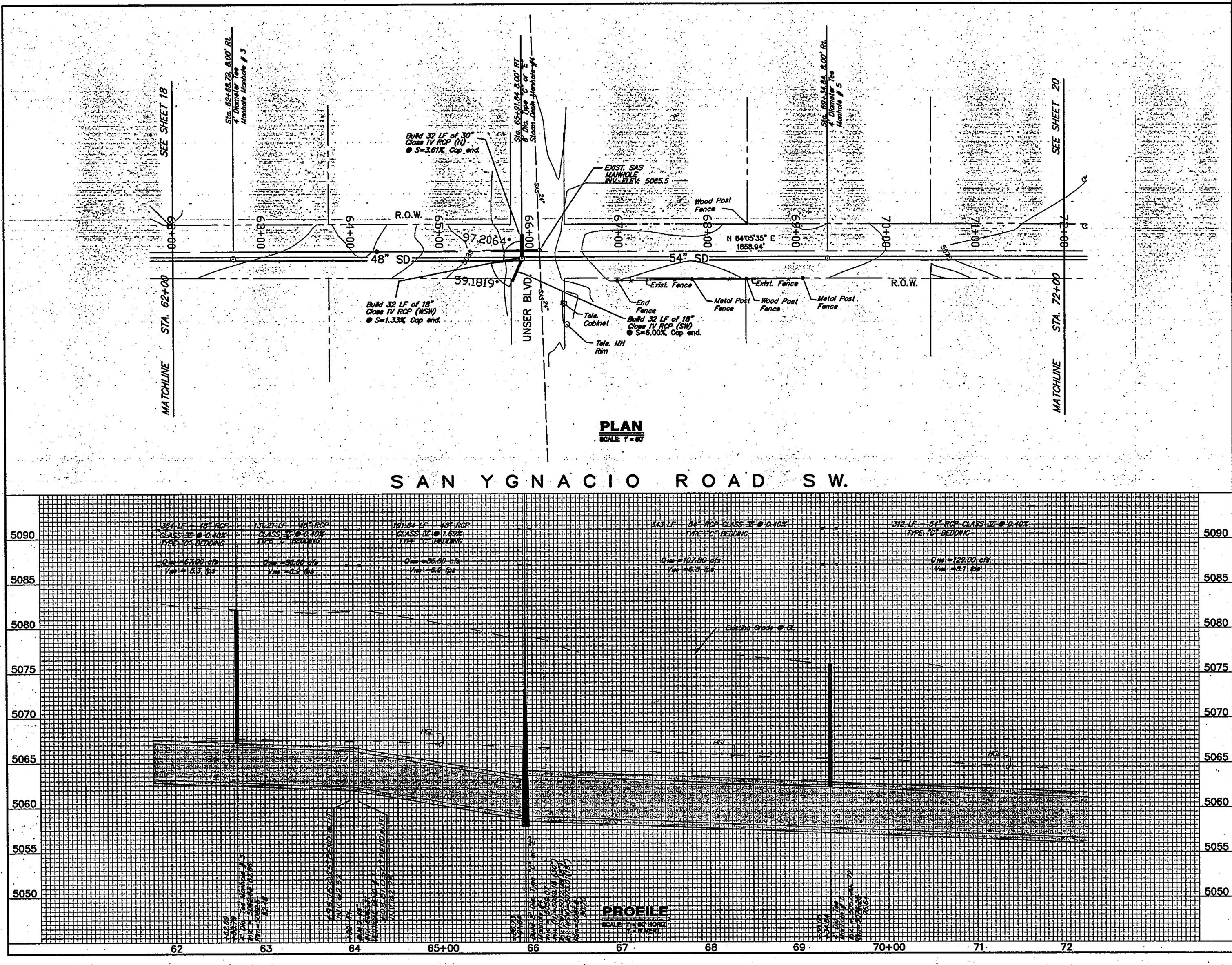
PRINCIPAL SPILLWAY PLAN AND PROFILE STA. 35+20.14 TO 55+35.79
OUTFALL PLAN AND PROFILE STA. 55+35.79 TO 62+00.00

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No.	Zone Map No.	Sheet	of
7188.91	L-10-Z	18	24

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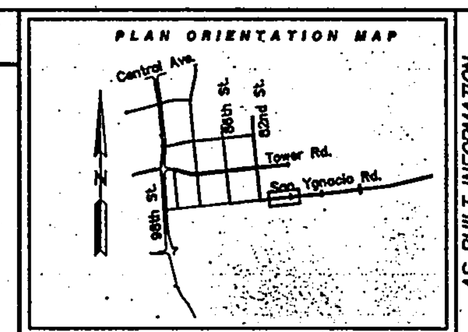
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PLAN
SCALE: 1"=50'

SAN YGNACIO ROAD SW.

PROFILE
SCALE: 1"=50' HORIZ.
1"=5' VERT.



NOTE:

1. THE CONTRACTOR SHALL REPAIR AT HIS COST ANY DAMAGE TO PRIVATE PROPERTY OUTSIDE OF THE SAN YGNACIO RIGHT OF WAY (R.O.W.) CAUSED DURING CONSTRUCTION.

AS BUILT INFORMATION

CONTRACTOR: CHAVA TRUCKING

WORK DONE BY:	CHAVA TRUCKING	DATE: 08/01
INSPECTORS ACCEPTANCE BY:	AMAPCA	DATE: 10/01
VERIFICATION BY:	LARKIN GROUP	DATE: 10/01
CHECKED BY:	LARKIN GROUP	DATE: 01-02

MICRO-FILM INFORMATION

RECORDED BY	DATE
RECORDED BY	DATE
RECORDED BY	DATE

BENCH MARKS

CITY OF ALBUQUERQUE CONTROL STATION 7-I.9.
STATION IS LOCATED 38.2 FT. WEST FROM CENTERLINE OF 98th. ST. AND 31.0 FT. SOUTH FROM CENTERLINE OF TOWER RD. STATION IS A STANDARD C.O.A. BRASS CAP SET IN CONCRETE. 0.4 FT. ABOVE GROUND AND STAMPED "7-I.9" ELEVATION = 5175.735.

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
1		
2		
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5		
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7		

ENGINEER'S SEAL

RECORD DRAWINGS WERE PREPARED FROM INFORMATION PROVIDED BY THE CONTRACTOR.
RECORD DRAWING
01/02

NO.	DATE	REVISIONS	BY
1		DESIGN	
2		REMARKS	
3			
4			

DESIGNED BY: D. Bishop — DATE: DEC. 2000
DRAWN BY: T. Carmen — DATE: DEC 2000
CHECKED BY: J. Andrews — DATE: DEC 2000

THE LARKIN GROUP, P.C.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

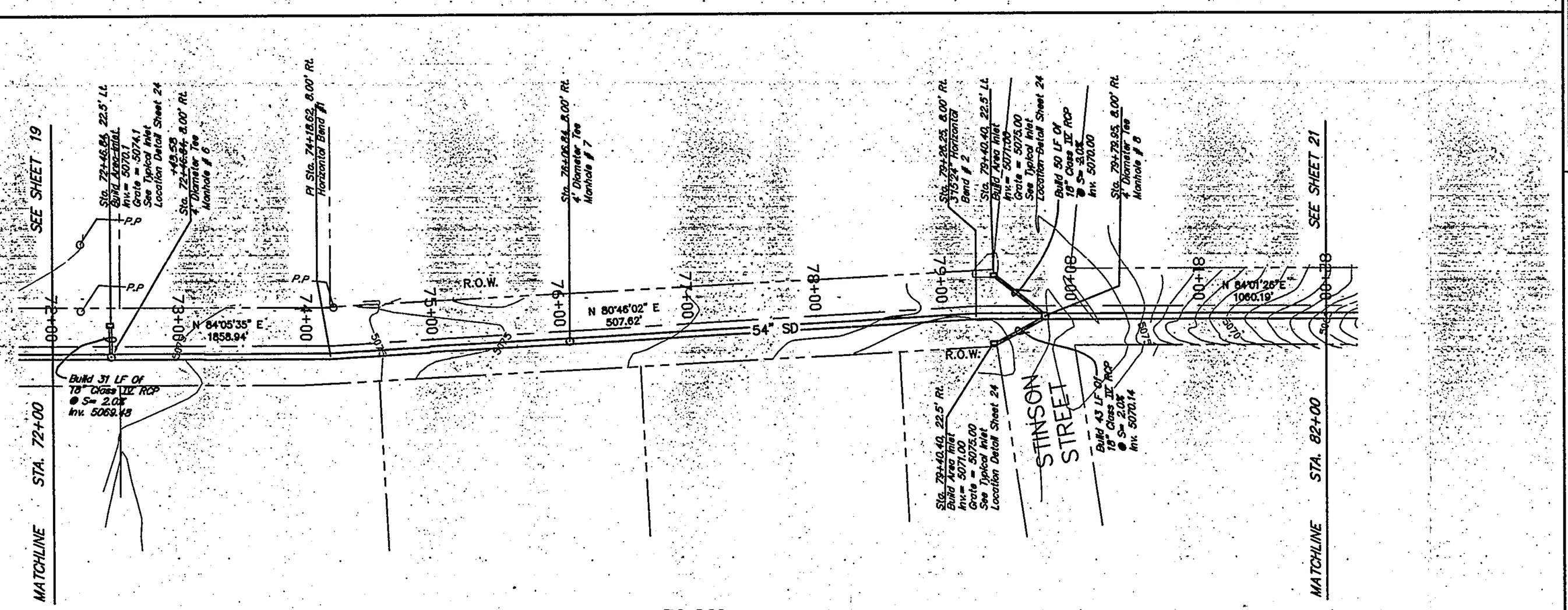
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: **TOWER/SAGE PARK, DETENTION POND AND OUTFALL PIPE**
OUTFALL PLAN AND PROFILE STA. 62+00 TO 72+00

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

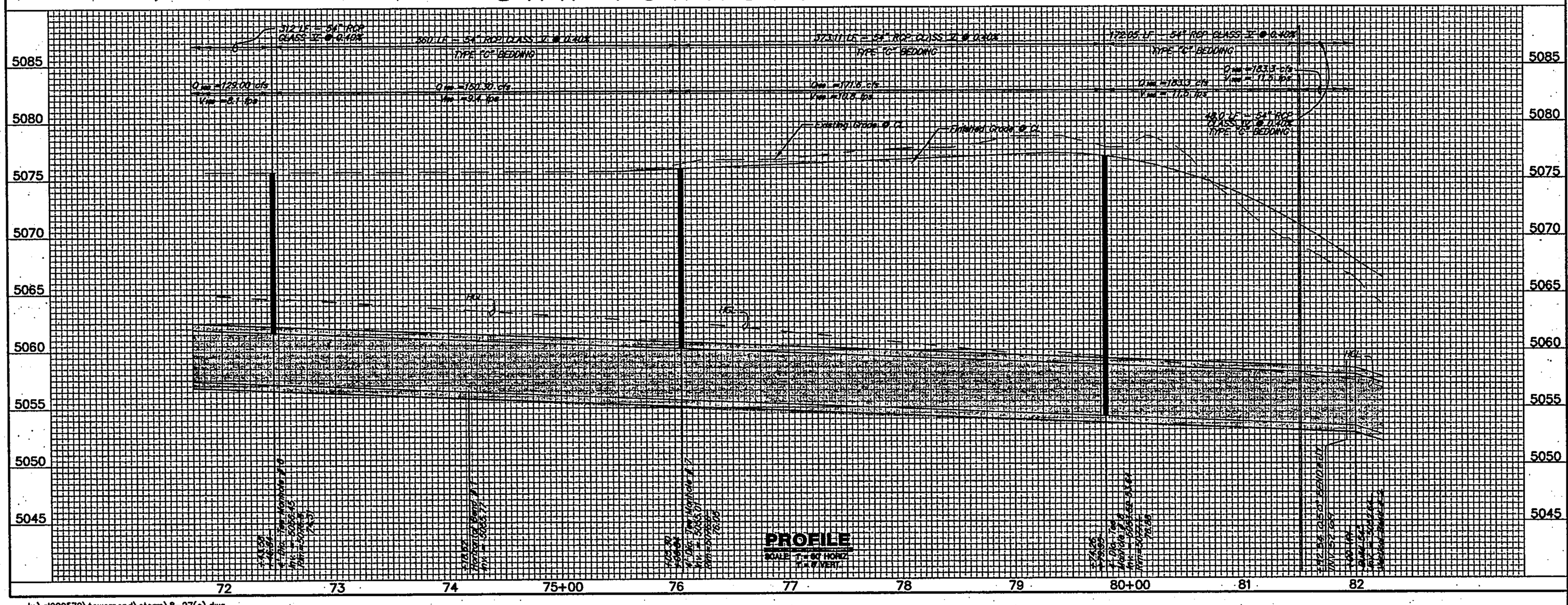
City Project No.	Zone Map No.	Sheet	of
7188.91	L-10-Z	19	25

J:\d7900572\tonypond\storm\S-28(0).dwg



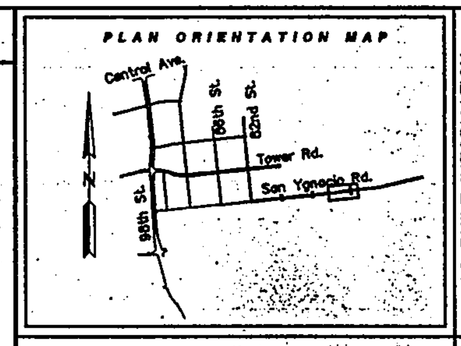
PLAN
SCALE: 1" = 60'

SAN YGNACIO ROAD SW.



PROFILE
SCALE: 1" = 60' HORIZ.
1" = 6' VERT.

lc:\al900572\towerpond\storm\8-27(o).dwg



NOTE"

1. THE CONTRACTOR SHALL REPAIR AT HIS COST ANY DAMAGE TO PRIVATE PROPERTY OUTSIDE OF THE SAN YGNACIO RIGHT OF WAY (R.O.W.) CAUSED DURING CONSTRUCTION.

AS BUILT INFORMATION

CONTRACTOR CHAVA WILCOXEN

	STAKED BY	DATE 09/01
	INSPECTED BY JAMPOL	DATE 10/01
	FIELD DRAWINGS BY LARKIN GROUP	DATE 10/01
	CORRECTED BY LARKIN GROUP	DATE 01-02

BENCH MARKS

CITY OF ALBUQUERQUE CONTROL STATION 7-L9.	MICRO-FILM INFORMATION
STATION IS LOCATED 39.2 FT. WEST FROM CENTERLINE	RECORDED BY DATE
OF 98th. ST. AND 31.0 FT. SOUTH FROM CENTERLINE	RECORDED BY DATE
OF TOWER RD. STATION IS A STANDARD C.O.A BRASS	RECORDED BY DATE
CAP SET IN CONCRETE 0.4 FT. ABOVE GROUND AND	RECORDED BY DATE
STAMPED "7-L9" ELEVATION = 5175.735.	RECORDED BY DATE

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

RECORD DRAWINGS WERE PREPARED FROM INFORMATION PROVIDED BY THE CONTRACTOR.

John A. Andrews
RECORD DRAWING
01/02

NO.	DATE	REVISIONS: DESIGN	REMARKS	BY
1				
2				
3				
4				

DESIGNED BY: D. Bishop — DATE: DEC. 2000
DRAWN BY: T. Carmen — DATE: DEC. 2000
CHECKED BY: J. Andrews — DATE: DEC. 2000

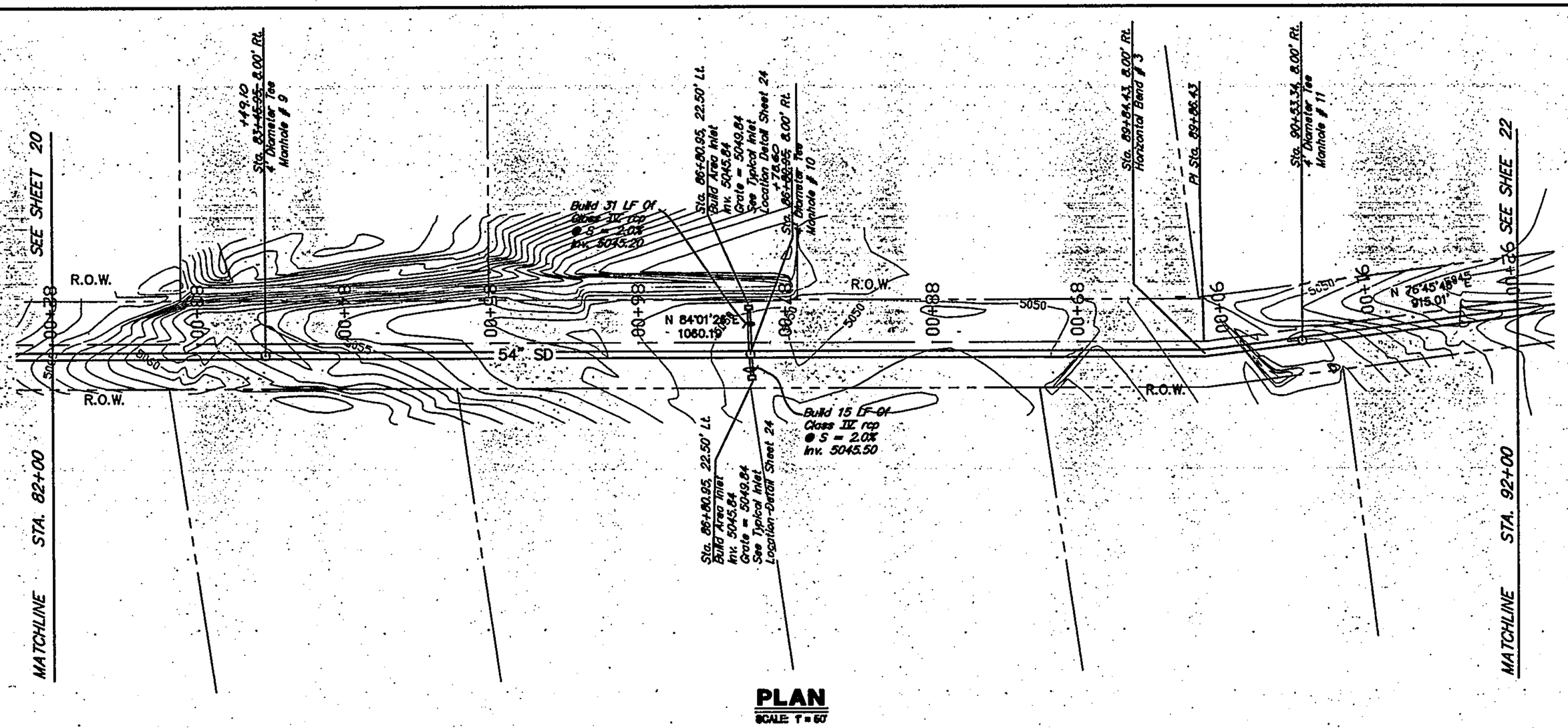
THE LARKIN GROUP, P.C.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: TOWER/SAGE PARK, DETENTION POND AND OUTFALL PIPE
OUTFALL PLAN AND PROFILE STA. 72+00 TO STA. 82+00

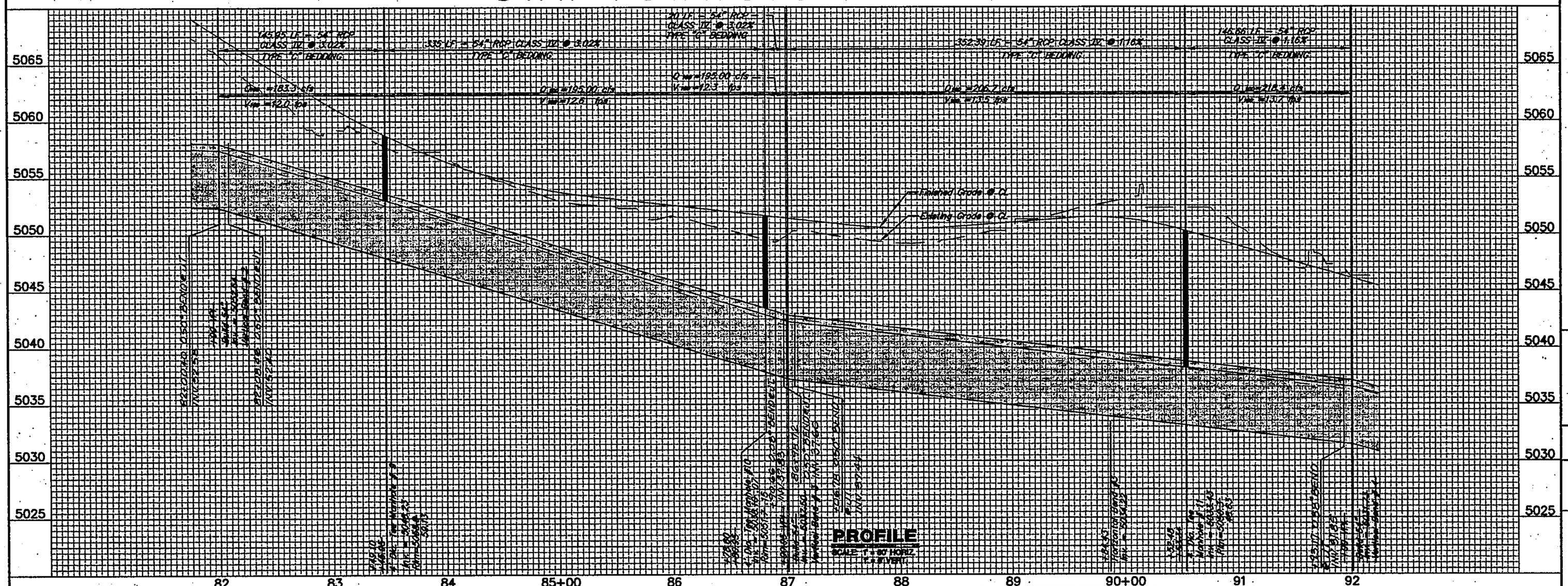
Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No.	Zone Map No.	Sheet	of
4188.91	L-10-Z	20	25



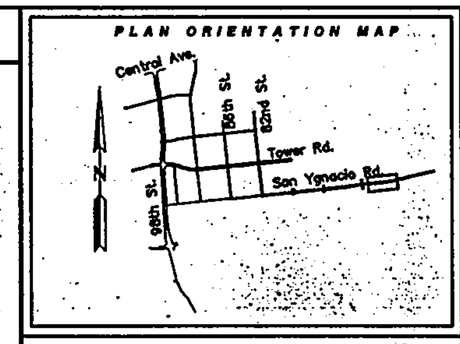
PLAN
SCALE: 1" = 60'

SAN YGNACIO ROAD SW.



PROFILE
SCALE: 1" = 60' HORIZ.
1" = 6' VERT.

k:\ql900572\towerpond\storm\8-28(o).dwg



NOTE:

1. THE CONTRACTOR SHALL REPAIR AT HIS COST ANY DAMAGE TO PRIVATE PROPERTY OUTSIDE OF THE SAN YGNACIO RIGHT OF WAY (R.O.W.) CAUSED DURING CONSTRUCTION.

AS BUILT INFORMATION

CONTRACTOR CHAVA TRUCKING — DATE 05/95
FIELD BY CHAVA TRUCKING — DATE 05/95
INSPECTORS ACCEPTANCE BY AMPCA — DATE 10/95
CONSTRUCTION BY LARKIN GROUP — DATE 10/95
SURVEYED BY LARKIN GROUP — DATE 11-98

MICRO-FILM INFORMATION

RECORDED BY — DATE
RECORDED BY — DATE
RECORDED BY — DATE

BENCH MARKS

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
1		
2		
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4		
5		
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ENGINEER'S SEAL

JOHN A. ANDREWS — NEW MEXICO — 9481 — REGISTERED PROFESSIONAL ENGINEER — STATE OF NEW MEXICO

RECORD DRAWINGS WERE PREPARED FROM INFORMATION PROVIDED BY THE CONTRACTOR.
John A. Andrews
RECORD DRAWING
01/02

NO.	DATE	REMARKS	BY
4			
3			
2			
1		DESIGN	
		DESIGNED BY: D. Bishop — DATE: DEC. 2000	
		DRAWN BY: T. Carman — DATE: DEC. 2000	
		CHECKED BY: J. Andrews — DATE: DEC. 2000	

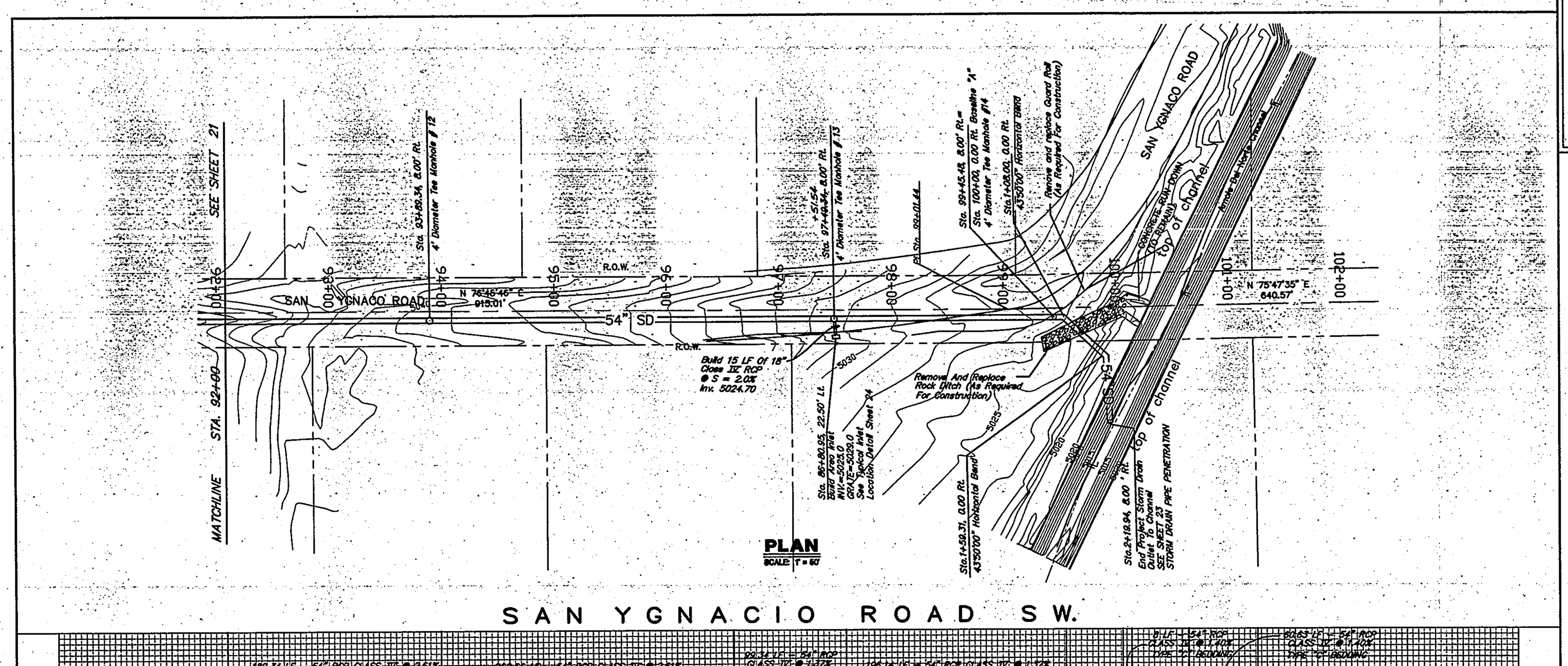
THE LARKIN GROUP, P.C.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: **TOWER/SAGE PARK, DETENTION POND AND OUTFALL PIPE**
OUTFALL PLAN AND PROFILE STA. 82+00 TO 92+00

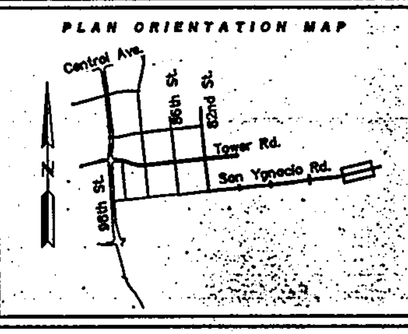
Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No.	Zone Map No.	Sheet	of
4188.91	L-10-Z	21	25



k:\ol900572\towerpond\storm\8-29(o).dwg

PLAN ORIENTATION MAP



NOTE:

1. CONTRACTOR SHALL COMPLETE PIPE PENETRATION AND ALL ASSOCIATED WORK IN THE AMOLE DEL NORTE CHANNEL BY MAY 1st. 2000.
2. THE CONTRACTOR SHALL REPAIR AT HIS COST ANY DAMAGE TO PRIVATE PROPERTY OUTSIDE OF THE SAN YGNACIO RIGHT OF WAY (R.O.W.) CAUSED DURING CONSTRUCTION.

AS BUILT INFORMATION

CONTRACTOR	CHAVA TRUCKING
STAKED BY	CHAVA TRUCKING DATE 08/01
PHOTOGRAPHS TAKEN BY	MARTCH DATE 10/01
FIELD VERIFICATIONS BY	LARKIN GROUP DATE 10/01
CORRECTED BY	LARKIN GROUP DATE 01-02

MICRO-FILM INFORMATION

ACCEPTED BY	DATE
RECORDED BY	DATE

BENCH MARKS

CITY OF ALBUQUERQUE CONTROL STATION 7-L9.
STATION IS LOCATED 39.2 FT. WEST FROM CENTERLINE OF 98th. ST. AND 31.0 FT. SOUTH FROM CENTERLINE OF TOWER RD. STATION IS A STANDARD C.O.A BRASS CAP SET IN CONCRETE 0.4 FT. ABOVE GROUND AND STAMPED "7-L9" ELEVATION = 5175.735.

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE
1		
2		
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ENGINEER'S SEAL

DONALD A. ANDREWS — NEW MEXICO — 9672 — REGISTERED PROFESSIONAL ENGINEER — STATE OF NEW MEXICO

RECORD DRAWINGS WERE PREPARED FROM INFORMATION PROVIDED BY THE CONTRACTOR.

RECORD DRAWING
01/02

NO.	DATE	REMARKS	BY
1		DESIGN	
2			
3			
4			

DESIGNED BY: D. Bishop — DATE: DEC. 2000
DRAWN BY: T. Carmen — DATE: DEC. 2000
CHECKED BY: J. Andrews — DATE: DEC. 2000

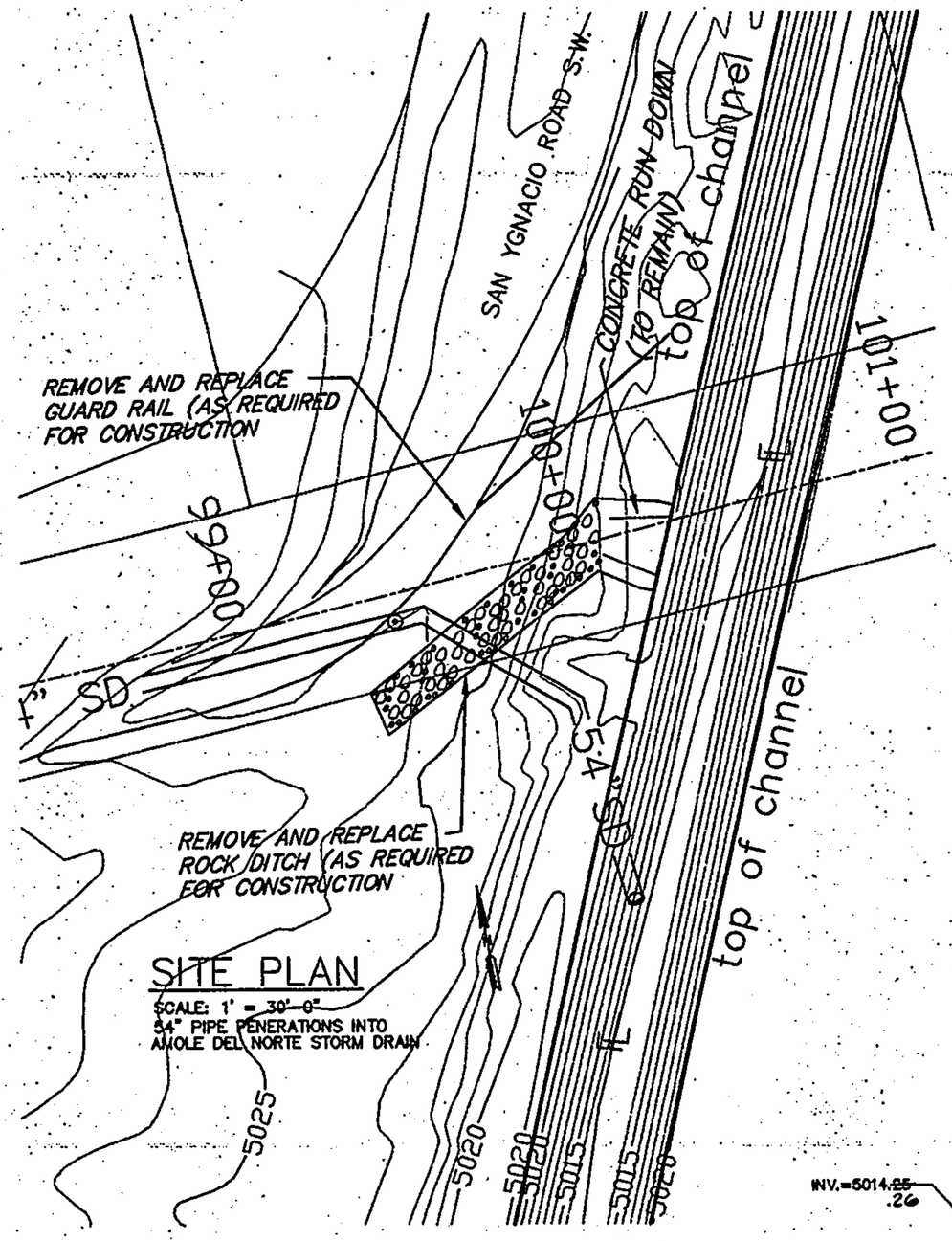
THE LARKIN GROUP, P.A.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: TOWER/SAGE PARK, DETENTION POND AND OUTFALL PIPE
OUTFALL PLAN AND PROFILE STA. 92+00 TO 2+19.94

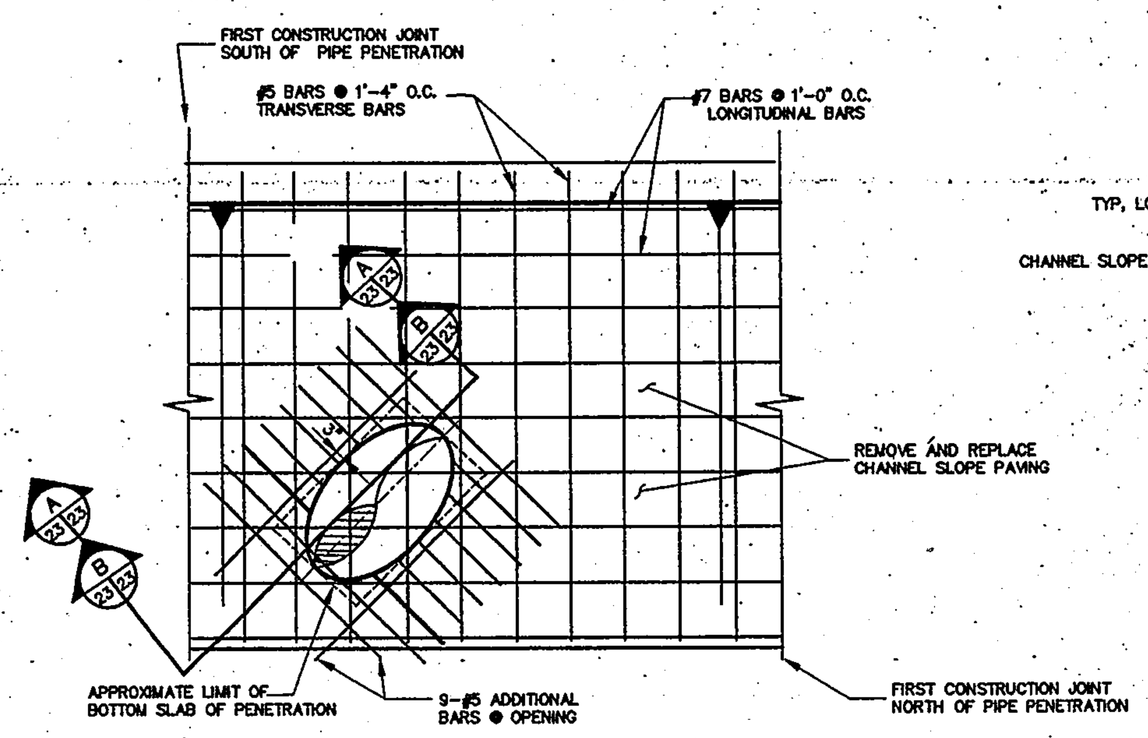
Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No.	Zone Map No.	Sheet	of
4188.91	L-10-Z	22	25



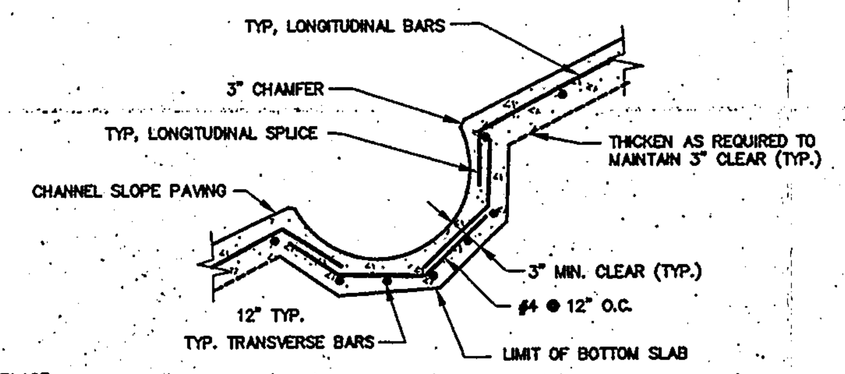
SITE PLAN

SCALE: 1" = 30'-0"
54" PIPE PENERATIONS INTO AMOLE DEL NORTE STORM DRAIN



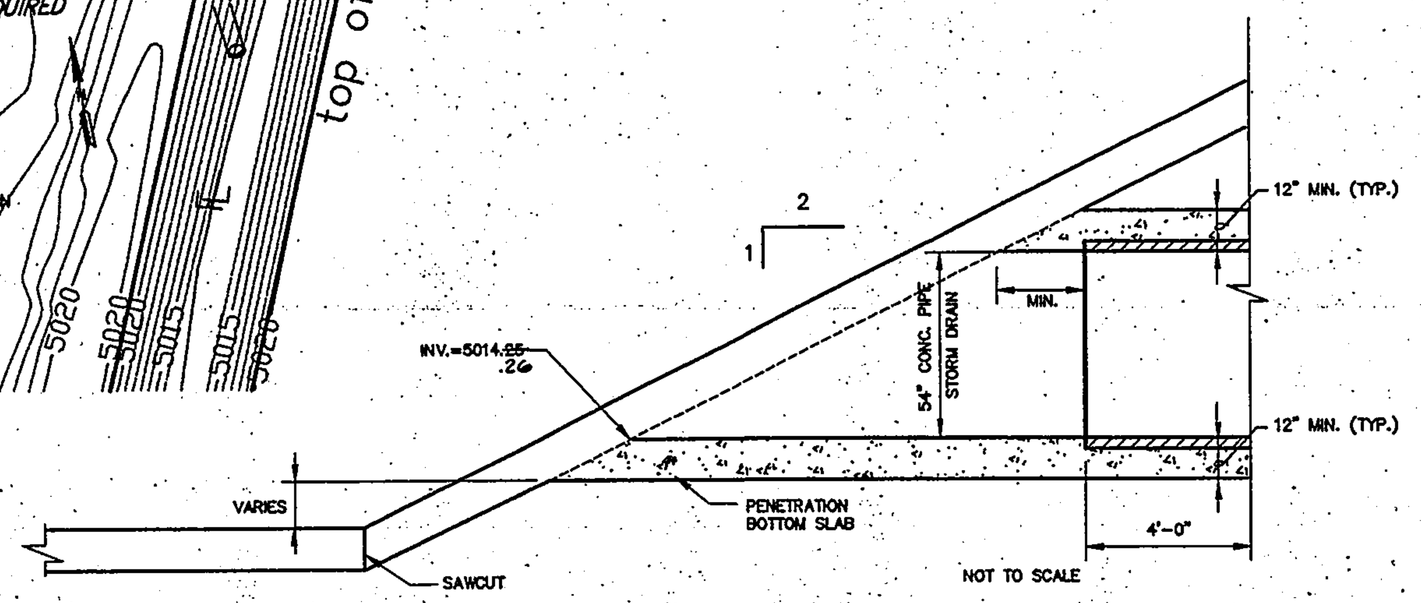
45° PIPE PENETRATION

NOT TO SCALE

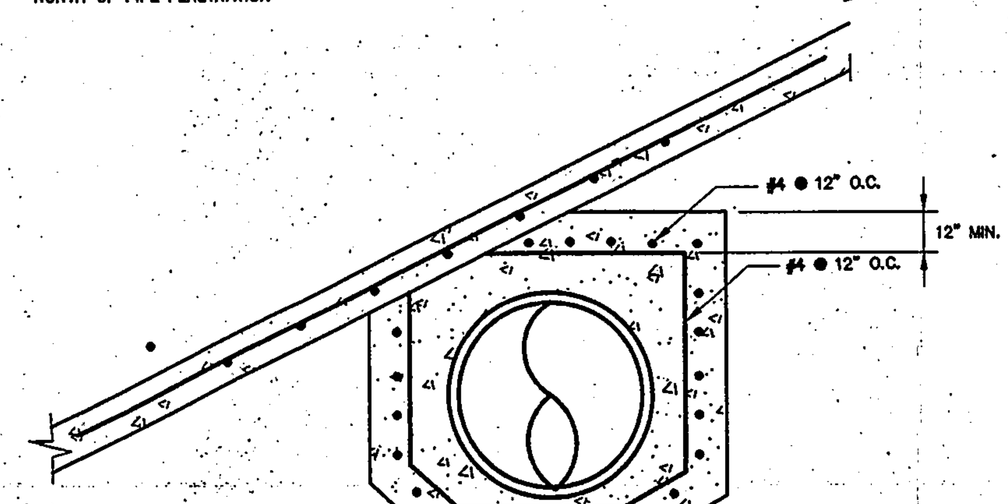


SECTION C–C

NOT TO SCALE



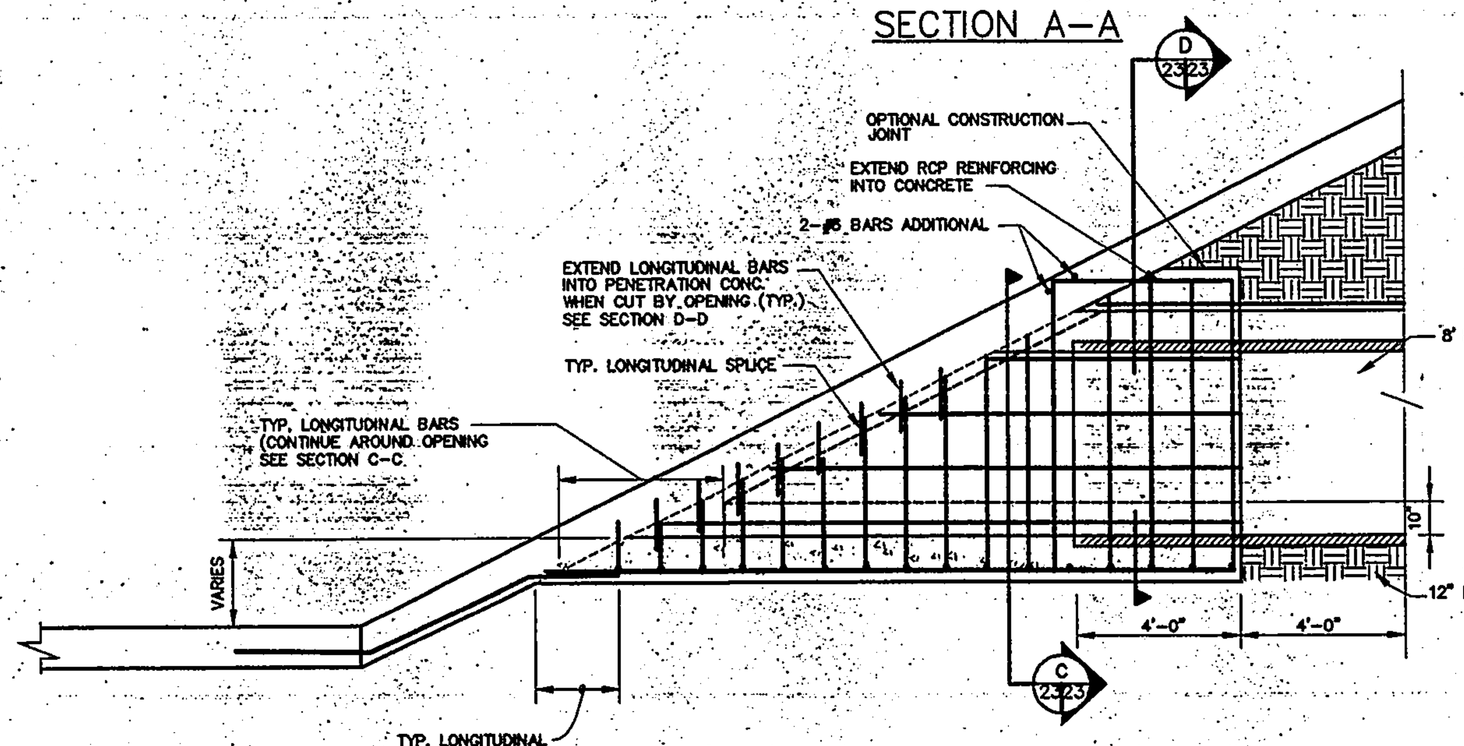
NOT TO SCALE

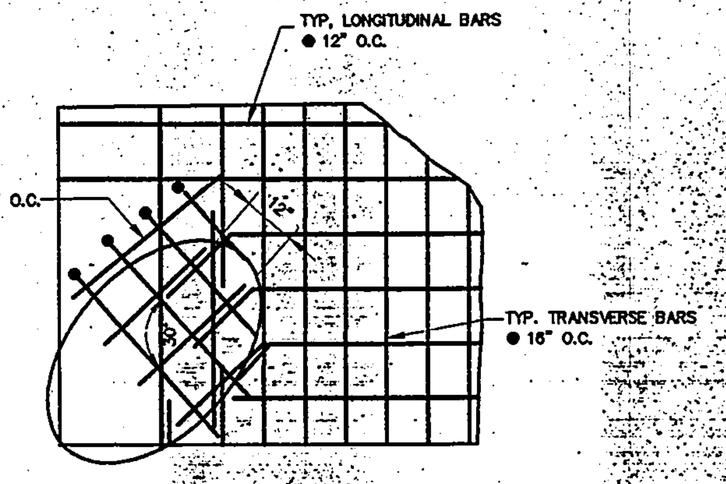


SECTION D–D

NOT TO SCALE

SECTION A–A





REINFORCING AT PENETRATION

NOT TO SCALE

GENERAL NOTES

1. REMOVE AND REPLACE GUARD RAIL AND ROCK DITCH AS REQUIRED FOR CONSTRUCTION OF 54" STORM DRAIN. COST REMOVAL AND REPLACEMENT IS CONSIDERED INCIDENTAL TO THE COST OF THE 54" STORM DRAIN.
2. CONTRACTOR SHALL REMOVE SAN YGNACIO ROAD AS REQUIRED FOR CONSTRUCTION OF 54" STORM DRAIN. CONTRACTOR SHALL REGRADE SAN YGNACIO TO PRE-CONSTRUCTION ELEVATIONS. COST REGARDING SAN YGNACIO IS CONSIDERED INCIDENTAL TO THE COST OF THE 54" STORM DRAIN.
3. CONTRACTOR SHALL REMOVE AND REPLACE CHANNEL SLOPE PAVING TO THE NEAREST CONSTRUCTION JOINT ON EACH SIDE OF THE PIPE PENETRATION. COST OR REMOVAL AND REPLACEMENT OF CHANNEL SLOPE PAVING SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE 54" PIPE PENETRATION.
4. SAWCUT, REMOVAL, AND DISPOSAL OF CONCRETE CHANNEL SHALL BE INCLUDED IN THE COST OF THE 54" PIPE PENETRATION. NO SEPARATE MEASUREMENT WILL BE MADE.

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
1		
2		
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4		
5		
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BENCH MARKS

CITY OF ALBUQUERQUE CONTROL STATION 7-I.9.
STATION IS LOCATED 39.2 FT. WEST FROM CENTERLINE OF 98th. ST. AND 31.0 FT. SOUTH FROM CENTERLINE OF TOWER RD. STATION IS A STANDARD C.O.A BRASS CAP SET IN CONCRETE 0.4 FT. ABOVE GROUND AND STAMPED "7-I.9" ELEVATION = 5175.735.

AS BUILT INFORMATION

CONTRACTOR CHAVA TRUCKING
STAKED BY CHAVA TRUCKING DATE 04/01
INSPECTED BY AMAFCA DATE 10/01
FIELD VERIFIED by LARKIN GROUP DATE 10/01
COMPILATION by LARKIN GROUP DATE 01/02
MICRO-FILM INFORMATION
RECORDED BY DATE
RECORDED BY DATE
RECORDED BY DATE

ENGINEER'S SEAL

JOHN A. ANDREWS — NEW MEXICO — 9857 — REGISTERED PROFESSIONAL ENGINEER — STATE OF NEW MEXICO

John A. Andrews RECORD DRAWING 01/02

NO.	DATE	REVISIONS REMARKS	BY
1	OCT. 2000	DESIGN	D.Bishop
2	OCT. 2000	DRAWN	T.Common
3	OCT. 2000	CHECKED	J.Andrews
4			

THE LARKIN GROUP
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

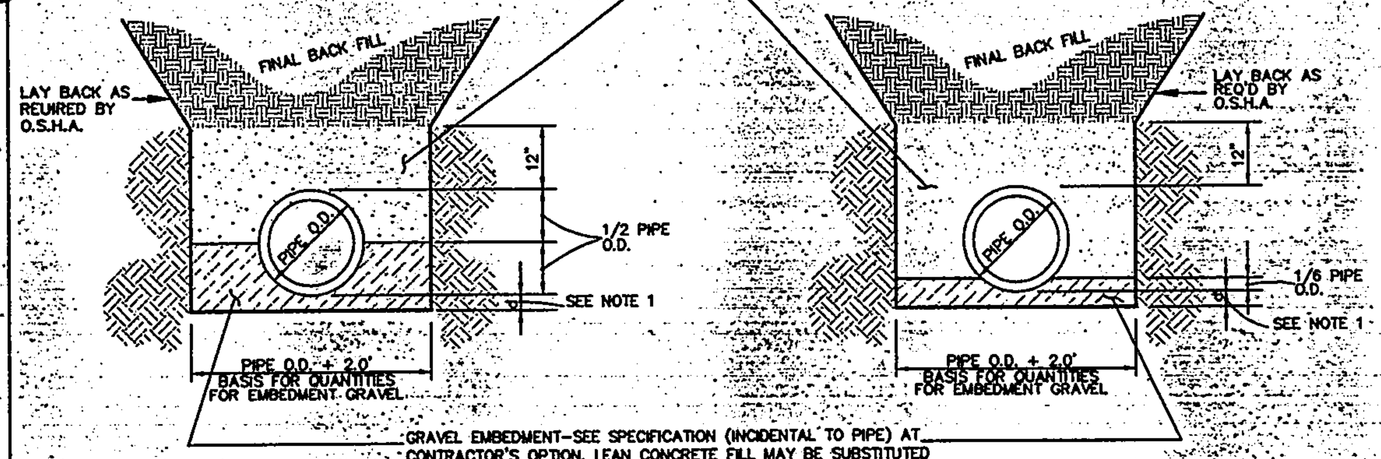
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: TOWER/SAGE PARK, DETENTION POND AND OUTFALL PIPE
STORM DRAIN PIPE PENETRATION DETAIL

Design Review Committee	City Engineer Approval	Last Design Update	No./Day/Yr.	No./Day/Yr.

City Project No. 4188.91 | Zone Map No. L-10-Z | Sheet 23 of 25

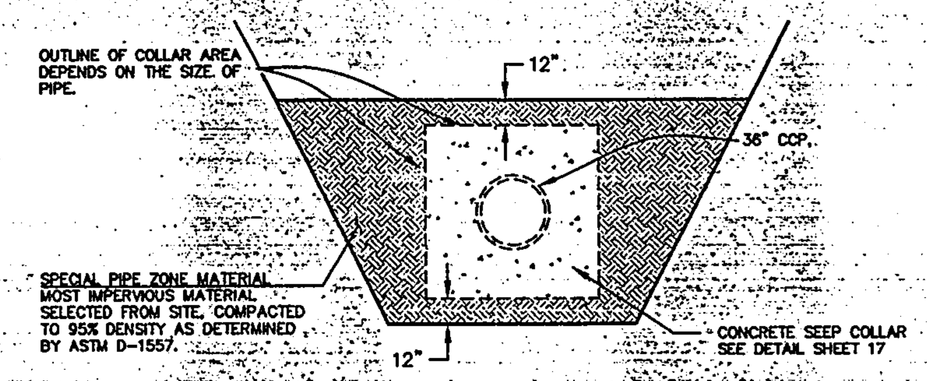
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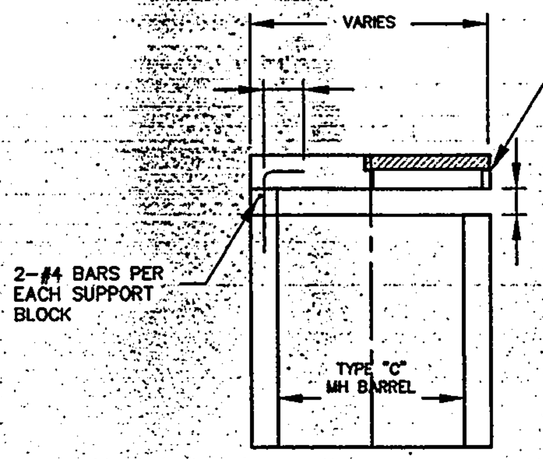
CLASS "B" BEDDING
NOT TO SCALE

CLASS "C" BEDDING
NOT TO SCALE

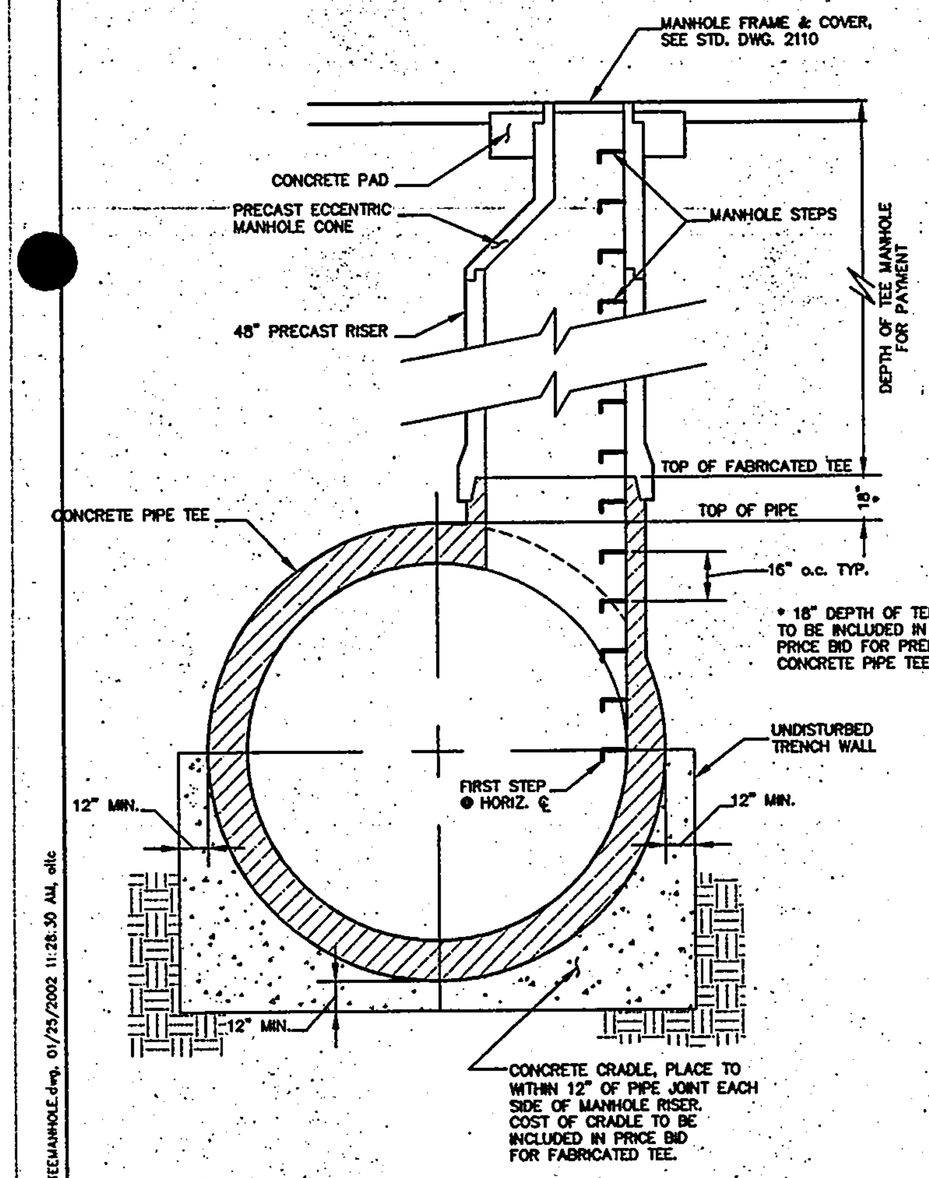
NOTES:
1. MINIMUM "d" SHALL BE 3" FOR 27" AND SMALLER RCP, 4" FOR 30" TO 60" RCP AND 6" FOR 66" AND LARGER RCP.



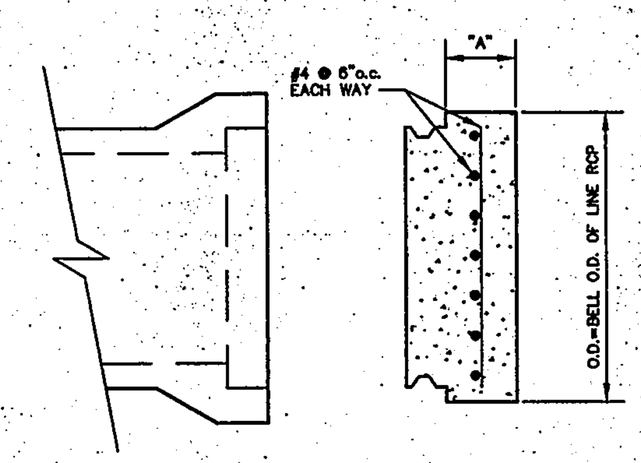
PRINCIPAL SPILLWAY PIPE
NOT TO SCALE



SECTION A–A
NOT TO SCALE

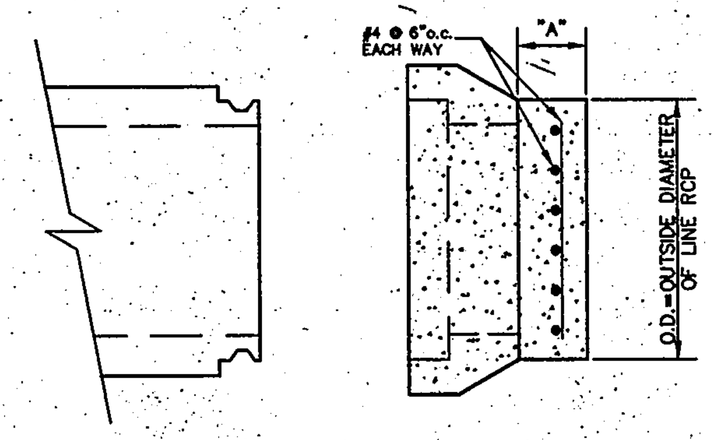


4' DIA. TEE MANHOLE DETAIL
NOT TO SCALE

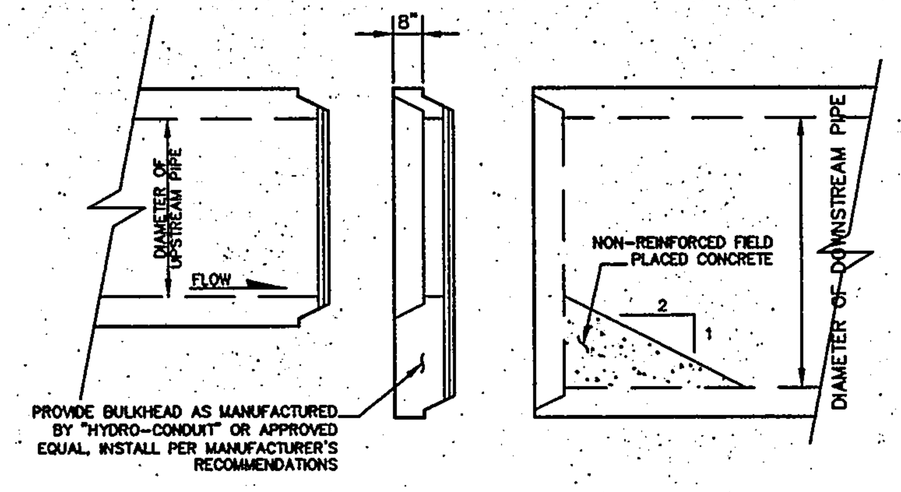


RCP END PLUG DETAIL
NOT TO SCALE

RCP I.D.	"A"
24" & SMALLER	3"
30" – 42"	6"
48" – 72"	8"
78" – 96"	10"



RCP END CAP DETAIL
NOT TO SCALE



EXPANSION BULKHEAD DETAIL
NOT TO SCALE

TABLE TOP AREA INLET
NOT TO SCALE

GENERAL NOTES

1. CLASS "C" BEDDING SHALL BE USED FOR ALL STORM DRAIN PIPE ON THIS PROJECT EXCEPT FOR STORM DRAIN PIPE THAT IS LOCATED UNDER THE POND COMPACTED EMBANKMENT.
2. SPECIAL BEDDING SHALL BE USED FOR ALL STORM DRAIN PIPE THAT IS LOCATED UNDER THE POND COMPACTED EMBANKMENT. SEE STORM DRAIN PLAN AND PROFILE FOR LOCATIONS.
3. PAYMENT FOR TABLE TOP AREA INLET SHALL INCLUDE SUPPORT BLOCKS, TABLE TOP SLAB AND MANHOLE. BARREL WILL BE PAID FOR UNDER BID ITEM No. 60.

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
1		
2		
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BENCH MARKS
CITY OF ALBUQUERQUE CONTROL STATION 7–L9.
STATION IS LOCATED 39.2 FT. WEST FROM CENTERLINE OF 98th. ST. AND 31.0 FT. SOUTH FROM CENTERLINE OF TOWER RD. STATION IS A STANDARD C.O.A BRASS CAP SET IN CONCRETE 0.4 FT. ABOVE GROUND AND STAMPED "7–L9" ELEVATION = 5175.735.

AS BUILT INFORMATION
CONTRACTOR: CHAVA TRUCKING — DATE: 05/01
STAKED BY: CHAVA TRUCKING — DATE: 05/01
INSPECTANCE BY: AMAYA — DATE: 10/01
FIELD VERIFICATION BY: LARSEN GROUP — DATE: 10/01
CORRECTED BY: LARSEN GROUP — DATE: 01-02
MICRO–FILM INFORMATION
RECORDED BY: — DATE:
RECORDED BY: — DATE:
RECORDED BY: — DATE:

ENGINEER'S SEAL
RECORD DRAWINGS WERE PREPARED FROM INFORMATION PROVIDED BY THE CONTRACTOR.
RECORD DRAWING 01/02

NO.	DATE	REVISIONS	BY
1		DESIGN	
2		DESIGNED BY: D. Bishop — DATE: OCT. 2000	
3		DRAWN BY: T. Carmon — DATE: OCT. 2000	
		CHECKED BY: J. Andrews — DATE: OCT. 2000	

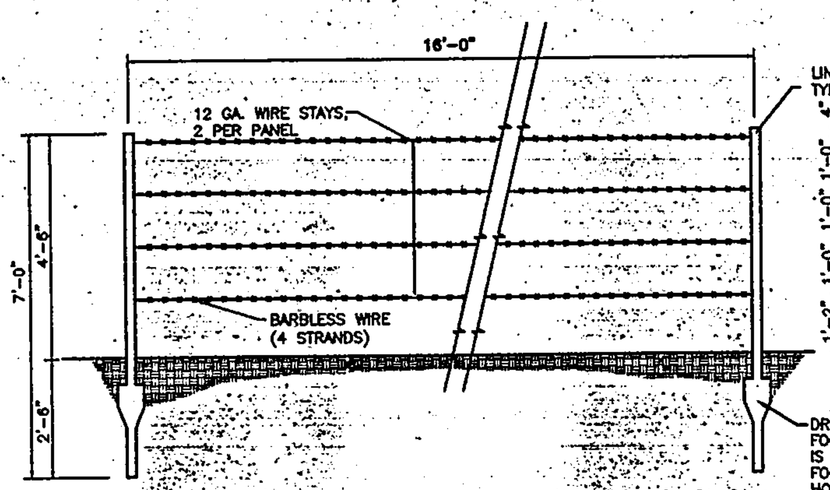
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TOWER/SAGE PARK, DETENTION POND AND OUTFALL PIPE
STORM DRAIN DETAILS

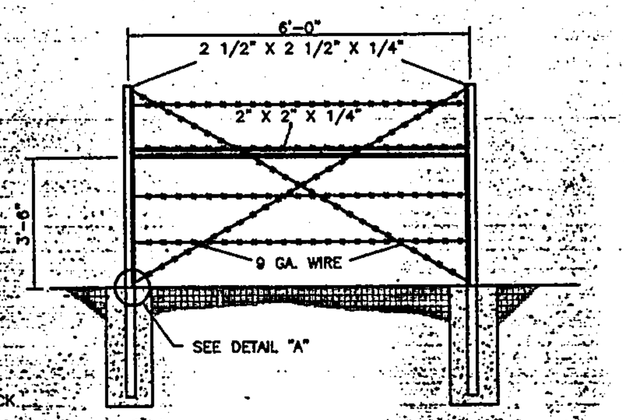
Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No. 4188.91 | Zone Map No. L–10–Z | Sheet 24 of 25

M:\Projects ALSP\ALSP00572\Dwg\TEMANHOLE.dwg, 01/29/2002 11:28:30 AM, alle



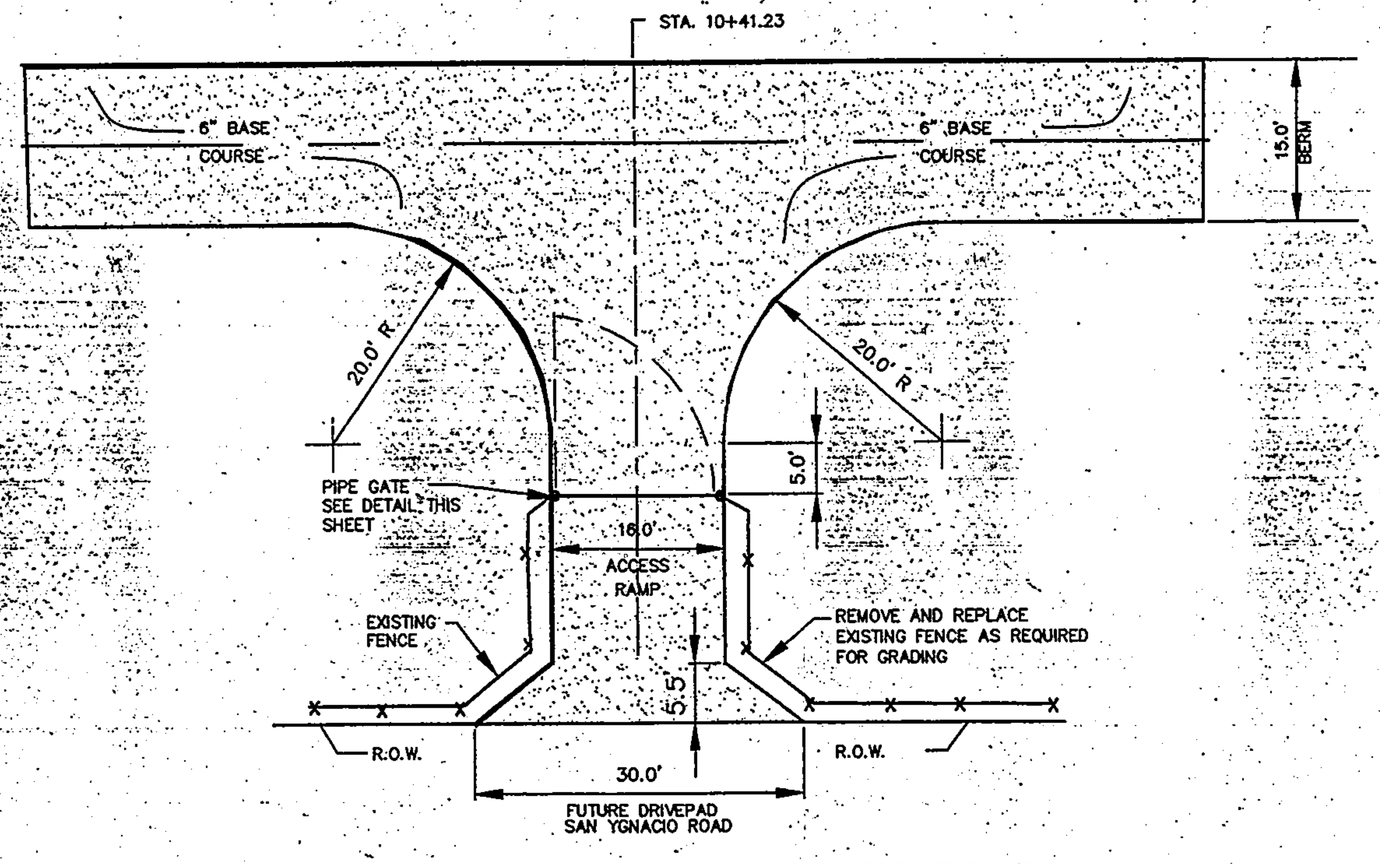
WIRE FENCE PANEL
N.T.S.



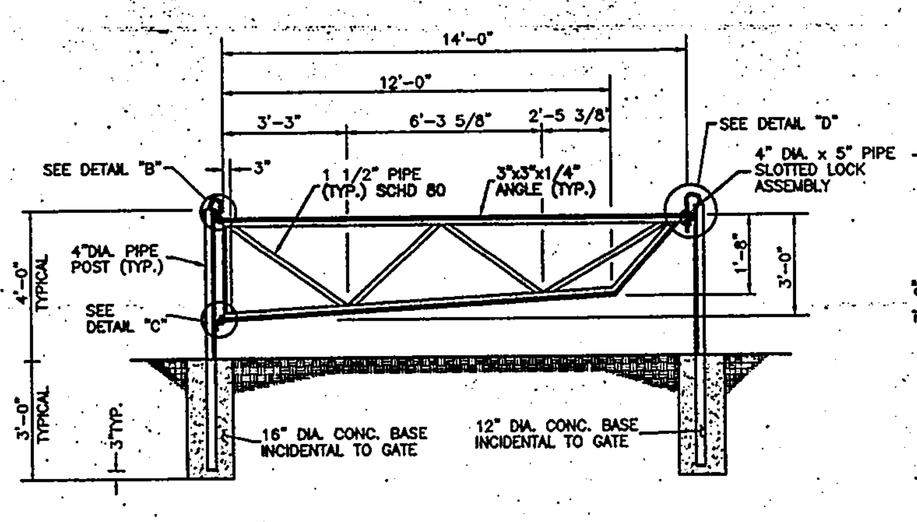
PULL PANEL
N.T.S.

NOTE

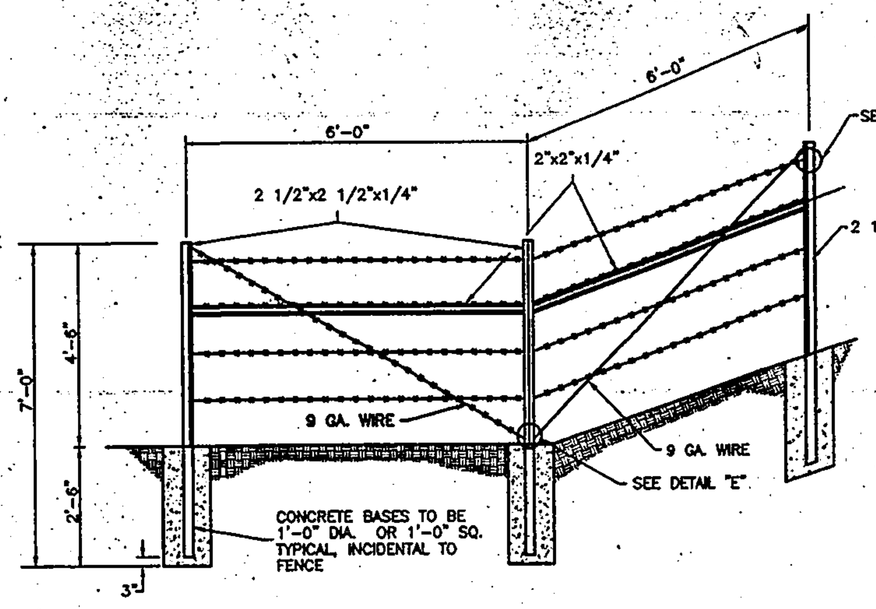
1. ALL WIRE SHALL BE BARBLESS.



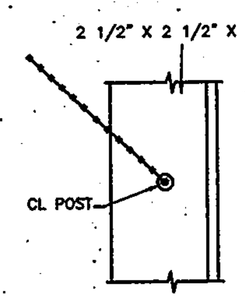
ACCESS RAMP – SAN YGNACIO ROAD
SCALE 1" = 10.0'
REFERENCE SHEET 6



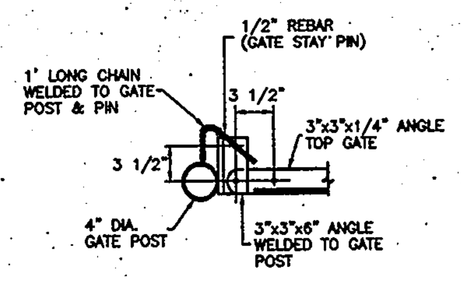
GATE ELEVATION
N.T.S.



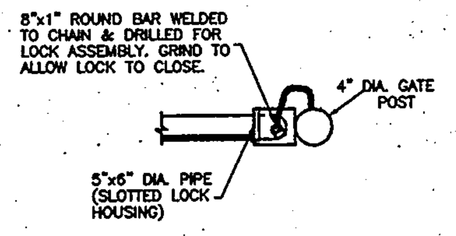
CORNER PANEL
N.T.S.



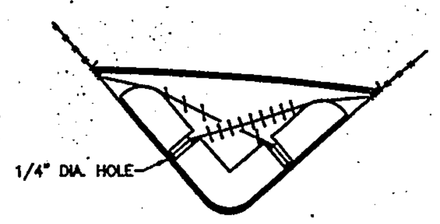
DETAIL A
N.T.S.



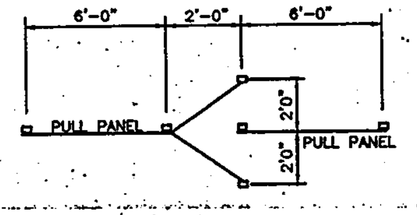
DETAIL B
N.T.S.



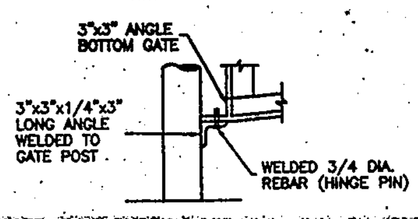
PLAN



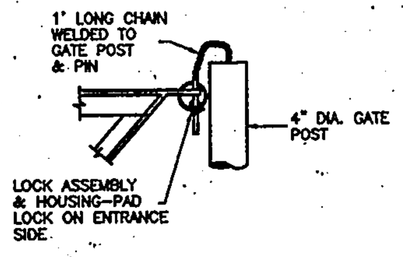
DETAIL E
N.T.S.



WALK GAP DETAIL
N.T.S.

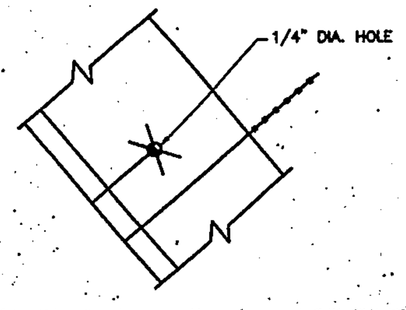


DETAIL C
N.T.S.



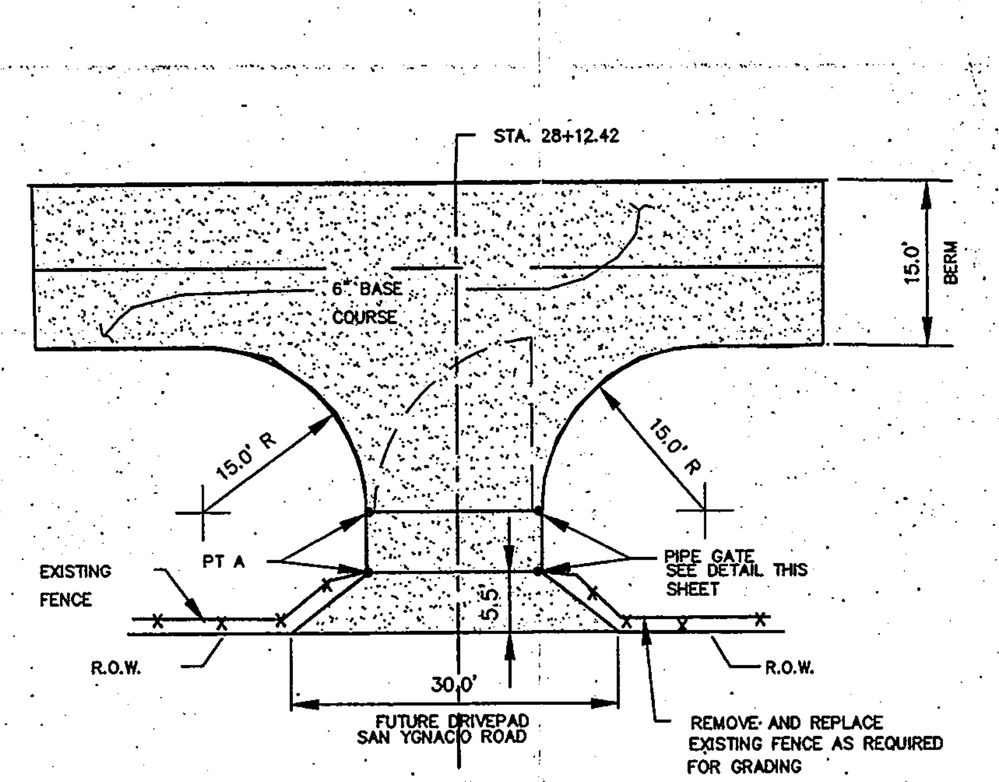
ELEVATION

DETAIL D
N.T.S.



DETAIL F
N.T.S.

FENCE DETAILS



ACCESS RAMP – TOWER ROAD
SCALE" 1" = 10.0'.
REFERENCE SHEET 6

John A. Andrews
RECORD DRAWING
01/02

AS BUILT INFORMATION
CONTRACTOR CHAVA TRUCKING DATE 04/01
WORK STAKED BY CHAVA TRUCKING DATE 04/01
ACCEPTANCE BY AMAFCA DATE 10/01
FIELD VERIFICATION BY LARKIN GROUP DATE 10/01
DRAWINGS COMPILED BY LARKIN GROUP DATE 01/02
MICRO-FILM INFORMATION DATE
RECORDED BY
DATE
RECORDED BY
DATE
RECORDED BY

BENCH MARKS
CITY OF ALBUQUERQUE CONTROL STATION 7-L9.
STATION IS LOCATED 39.2 FT. WEST FROM CENTERLINE OF 98th ST. AND 31.0 FT. SOUTH FROM CENTERLINE OF TOWER RD. STATION IS A STANDARD C.O.A. BRASS CAP SET IN CONCRETE. 0.4 FT. ABOVE GROUND AND STAMPED "7-L9" ELEVATION = 5175.735.

SURVEY INFORMATION
FIELD NOTES

NO.	DATE	BY
1		
2		
3		
4		
5		
6		
7		

ENGINEER'S SEAL
NEW MEXICO REGISTERED PROFESSIONAL ENGINEER JOHN A. ANDREWS

NO.	DATE	REVISIONS	BY
1		DESIGN	
2		REMARKS	
3			

DESIGNED BY: D.B. DATE: OCT. 2000
DRAWN BY: T.C. DATE: OCT. 2000
CHECKED BY: J.A. DATE: OCT. 2000

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: TOWER/SAGE PARK, DETENTION POND AND OUTFALL PIPE
FENCE DETAILS

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No.	Zone Map No.	Sheet	of
4188.91	L-10-Z	25	25

THE LARKIN GROUP, inc.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

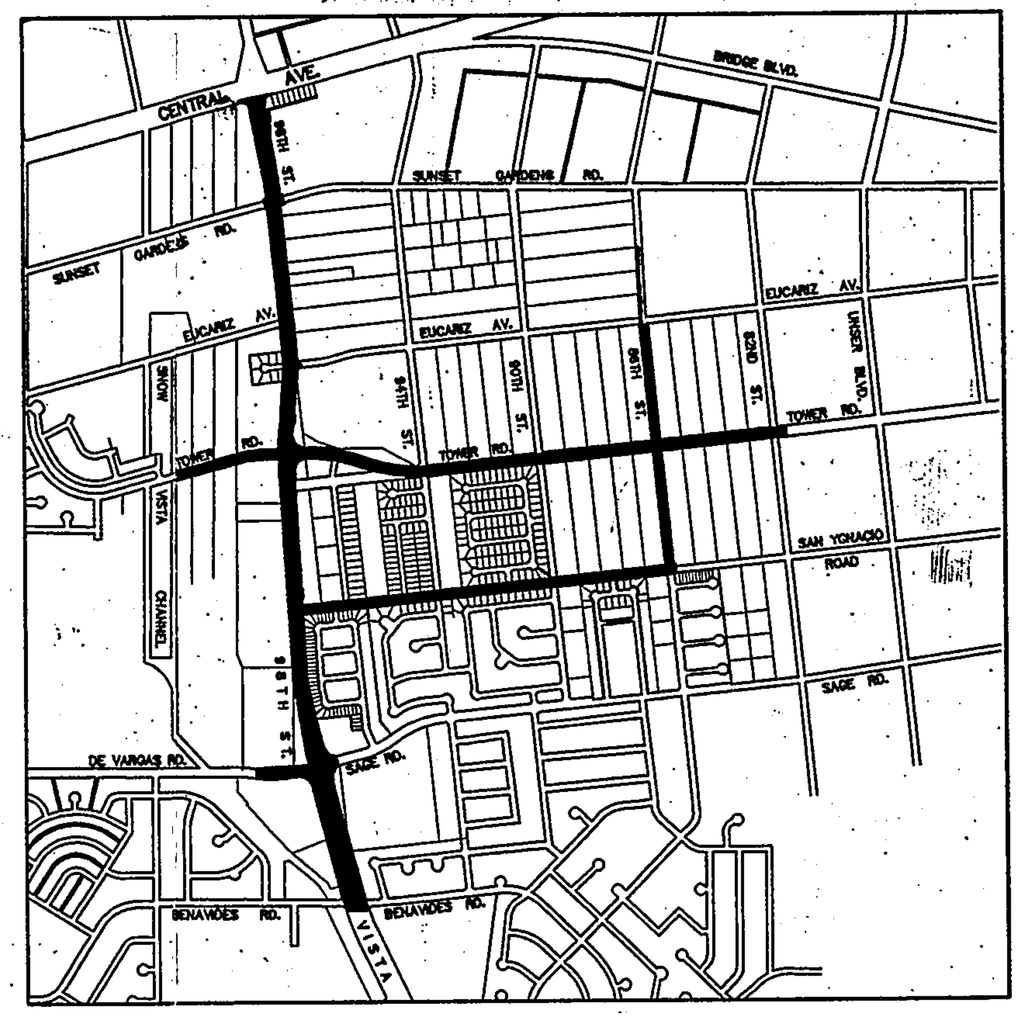
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SPECIAL ASSESSMENT DISTRICT 222

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VICINITY MAP

ZONE ATLAS L-9-Z & M-9-Z
SCALE: 1" = 1000'

APPROVAL OF RECORD DRAWINGS
CHIEF CONSTRUCTION ENGINEER
Goel Chang
DATE 9/23/03

CITY OF ALBUQUERQUE

NEW MEXICO

I, JOHN A. ANDREWS, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE RECORD INFORMATION, SHOWN HEREIN, WAS OBTAINED UNDER MY DIRECT SUPERVISION, REPRESENTS THE CONDITIONS OF THIS PROJECT UPON COMPLETION, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. ALL HORIZONTAL AND VERTICAL INFORMATION, SHOWN HEREIN, SHOULD BE FIELD VERIFIED BEFORE USE IN CONJUCTION WITH ANY FUTURE PROJECT.

JOHN A. ANDREWS, PE — REGISTERED PROFESSIONAL ENGINEER STATE OF NEW MEXICO No. 3960 JOHN A. ANDREWS — 10-16-02 DATE

ALBUQUERQUE NEW MEXICO 1706

SET NUMBER

RECORD DRAWING

THE LARKIN GROUP, inc.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE
1	5-12A & 5-12B		6-15-02		6/18/02		6/17/02

ENGINEER'S STAMP & SIGNATURE — REGISTERED PROFESSIONAL ENGINEER STATE OF NEW MEXICO No. 3960 JOHN A. ANDREWS

APPROVALS	ENGINEER	DATE
DRC Chairman		12-12-00
Transportation		12-5-00
Water/Wastewater		12-6-00
Hydrology		12-5-00
Parks		
Constr. Mngmt.		
Comm. Coord.		12-5-00

APPROVED FOR CONSTRUCTION

12-12-00
City Engineer — Date

City Project No. 4188.91

Sheet 1-1 Of 1-4

RECORD DRAWING

THE LARKIN GROUP
8500 MENAUL NE, SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: SPECIAL ASSESSMENT DISTRICT 222
OVERALL STORM SYSTEM PLAN
STORM DRAIN LAYOUT PLAN

Design Review Committee	City Engineer Approval	Last Design Update	No./Day/Yr.	No./Day/Yr.
DES 1 2000	INDEX 1 2000 CITY ENGINEER			

City Project No. 4188.91 | Zone Map No. L & M-9 | Sheet 2-5 of 2-5

NO.	DATE	REVISIONS REMARKS	BY
1		Storm Drain Revisions	R.S.
2			
3			
4			

DESIGN
DESIGNED BY: R.W.M. DATE: DEC. 2000
DRAWN BY: P.D.R. DATED: DEC. 2000
CHECKED BY: J.A.A. DATE: DEC. 2000

ENGINEER'S SEAL
REGISTERED PROFESSIONAL ENGINEER
No. 10201
JAMES ALBERT ARMIJO
STATE OF NEW MEXICO

SURVEY INFORMATION
FIELD NOTES BY: — DATE:
OF THE INTERSECTION.
AN ACS 3¼" ALUMINUM CAP STAMPED
"10-L9, 1988", SET FLUSH IN THE TOP OF
THE SSE CURB RETURN.
X=352794.84 Y=1482084.51
ELEV. 5204.437

BENCH MARKS
10-L9 LOCATED AT THE INTERSECTION OF
I-40 AND 98th St., IN THE NE QUADRANT

NO.	BY	DATE
1		
2		
3		
4		
5		
6		
7		

AS BUILT INFORMATION
CONTRACTOR
STAKED BY — DATE
INSPECTED BY — DATE
FIELD CORRECTIONS BY — DATE
CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
RECORDED BY — DATE
RECORDED BY — DATE

LEGEND
NEW STORM DRAIN LINE W/ SIZE
EXISTING STORM DRAIN MANHOLE
OUTFALL MANHOLE
NEW STORM DRAIN MANHOLE
EXISTING STORM DRAIN INLET
NEW STORM DRAIN INLET
EXISTING ROW
EXISTING STORM DRAIN LINE
DRAINAGE BASIN BOUNDARY

SCALE: 1" = 300'

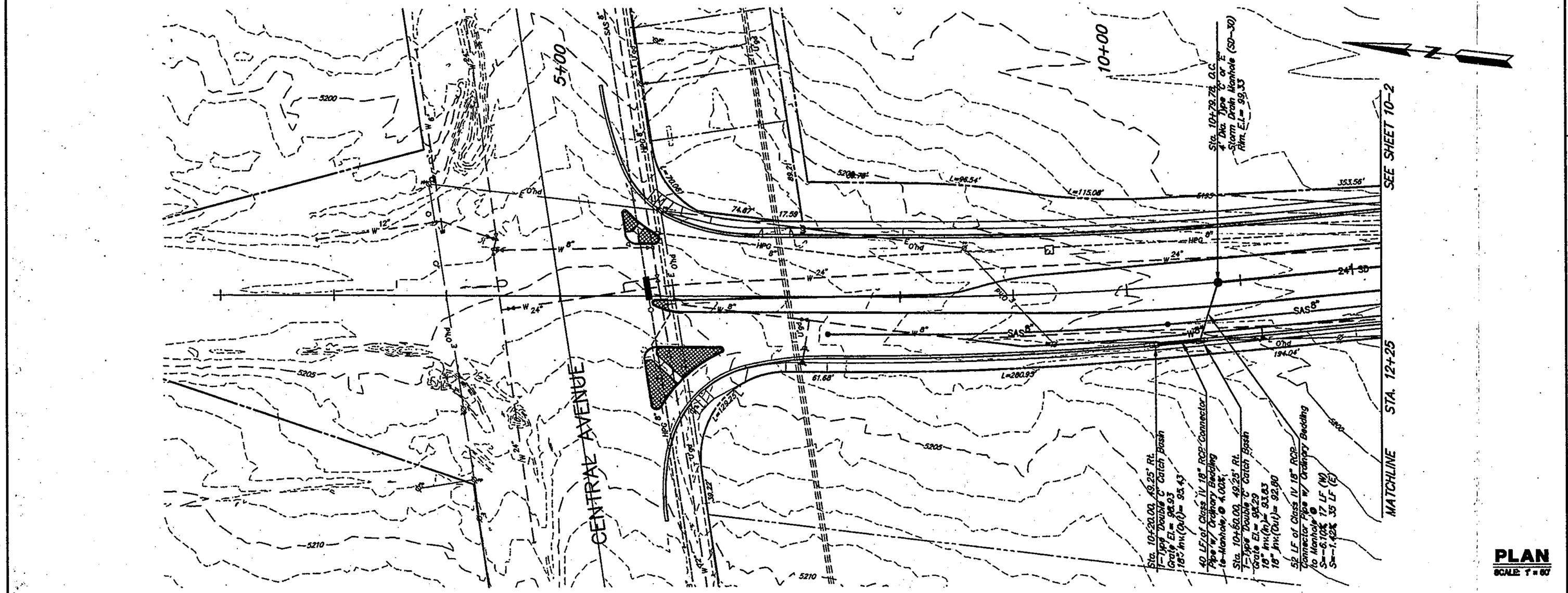
DETAIL
94th STREET AND TOWER RD.
NO SCALE

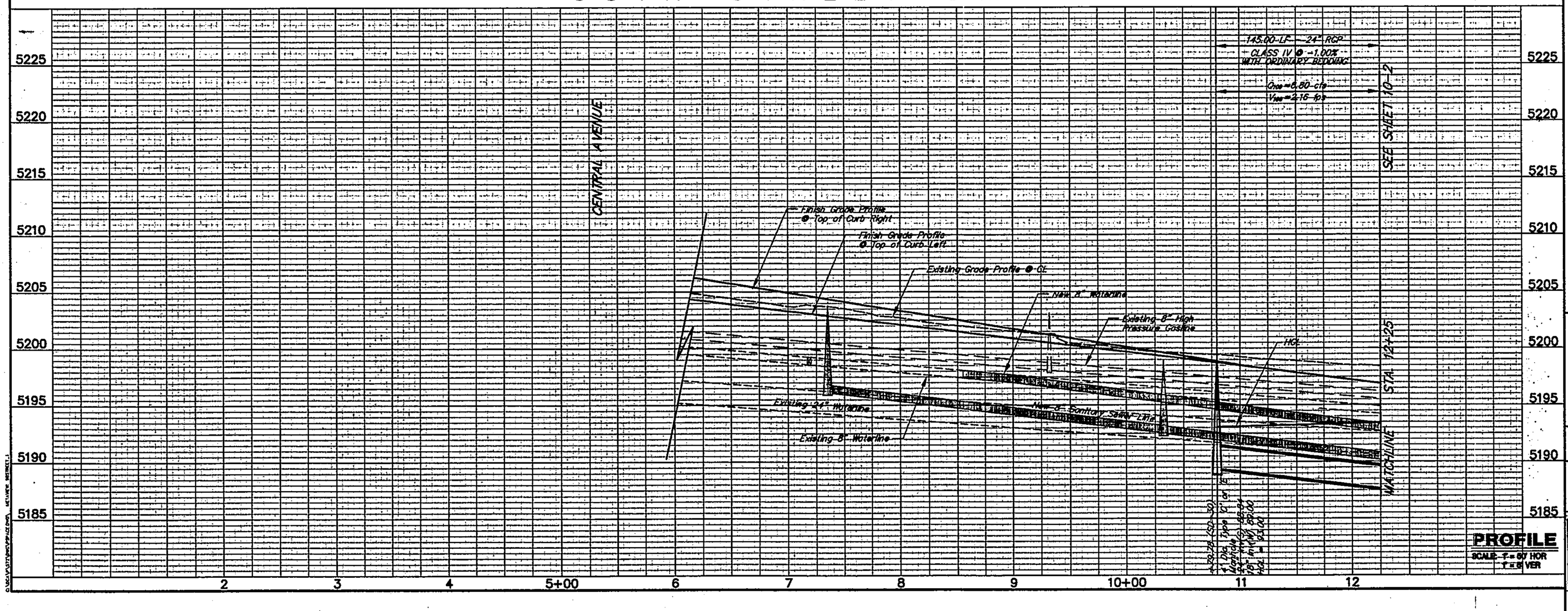
DETAIL
90th STREET AND SAN YGNACIO RD.
NO SCALE

DETAIL
86th STREET AND SAN YGNACIO RD.
NO SCALE

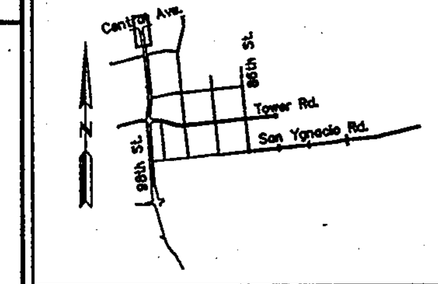
DETAIL
86th STREET AND TOWER RD.
NO SCALE

SNOW VISTA CHANNEL
SNOW MESA ROAD
EUCARIZ AVENUE
SUNSET GARDENS RD.
102nd STREET
CENTRAL AVENUE
94th STREET
TOWER ROAD
RYNO COURT
98th STREET
OLD TOWER ROAD
97th STREET
WESTVIEW TOWNHOUSES
BENAVIDES ROAD
SAGE ROAD
SUNSET WEST UNIT 1
SUNSET WEST UNIT 2
SUNSET WEST UNIT 3
94th STREET
SAN YGNACIO ROAD
90th STREET
86th STREET
82nd STREET
TOWER QUADRANT PARK
POND CONSTRUCTION BY OTHERS.
OUTFALL LINE BY OTHERS.
MANHOLE & INLETS BY OTHERS.
MANHOLE & INLET BY OTHERS.
See Sheet 10-10.2 for Revisions to Storm Drain





PLAN ORIENTATION MAP



AS BUILT INFORMATION

CONTRACTOR
STAKED BY DATE
INSPECTORS ACCEPTANCE BY DATE
FIELD VERIFICATION BY DATE
DRAWINGS BY DATE
MICRO-FILM INFORMATION
RECORDED BY DATE
RECORDED BY DATE
RECORDED BY DATE

BENCH MARKS

10-L9 LOCATED AT THE INTERSECTION OF I-40 AND 98th St. IN THE NE QUADRANT OF THE INTERSECTION.
AN ACS 1¾" ALUMINUM CAP STAMPED "10-L9 1989" SET FLUSH IN THE TOP OF THE SSE CURB RETURN.
X=352794.84 Y=1482094.51
ELEV. 5204.437

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE
1		
2		
3		
4		
5		
6		
7		

ENGINEER'S SEAL

PROFESSIONAL ENGINEER STATE OF NEW MEXICO 9834 JOHN A. ARCHULETA

RECORD DRAWING

NO.	DATE	REVISIONS	BY
1		DESIGN	
2			
3			
4			

DESIGNED BY: S.M.B. DATE: DEC. 2000
DRAWN BY: R.A.S. DATE: DEC. 2000
CHECKED BY: J.A.A. DATE: DEC. 2000

THE LARKIN GROUP, P.A.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

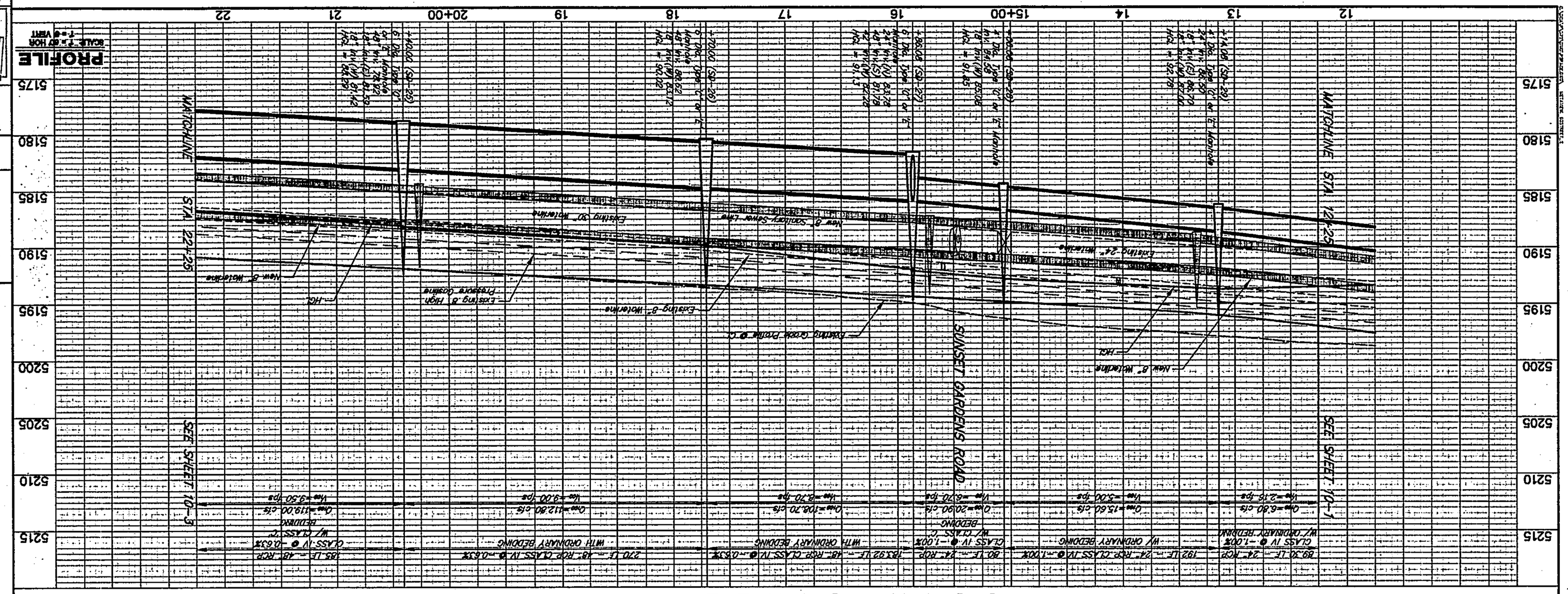
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

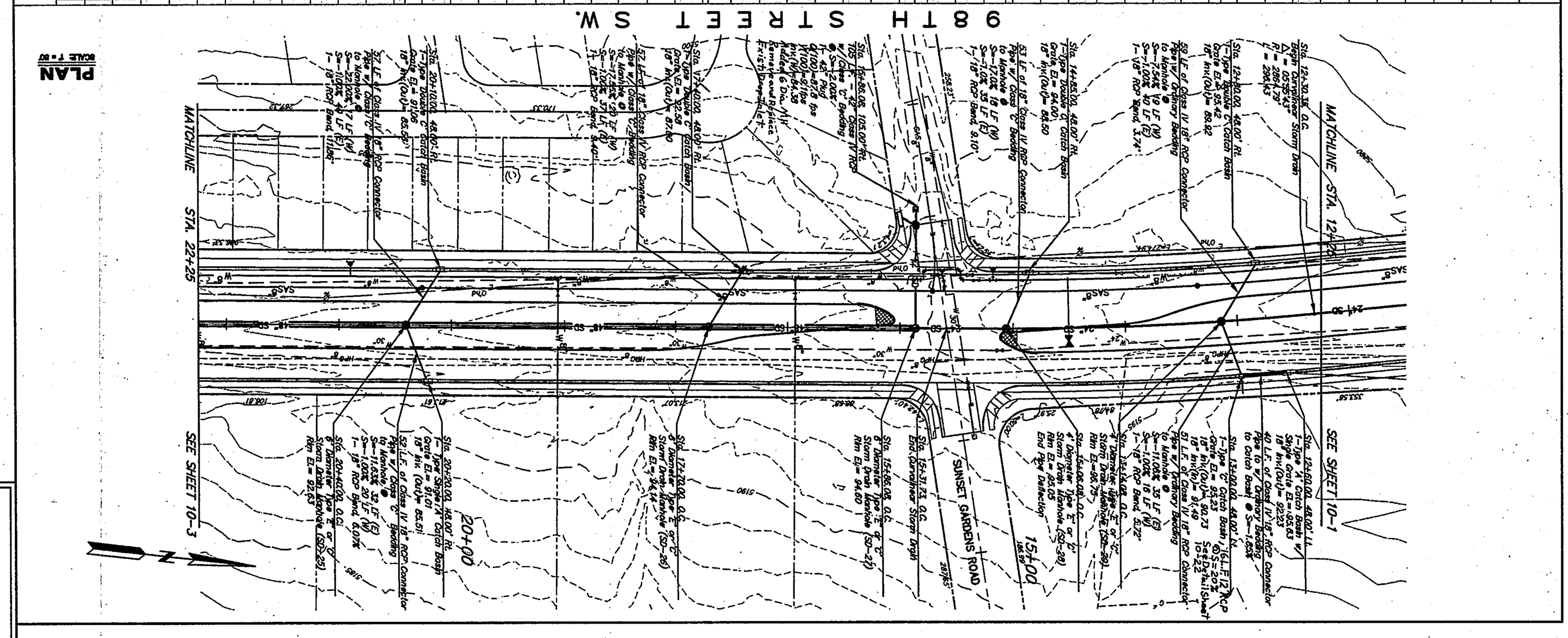
TITLE: SPECIAL ASSESSMENT DISTRICT 222
98TH STREET SW.
STORM DRAIN PLAN & PROFILE

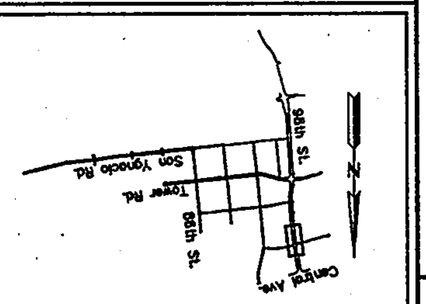
Design Review Committee: APPROVED DEC 12 2000 DESIGN REVIEW COMMITTEE
City Engineer Approval: APPROVED DEC 12 2000 CITY ENGINEER

No./Day/Yr.	No./Day/Yr.
Last Design Update	

City Project No. 4188.91 | Zone Map No. L & M-9 | Sheet 10-1 of 10-23







RECORD DRAWING

THE LARKIN GROUP
8500 MENAUL NE, SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: SPECIAL ASSESSMENT DISTRICT 222
98TH STREET SW.
STORM DRAIN PLAN & PROFILE

	Design Review Completed	Last Design Update
No./Dept./Tr.	DESIGN REVIEW/CONSTRUCTION	No./Dept./Tr.
	CITY ENGINEER DEC 1 2 2000	
	CITY SURVEYOR DEC 1 2 2000	

City Project No. 4188.91 | Zone Map No. L & M-9 | Sheet 10-2 of 10-23

NO.	DATE	REVISIONS	BY
1		Culvert to Back of Inlet	R.S.
2		Added M.H. Remove + Replace Inlet	R.S.
3			
4			

DESIGN
DESIGNED BY: S.M.R. DATE: DEC. 2000
DRAWN BY: R.L.S. DATE: DEC. 2000
CHECKED BY: J.A.A. DATE: DEC. 2000

ENGINEER'S SEAL
REGISTERED PROFESSIONAL ENGINEER
STATE OF NEW MEXICO
JOHN A. ANDERSON

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE
1		OF THE INTERSECTION.
2		AN ACS 1¾" ALUMINUM CAP STAMPED
3		"10-L9, 1989" SET FLUSH IN THE TOP OF
4		THE SSE CURB RETURN.
5		X= 352794.84 Y= 1482089.51
6		ELEV. 5204.437
7		

BENCH MARKS

10-L9 LOCATED AT THE INTERSECTION OF I-40 AND 98th St., IN THE NE QUADRANT

AS BUILT INFORMATION

CONTRACTOR	DATE
STAKED BY	DATE
SURVEYOR'S FIELD NOTES BY	DATE
CONSTRUCTION STAKING BY	DATE
CONSTRUCTION CORRECTED BY	DATE
MICRO-FILM INFORMATION	
RECORDED BY	DATE
RECORDED BY	DATE

RECORD DRAWING

THE LARKIN GROUP
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: SPECIAL ASSESSMENT DISTRICT 222
98TH STREET SW.
STORM DRAIN PLAN & PROFILE

No.	Date	REVISIONS	BY
1			
2			
3			
4			

DESIGN
DESIGNED BY: S.M.B. DATE: DEC. 2000
DRAWN BY: R.L.S. DATE: DEC. 2000
CHECKED BY: J.A.A. DATE: DEC. 2000

ENGINEER'S SEAL
REGISTERED PROFESSIONAL ENGINEER
JOHN A. ALCARAZ
No. 9844
STATE OF NEW MEXICO

PROFILE
SCALE: 1"=50' HOR. 1"=5' VERT.

98TH STREET SW.

MATCHLINE STA. 324+25 — SEE SHEET 10-4

MATCHLINE STA. 321+75 — SEE SHEET 10-2

RYNO COURT

EUCARIZ AVENUE

EUCARIZ AVENUE EASTBOUND

EUCARIZ AVENUE WESTBOUND

Existing 8" Waterline

Existing 8" Sanitary Sewer

Existing 10" Waterline

New 8" Waterline

Existing Irrigation Pipeline @ 0'

Existing 30" Waterline

Existing 8" Sanitary Sewer

New 8" Sanitary Sewer Line

Existing 8" High Pressure Gasline

Existing 8" Waterline

Existing 8" Waterline

Existing 8" Water

98TH STREET SW.

PROFILE

SCALE: F = 60' HOR
F = 6' VERT

MATCHLINE STA. 32+23.23

SEE SHEET 10-3

TOWER ROAD

DEMI ROAD

SEE SHEET 10-13 FOR CONTINUATION OF STORM DRAIN

PLAN

SCALE F = 60'

MATCHLINE STA. 32+23.23

SEE SHEET 10-3

TOWER ROAD

DEMI ROAD

SEE SHEET 10-13 FOR CONTINUATION OF STORM DRAIN

PLAN ORIENTATION MAP

RECORD DRAWING

THE LARKIN GROUP
6500 MENAUL NE SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: SPECIAL ASSESSMENT DISTRICT 222
98TH STREET SW.
STORM DRAIN PLAN & PROFILE

Original Drawing Approved	DRB APPROVAL	CITY ENGINEER	
Last Design Update	DEC 12 2000	DEC 12 2000	
	REVISED CULMATTSE	DESIGN	

No. Days/Yr. | No. Days/Yr.

City Project No. 4188.91 | Zone Map No. L & M-9 | Sheet 10-4 of 10-23

REVISIONS			
NO.	DATE	REMARKS	BY
1			
2			
3			
4			

DESIGN
DESIGNED BY: S.M.B. DATE: DEC. 2000
DRAWN BY: R.J.S. DATE: DEC. 2000
CHECKED BY: J.A.A. DATE: DEC. 2000

ENGINEER'S SEAL
REGISTERED PROFESSIONAL ENGINEER
STATE OF NEW MEXICO
JOHN A. ALCARAZ

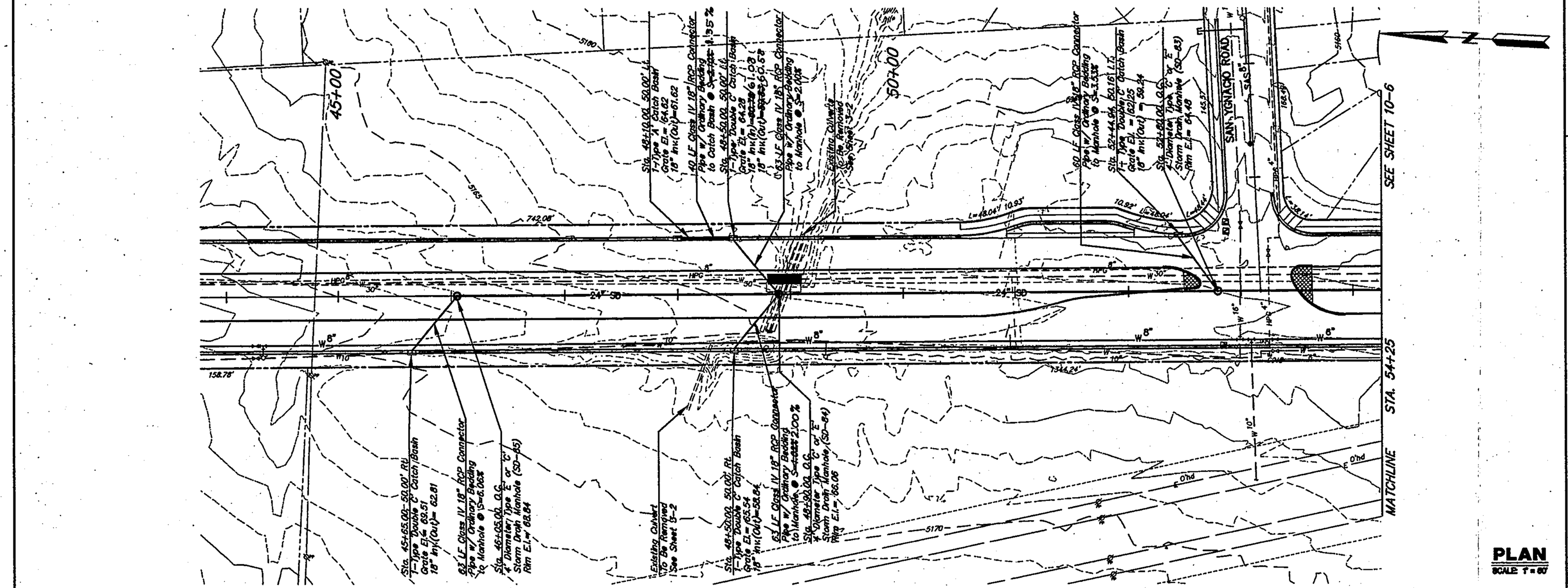
SURVEY INFORMATION

FIELD NOTES BY: DATE:
I-40 AND 98th St. IN THE NE QUADRANT
OF THE INTERSECTION.
AN ACS 1¾" ALUMINUM CAP STAMPED
"10-L9, 1989", SET FLUSH IN THE TOP OF
THE SSE CURB RETURN.
X=352794.84 Y=1482084.51
ELEV. 5204.437

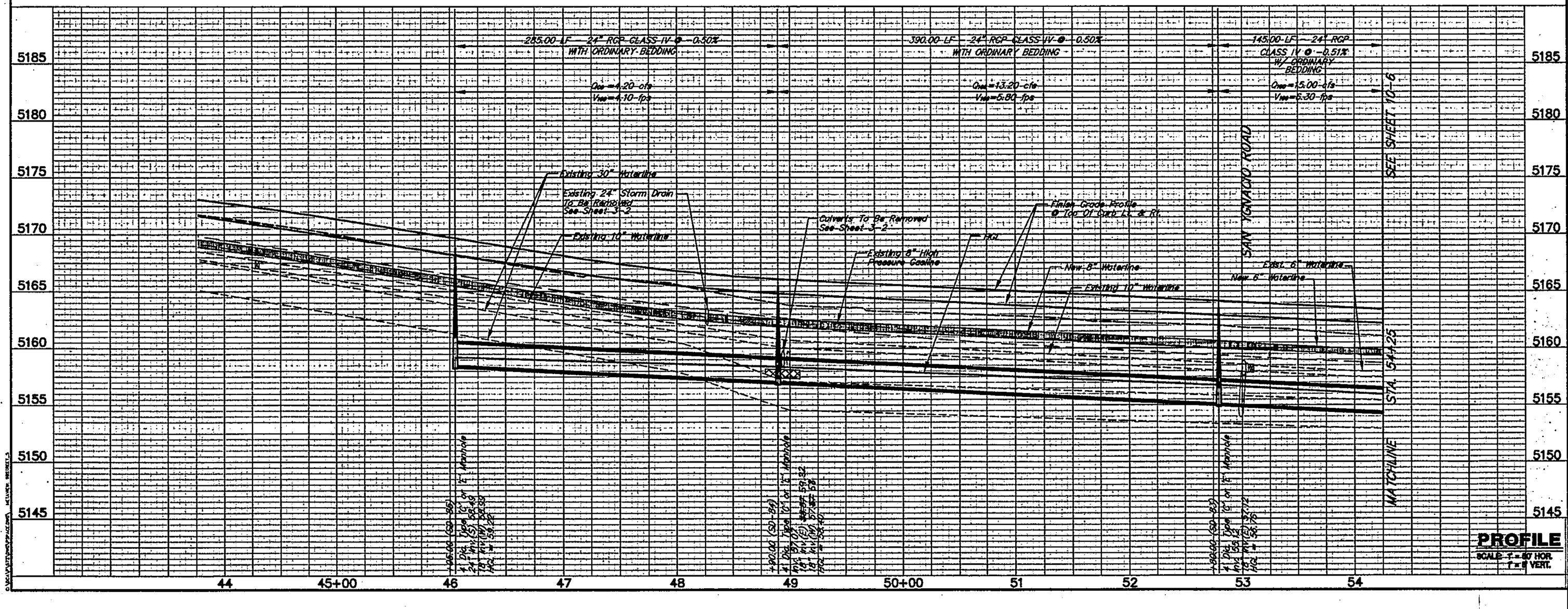
BENCH MARKS
10-L9 LOCATED AT THE INTERSECTION OF

AS BUILT INFORMATION

CONTRACTOR: STARTED BY: DATE:
INSPECTOR'S FIELD CHANGES BY: DATE:
CONSTRUCTION COMPLETED BY: DATE:
MICRO-FILM INFORMATION
RECORDED BY: DATE:
RECORDED BY: DATE:

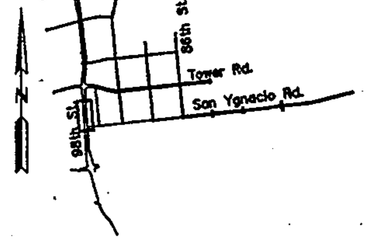


PLAN
SCALE: 1" = 60'



PROFILE
SCALE: 1" = 60' HOR.
1" = 6' VERT.

PLAN ORIENTATION MAP



AS BUILT INFORMATION

CONTRACTOR	
STAKED BY	DATE
INSPECTOR'S FIELD CHANGES BY	DATE
VERIFICATION BY	DATE
AS BUILTS CORRECTED BY	DATE

MICRO-FILM INFORMATION

RECORDED BY	DATE
RECORDED BY	DATE
RECORDED BY	DATE

SURVEY INFORMATION

BENCH MARKS

10-L9 LOCATED AT THE INTERSECTION OF
I-40 AND 98th St., IN THE NE QUADRANT
OF THE INTERSECTION.
AN ACS 1¼" ALUMINUM CAP STAMPED
"10-L9, 1989". SET FLUSH IN THE TOP OF
THE SSE CURB RETURN.
X= 352794.84 Y= 1482084.51
ELEV: 5204.437

FIELD NOTES

NO.	BY	DATE
1		
2		
3		
4		
5		
6		
7		

ENGINEER'S SEAL



RECORD DRAWING

NO.	DATE	REVISIONS	BY
4			
3			
2			
1		DESIGN	
		DESIGNED BY: R.W.M.	DATE: DEC. 2000
		DRAWN BY: R.J.S.	DATE: DEC. 2000
		CHECKED BY: J.A.A.	DATE: DEC. 2000

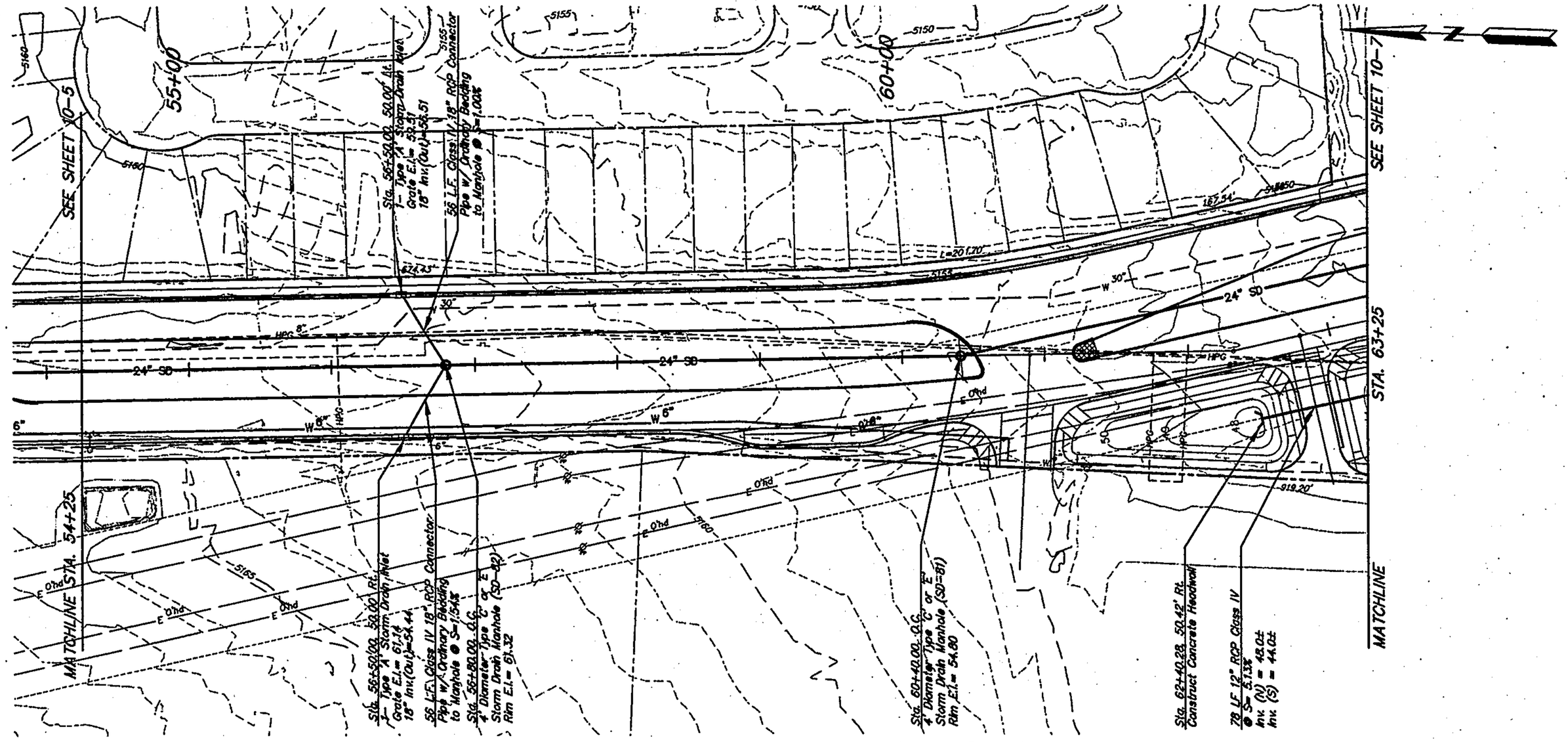
THE LARKIN GROUP, P.A.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

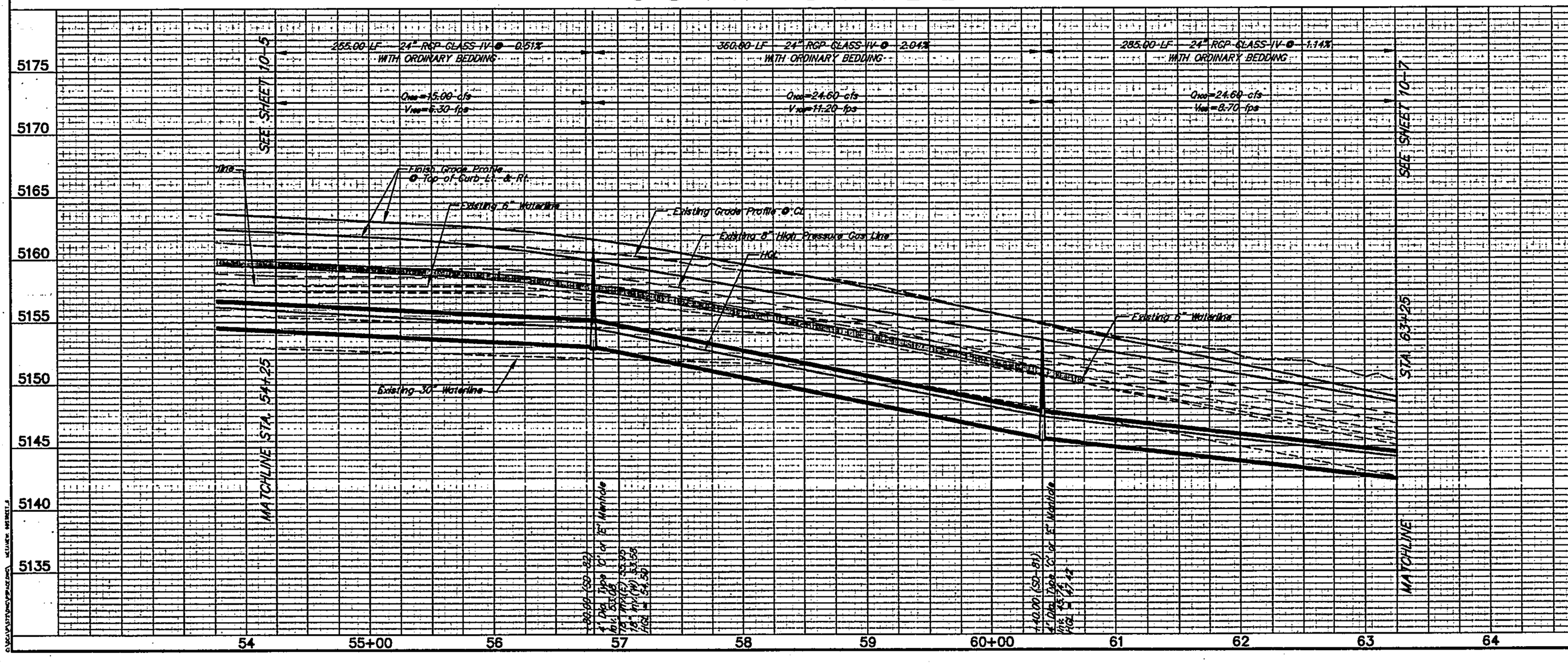
TITLE: SPECIAL ASSESSMENT DISTRICT 222
98TH STREET SW.
STORM DRAIN PLAN & PROFILE

Traffic Engineer Approval	City Engineer Approval	No./Day/Yr.	No./Day/Yr.
APPROVED DEC 1 2 2000 DESIGN REVIEW COMMITTEE	APPROVED DEC 1 2 2000 CITY ENGINEER	Last Design Update	

City Project No.	Zone Map No.	Sheet	of
4188.91	L & M-9	10-5	10-23

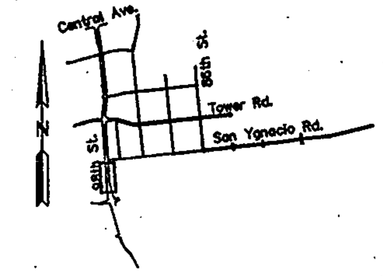


PLAN
SCALE: 1" = 60'



PROFILE
SCALE: 1" = 60' HOR.
1" = 6' VERT.

PLAN ORIENTATION MAP



AS BUILT INFORMATION

CONTRACTOR — DATE
WORK STAKED BY — DATE
MONITORED BY
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE

MICRO-FILM INFORMATION

RECORDED BY — DATE
RECORDED BY — DATE
RECORDED BY — DATE

BENCH MARKS

10-L9 LOCATED AT THE INTERSECTION OF 1-40 AND 98th St., IN THE NE QUADRANT OF THE INTERSECTION.
AN ACS 1¾" ALUMINUM CAP STAMPED "10-L9, 1989", SET FLUSH IN THE TOP OF THE SSE CURB RETURN.
X= 352794.84 Y=1482094.51
ELEV. 5204.437

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE
1		
2		
3		
4		
5		
6		
7		

ENGINEER'S SEAL

NO.	DATE	REVISIONS	BY
1		DESIGN	
2		DATE: DEC. 2000	
3		DATE: DEC. 2000	
4		DATE: DEC. 2000	

DESIGNED BY: R.W.M.
DRAWN BY: R.J.S.
CHECKED BY: J.A.A.

RECORD DRAWING

THE LARKIN GROUP, INC.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: SPECIAL ASSESSMENT DISTRICT 222
98TH STREET SW.
STORM DRAIN PLAN & PROFILE

Design Review Committee: APPROVED DEC 12 2000 — REVIEW COMPLETE
City Engineer Approval: APPROVED DEC 12 2000 — CITY ENGINEER

Last Design Update: No./Day/Yr. / No./Day/Yr.

City Project No. 4188.91 | Zone Map No. L & M-9 | Sheet 10-6 of 10-23

City Project No. 4188.91 | Zone Map No. L & M-9 | Sheet 10-7 of 10-23

RECORD DRAWING

THE LARKIN GROUP
8500 MENAUL NE SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: SPECIAL ASSESSMENT DISTRICT 222
98TH STREET SW.
STORM DRAIN PLAN & PROFILE

No.	Date	Revisions	By
1			
2			
3			
4			

DESIGNED BY: S.M.B. DATE: DEC. 2000
DRAWN BY: R.J.S. DATE: DEC. 2000
CHECKED BY: J.A.A. DATE: DEC. 2000

ENGINEER'S SEAL

REGISTERED PROFESSIONAL ENGINEER
STATE OF NEW MEXICO
ANDREW A. GARCIA
10,277

CONSTRUCTION CERTIFICATION
PROJECT ENGINEER — No./Day/Yr.
CITY ENGINEER — No./Day/Yr.
Last Design Update

DEC 1 2 2000

SURVEY INFORMATION

NO.	FIELD NOTES BY	DATE
1	I-40 AND 98th St., IN THE NE QUADRANT	
2	OF THE INTERSECTION.	
3	AN ACS 1¾" ALUMINUM CAP STAMPED	
4	"10-L9, 1989", SET FLUSH IN THE TOP OF	
5	THE SSE CURB RETURN.	
6	X=352794.64 Y=1482084.51	
7	ELEV. 5204.437	

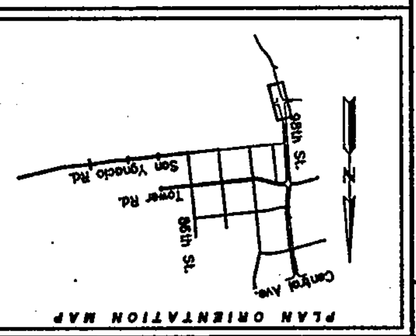
BENCH MARKS

10-L9 LOCATED AT THE INTERSECTION OF

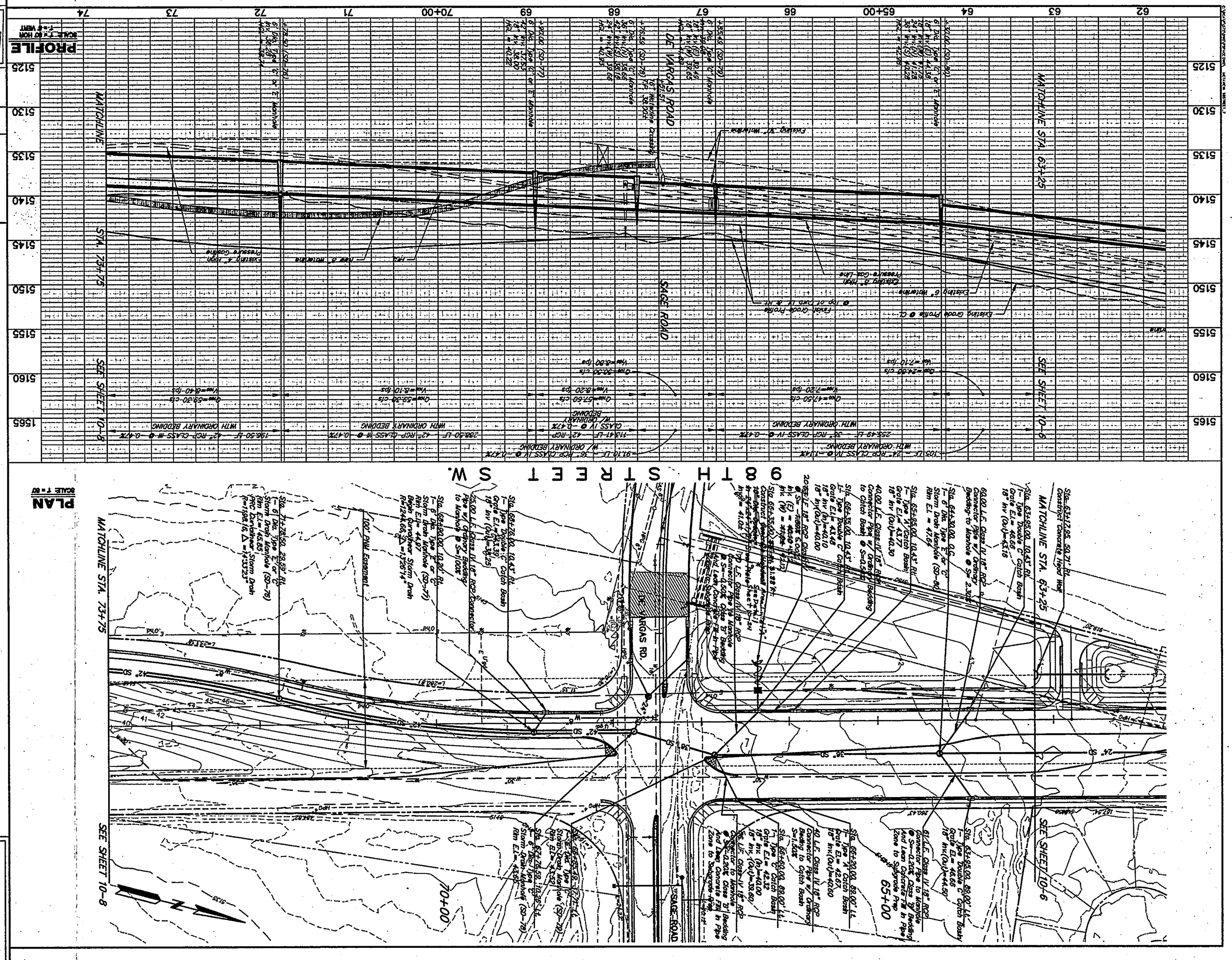
AS BUILT INFORMATION

CONTRACTOR		
SEWER BY		DATE
WATER BY		DATE
ACCEPTANCE BY		DATE
FIELD INSPECTION BY		DATE
DRAWING CORRECTED BY		DATE
MICRO-FILM INFORMATION		
RECORDED BY		DATE
RECORDED BY		DATE

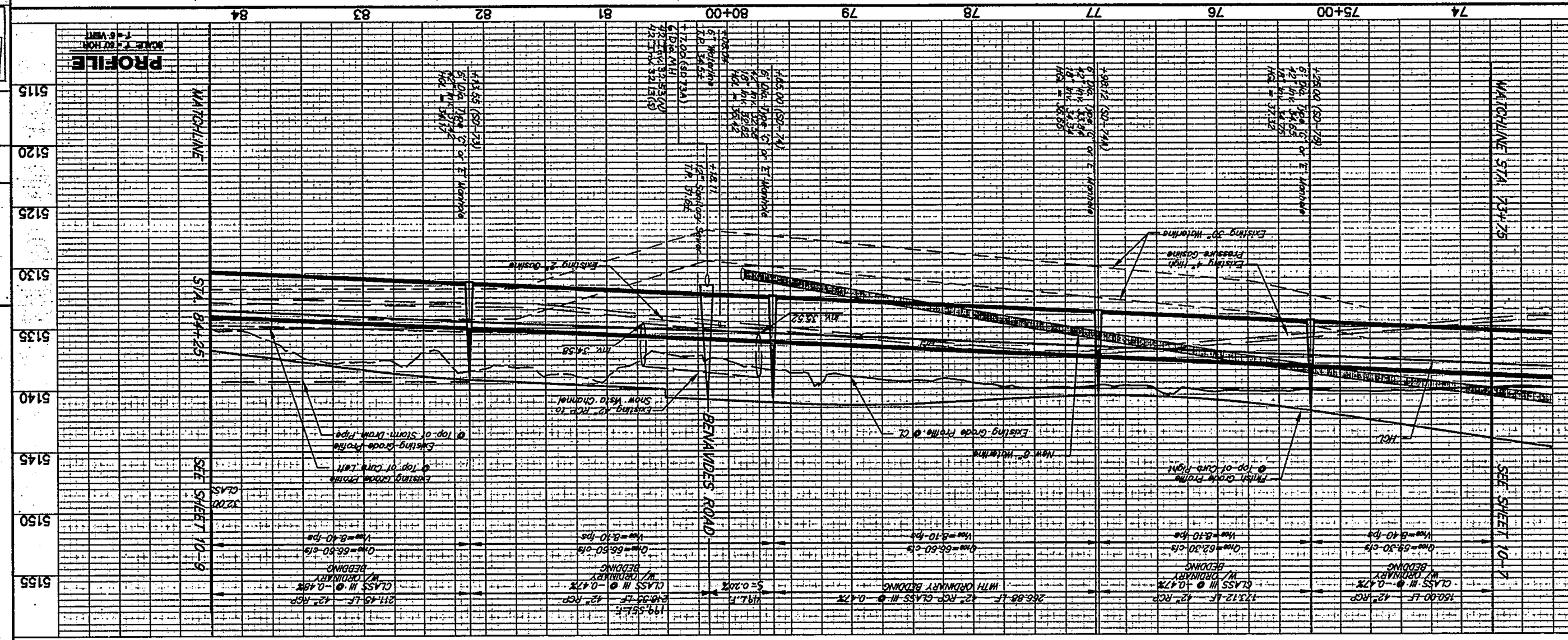
PLAN ORIENTATION MAP

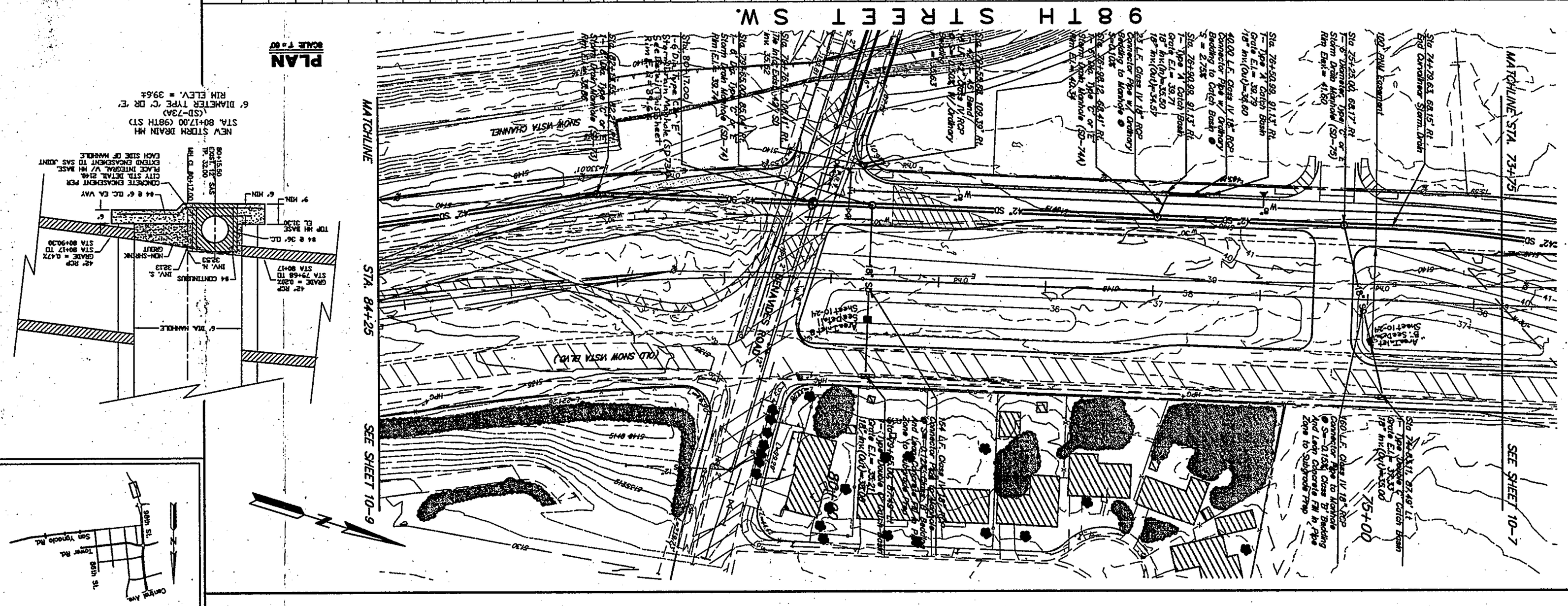


PLAN
SCALE 1" = 60'


98TH STREET SW.
MATCHLINE STA. 63+25
MATCHLINE STA. 73+75
SEE SHEET 10-8
SEE SHEET 10-6
SAGE ROAD
DE VARGAS RD.
70+00
65+00
Sta. 63+12.06, 50.71' RT, Connect Concrete Lined Ditch
Sta. 63+85.00, 10.43' RT, Grate E.I.= 46.66, 18" Inv (Out)=43.16
Sta. 64+33.00, 0.0' CL, Storm Drain Manhole (SD-80), Rim E.I. = 47.06
Sta. 65+85.00, 10.43' RT, 1-Type 'A' Catch Basin, Grate E.I.=43.77, 18" Inv (Out)=40.30
Sta. 66+35.00, 10.43' RT, 1-Type Double 'C' Catch Basin, Grate E.I.= 43.13, 18" Inv (Out)=40.25
Sta. 66+78.00, 10.43' RT, 1-Type Double 'C' Catch Basin, Grate E.I.= 43.13, 18" Inv (Out)=40.25
Sta. 68+28.00, 10.43' RT, 1-Type Double 'C' Catch Basin, Grate E.I.= 43.13, 18" Inv (Out)=40.25
Sta. 68+80.00, 12.80' RT, 1-Type 'C' Storm Drain Manhole (SD-79), Rim E.I= 44.97
Sta. 71+28.50, 29.89' RT, 1-Type 'C' Storm Drain Manhole (SD-78), Rim E.I.= 46.83
Sta. 63+85.00, 89.00' Lt, 1-Type 'A' Catch Basin, Grate E.I.= 42.67, 18" Inv (Out)=40.20
Sta. 65+80.00, 89.00' Lt, 1-Type 'C' Catch Basin, Grate E.I.= 42.32, 18" Inv (In)=40.00, 18" Inv (Out)=39.60
Sta. 66+80.00, 89.00' Lt, 1-Type 'C' Storm Drain Manhole (SD-78), Rim E.I.= 43.32
Sta. 6' Dbl. Type 'C' Storm Drain Manhole (SD-78), Rim E.I.= 43.50
100' PNM Easement
Existing Grade Profile @ C.L.
Final Grade Profile @ Top-of-Curb 'A' & 'C'
Existing 6" Water Line
Existing 8" PNM Treasure Gas Line
Existing 4" PNM Treasure Gas Line
Existing 6" Waterline
Existing 4" PNM Treasure Gas Line
New 8" Waterline
Existing 4" PNM Treasure Gas Line
Existing 30" Waterline
Existing 12" Waterline
Existing 16" Waterline
Existing 8" Waterline
Existing 24" Waterline
Existing 36" Waterline
Existing 42" Waterline

98TH STREET SW.





RECORD DRAWING

THE LARKIN GROUP
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: SPECIAL ASSESSMENT DISTRICT 222
98TH STREET SW.
STORM DRAIN PLAN & PROFILE

Design Review Committee	DESIGN REVIEW COMMITTEE	DESIGN	CITY ENGINEER
PROVE		DEC 12 2000	DEC 12 2000
Last Design Update			
No./Date/Rr.		No./Date/Rr.	

City Project No. 4188.91 | Zone Map No. L & M-9 | Sheet 10-8 of 10-23

NO.	DATE	REVISIONS	BY
1		Added Area Inlets	R.S.
2		Added MH to Protect Southerly Line	
3			
4			

DESIGN
DESIGNED BY: S.M.B. DATE: DEC. 2000
DRAWN BY: R.J.S. DATE: DEC. 2000
CHECKED BY: J.A.A. DATE: DEC. 2000

ENGINEER'S SEAL
REGISTERED PROFESSIONAL ENGINEER
STATE OF NEW MEXICO
JOSEPH A. ANDREWS

SURVEY INFORMATION

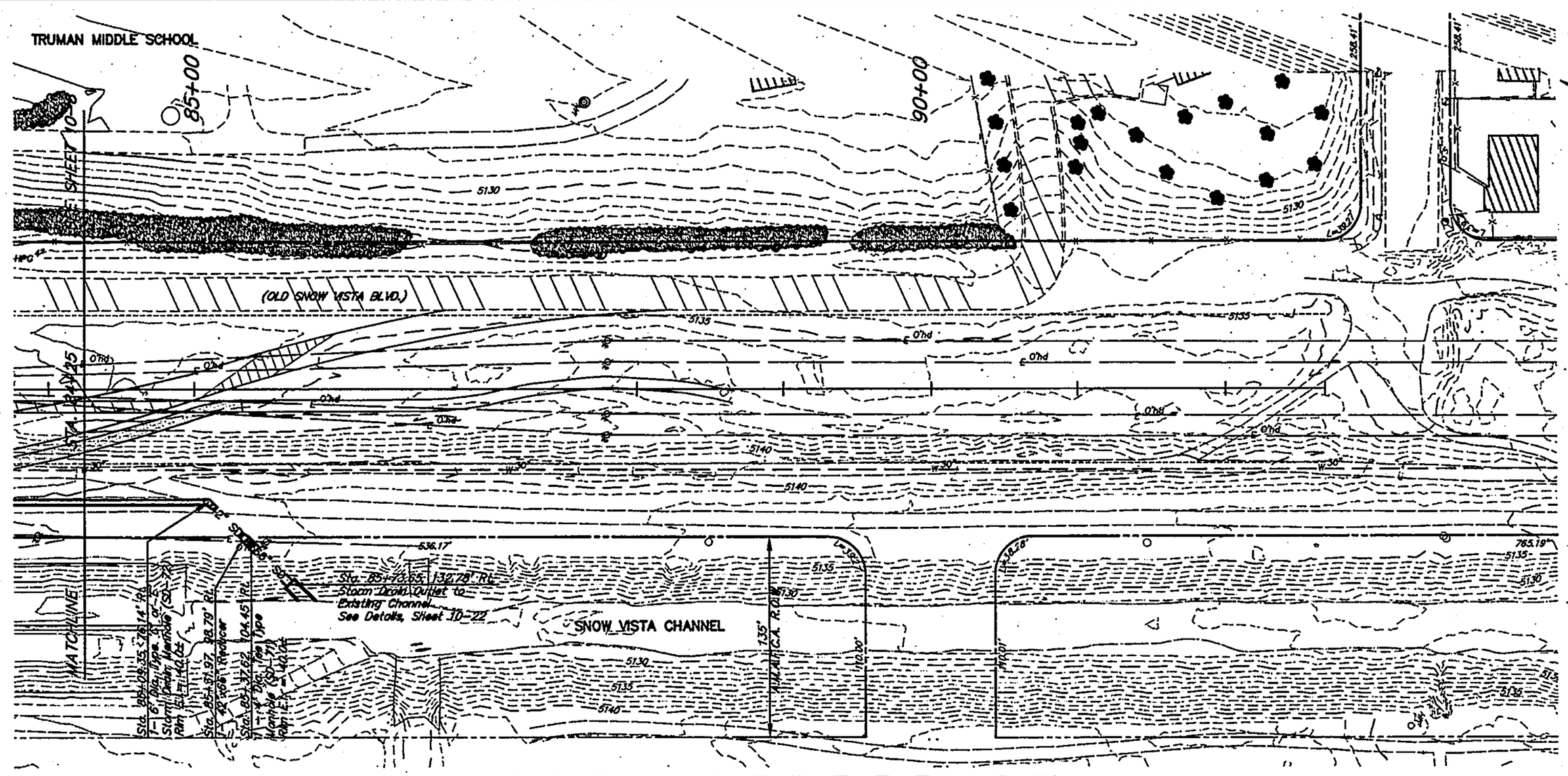
FIELD NOTES

NO.	BY	DATE
1		I-40 AND 98th St., IN THE NE QUADRANT
2		OF THE INTERSECTION.
3		AN ACS 1¼" ALUMINUM CAP STAMPED
4		"10-L9, 1989", SET FLUSH IN THE TOP OF
5		THE SSE CURB RETURN.
6		X=3527294.84 Y=1482084.51
7		ELEV. 5204.437

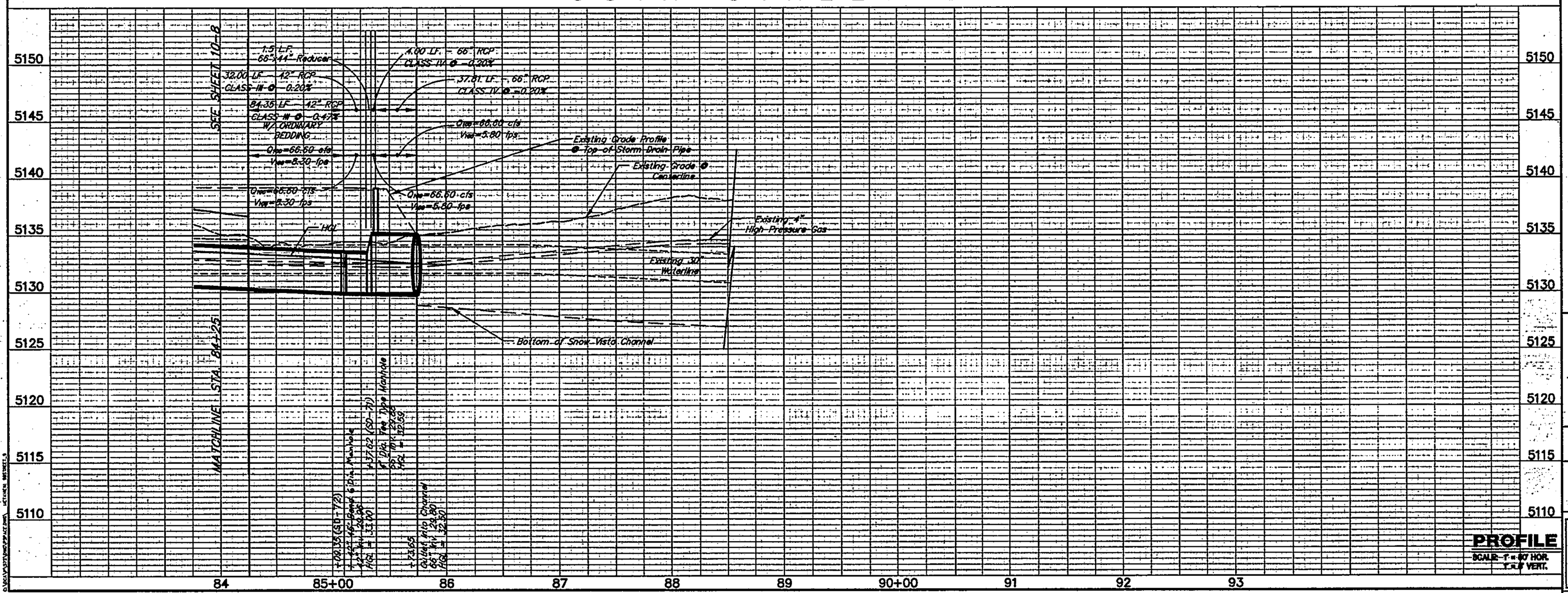
BENCH MARKS

AS BUILT INFORMATION

CONTRACTOR		
STARTED BY		DATE
COMPLETED BY		DATE
FIELD VERIFICATION BY		DATE
MICRO-FILM INFORMATION		
RECORDED BY		DATE
RECORDED BY		DATE

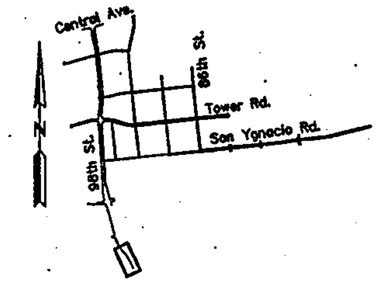


PLAN
SCALE: 1" = 50'



PROFILE
SCALE: 1" = 50' HOR.
1" = 5' VERT.

PLAN ORIENTATION MAP



NOTES:

1. AMAFCA FIELD ENGINEER SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY WORK WITHIN THE AMAFCA R.O.W. TEL 844-2215 JERRY LOVATO
2. NO WORK WILL BE PERFORMED IN THE AMAFCA R.O.W. BETWEEN APRIL 15 AND OCTOBER 15 WITHOUT WRITTEN PERMISSION FROM AMAFCA.
3. ALL SUBGRADE, BACKFILL AND EMBANKMENT SHALL BE COMPACTED TO 95% (MODIFIED PROCTOR) WITHIN THE AMAFCA R.O.W. TESTING REPORTS SHALL BE PROVIDED TO AMAFCA FIELD ENGINEER.
4. AMAFCA FIELD ENGINEER WILL BE NOTIFIED 48 HOURS PRIOR TO FINAL INSPECTION OF ANY FACILITIES WITHIN THE AMAFCA R.O.W.

RECORD DRAWING

APPROVED FOR CONSTRUCTION

John P. Kelly 12-7-00
FOR AMAFCA DATE

AS BUILT INFORMATION

CONTRACTOR
WORK STAKED BY — DATE
SURVEYED BY — AGENCY/COMPANY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS COMPILED BY — DATE

BENCH MARKS

10-L9 LOCATED AT THE INTERSECTION OF 10-40 AND 98th St. IN THE NE QUADRANT OF THE INTERSECTION.
AN ACS 1¾" ALUMINUM CAP STAMPED "10-L9, 1989", SET FLUSH IN THE TOP OF THE SSE CURB RETURN.
X=352794.84 Y=1482084.51
ELEV. 5204.437

MICRO-FILM INFORMATION

RECORDED BY — DATE
RECORDED BY — DATE
RECORDED BY — DATE

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE
1		
2		
3		
4		
5		
6		
7		

ENGINEER'S SEAL



NO.	DATE	REVISIONS	BY
1			
2			
3			
4			

DESIGN — DATE: MAY 2000
DESIGNED BY: S.M.B.
DRAWN BY: R.L.S.
CHECKED BY: J.A.A.

THE LARKIN GROUP, P.A.
8500 MENAUL, NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

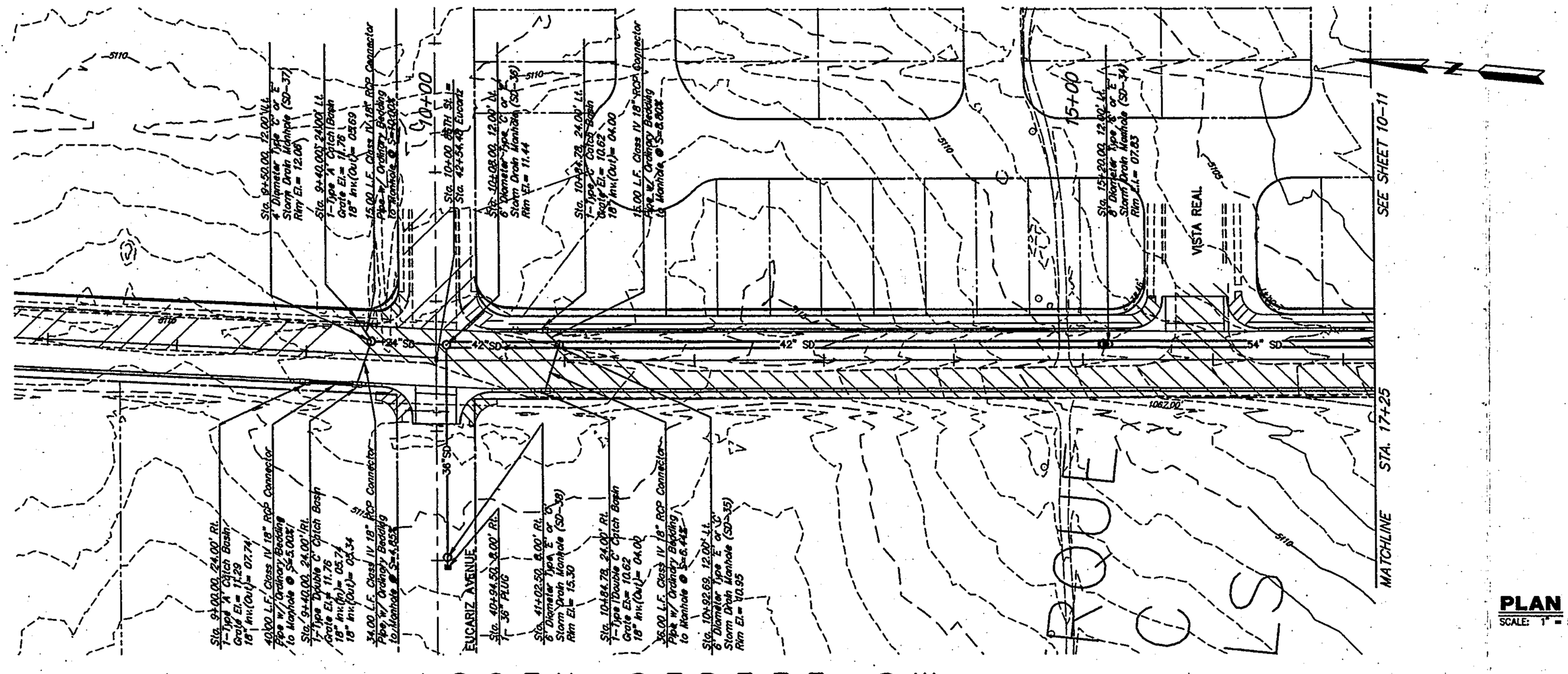
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: SPECIAL ASSESSMENT DISTRICT 222
98TH STREET SW.
STORM DRAIN PLAN & PROFILE

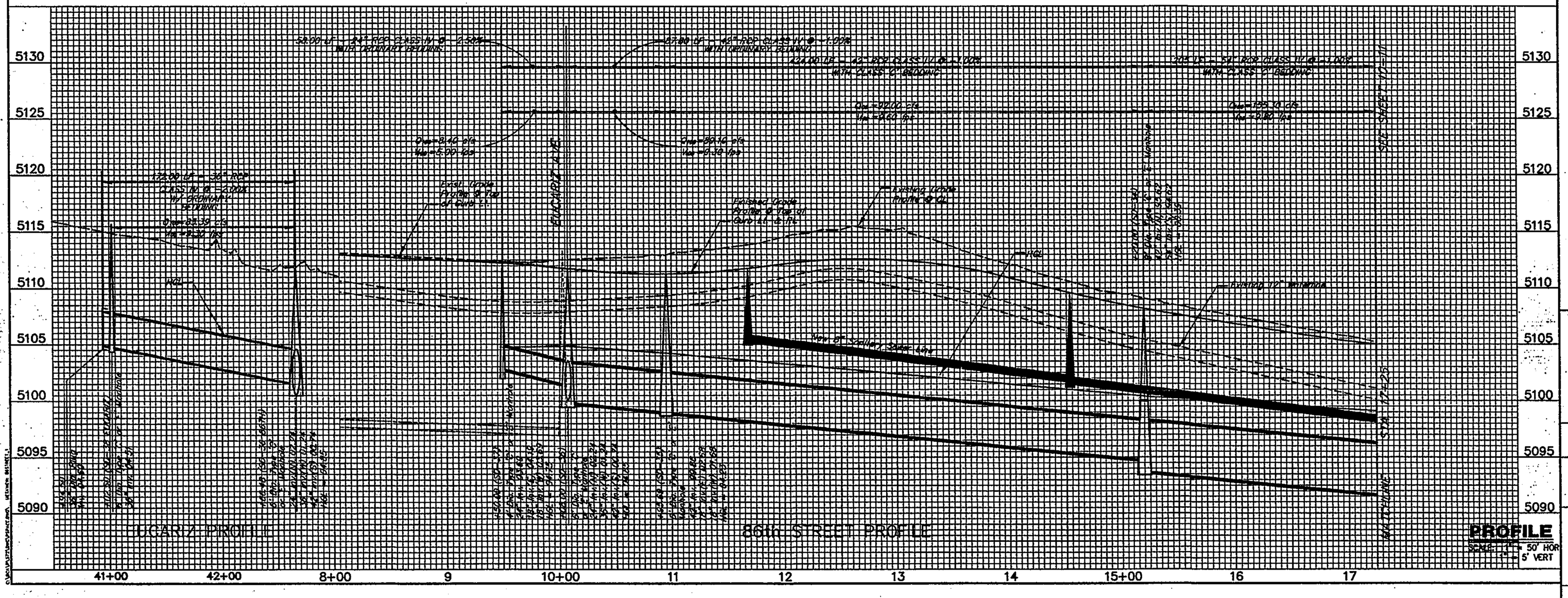
Design Review Committee: APPROVED DEC 12 2000 DESIGN REVIEW COMMITTEE
City Engineer: APPROVED DEC 14 2000 CITY ENGINEER

Last Design Update: No./Day/Yr. —

City Project No. 4188.91 | Zone Map No. L & M-9 | Sheet 10-9 of 10-23

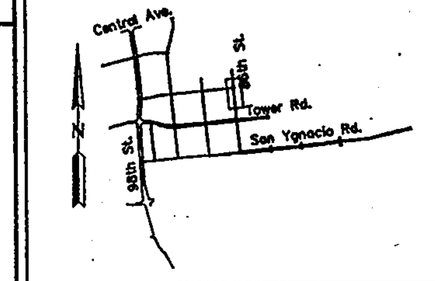


PLAN
SCALE: 1" = 50'



PROFILE
SCALE: 50' HOR
5' VERT

PLAN ORIENTATION MAP



SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE
1		
2		
3		
4		
5		
6		
7		

BENCH MARKS

10-L9 LOCATED AT THE INTERSECTION OF I-40 AND 98th St., IN THE NE QUADRANT OF THE INTERSECTION.
AN ACS "10" ALUMINUM CAP STAMPED "10-L9, 1989" SET FLUSH IN THE TOP OF THE SSE CURB RETURN.
X=352794.84 Y=1482084.51
ELEV. 5204.437

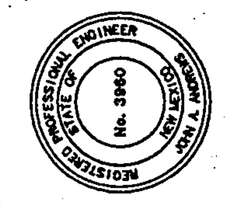
AS BUILT INFORMATION

CONTRACTOR		
STAKED BY		DATE
INSPECTOR'S INITIALS BY		DATE
FIELD VERIFIED BY		DATE
DRAWING BY		DATE
CORRECTED BY		DATE

MICRO-FILM INFORMATION

RECORDED BY	DATE
RECORDED BY	DATE
RECORDED BY	DATE

ENGINEER'S SEAL



NO.	DATE	REMARKS
1	DEC. 2001	DESIGN
2	DEC. 2001	
3	DEC. 2001	
4		

DESIGNED BY: R.W.M.
DRAWN BY: R.L.S.
CHECKED BY: J.A.A.

RECORD DRAWING

THE LARKIN GROUP, INC.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

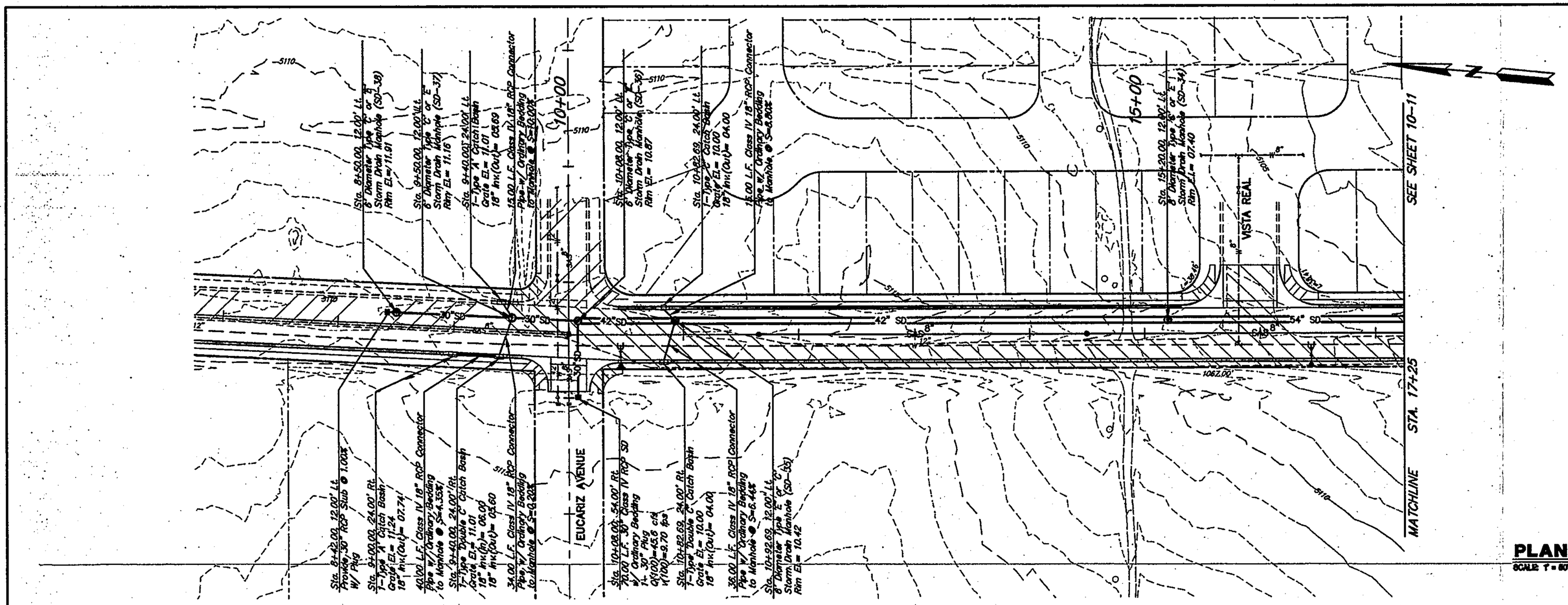
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: SPECIAL ASSESSMENT DISTRICT 222
86TH STREET SW.
STORM DRAIN PLAN & PROFILE

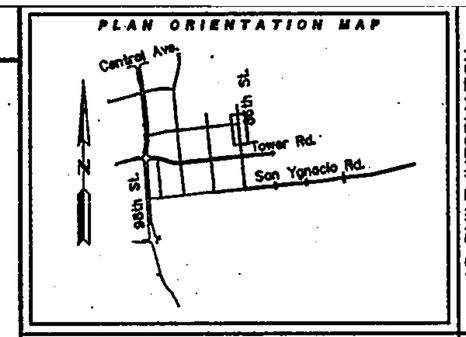
Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No.	Zone Map No.	Sheet	of
4188.92	L & M-9	10-10.2	10-23

THIS SHEET REPLACES SHT. 10-10 OF THE APPROVED PLANS DATED 12/12/2000



PLAN ORIENTATION MAP



AS BUILT INFORMATION

CONTRACTOR	
STAKED BY	DATE
INSPECTED BY	
FIELD CHECKED BY	DATE
VERIFICATIONS BY	
DRAWN BY	DATE
CORRECTED BY	

MICRO-FILM INFORMATION

RECORDED BY	DATE
RECORDED BY	DATE
RECORDED BY	DATE

BENCH MARKS

10-L9 LOCATED AT THE INTERSECTION OF I-40 AND 98th ST. IN THE NE QUADRANT OF THE INTERSECTION. AN ACS 1¼" ALUMINUM CAP STAMPED "10-L9, 1989". SET FLUSH IN THE TOP OF THE SSE CURB RETURN.
X=352734.84 Y=1482084.51
ELEV. 5204.437

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE
1		
2		
3		
4		
5		
6		
7		

ENGINEER'S SEAL

REVISIONS

NO.	DATE	REMARKS	BY
1		DESIGN	
2			
3			
4			

DESIGNED BY: R.W.M. DATE: DEC. 2000
DRAWN BY: R.J.S. DATE: DEC. 2000
CHECKED BY: J.A.A. DATE: DEC. 2000

THE LARKIN GROUP, INC.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

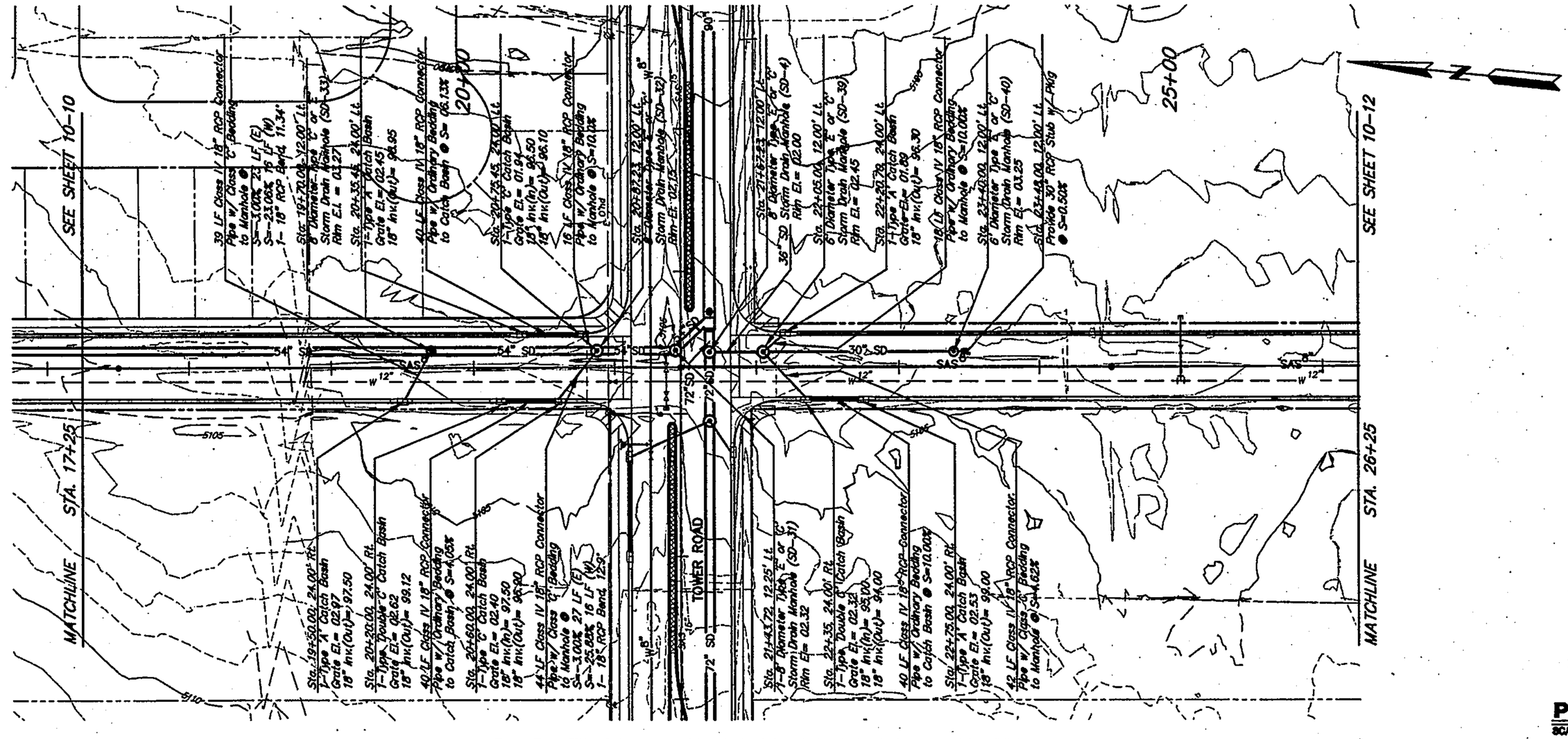
TITLE: SPECIAL ASSESSMENT DISTRICT 222
86TH STREET SW.
STORM DRAIN PLAN & PROFILE

Design Review Committee: APPROVED DEC 12 2000 DESIGN REVIEW COMMITTEE
City Engineer Approval: APPROVED DEC 11 2000 CITY ENGINEER

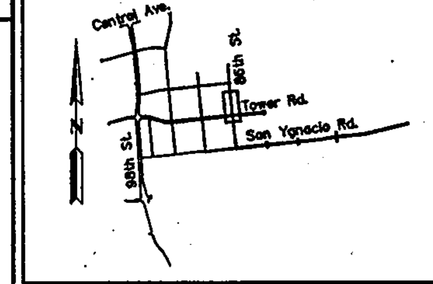
Last Design Update	No./Day/Yr.	No./Day/Yr.

City Project No. 4188.91 | Zone Map No. L & M-9 | Sheet 10-10 of 10-23

THIS SHEET IS REPLACED BY SHT. 10-10.2



PLAN ORIENTATION MAP



AS BUILT INFORMATION

CONTRACTOR

STAKED BY	DATE
INSPECTOR'S ACCEPTANCE BY	DATE
FINAL VERIFICATION BY	DATE
DRAWINGS CHANGED BY	DATE

MICRO-FILM INFORMATION

RECORDED BY	DATE
RECORDED BY	DATE
RECORDED BY	DATE

SURVEY INFORMATION

BENCH MARKS

10-L9 LOCATED AT THE INTERSECTION OF I-40 AND 98th St., IN THE NE QUADRANT OF THE INTERSECTION. AN ACS 1¾" ALUMINUM CAP STAMPED "10-L9, 1989". SET FLUSH IN THE TOP OF THE SSE CURB RETURN. X=382784.84 Y=1482084.51 ELEV. 5204.437

FIELD NOTES

NO.	BY	DATE
1		
2		
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4		
5		
6		
7		

ENGINEER'S SEAL

NEW MEXICO REGISTERED PROFESSIONAL ENGINEER STATE OF NEW MEXICO

RECORD DRAWING

NO.	DATE	REVISIONS	BY
4			
3			
2			
1		DESIGN	
		DESIGNED BY: S.M.B.	DATE: DEC. 2000
		DRAWN BY: R.L.S.	DATE: DEC. 2000
		CHECKED BY: J.A.A.	DATE: DEC. 2000

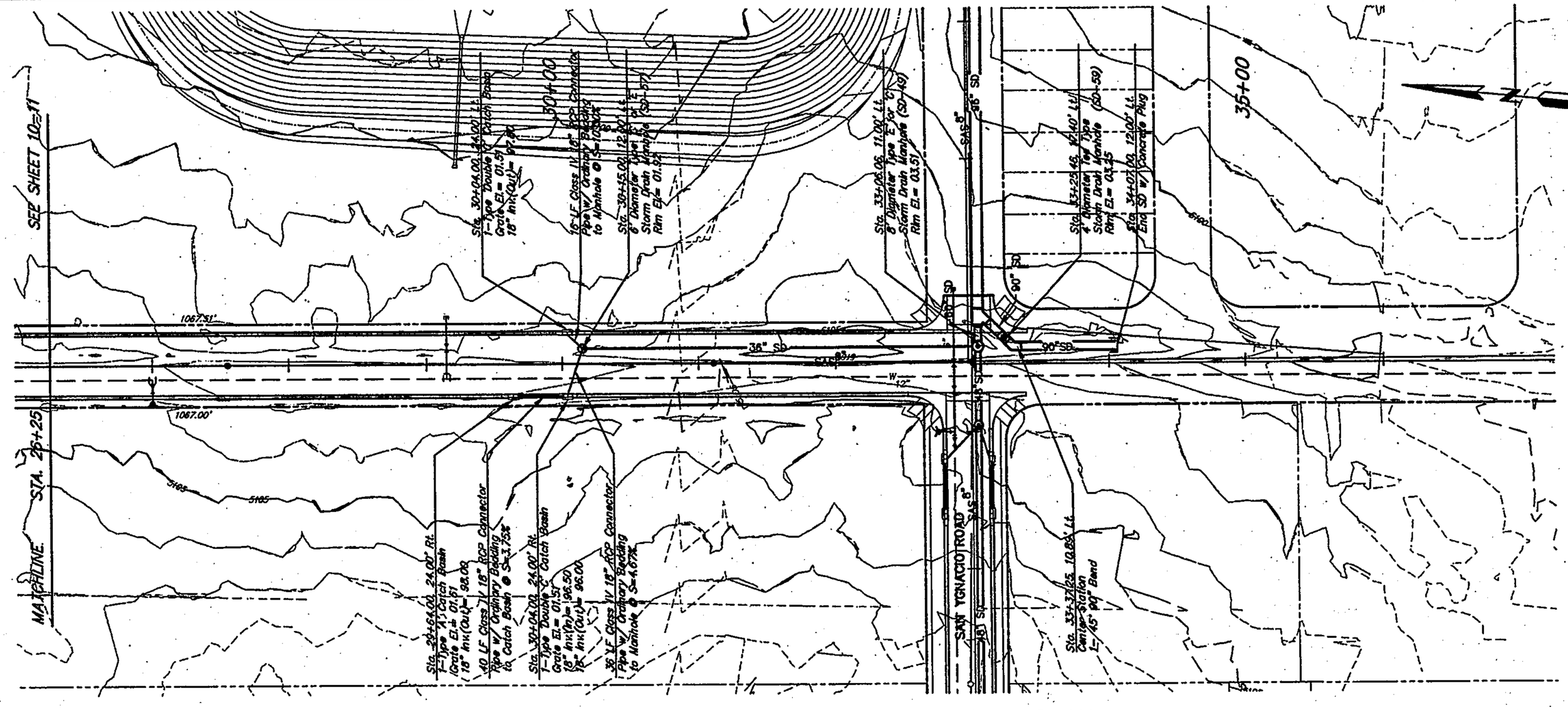
THE LARKIN GROUP, P.A.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

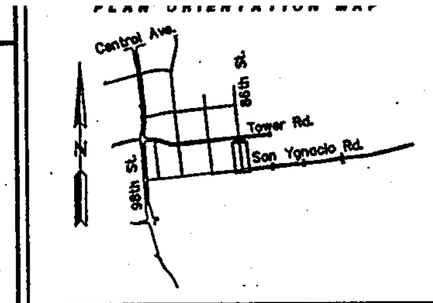
TITLE: SPECIAL ASSESSMENT DISTRICT 222
86TH STREET SW.
STORM DRAIN PLAN & PROFILE

Design Review Committee	City Engineer Approval	No./Day/Yr.	No./Day/Yr.
APPROVED DEC 12 2000 DESIGN REVIEW COMMITTEE	APPROVED DEC 20 2000 CITY ENGINEER	Last Design Update	

City Project No.	Zone Map No.	Sheet	of
4188.91	L & M-9	10-11	10-23



PLAN ORIENTATION MAP



SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
1		
2		
3		
4		
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BENCH MARKS

10-L9 LOCATED AT THE INTERSECTION OF CENTRAL AND 98th St., IN THE NE QUADRANT OF THE INTERSECTION. AN ACS 1¾" ALUMINUM CAP STAMPED "10-L9, 1989", SET FLUSH IN THE TOP OF THE SSE CURB RETURN.
X=352794.84 Y=1482084.51
ELEV. 5204.437

AS BUILT INFORMATION

CONTRACTOR
WORK STARTED BY — DATE
ACCEPTANCE BY — DATE
FIELD REVISION BY — DATE
DRAWINGS CORRECTED BY — DATE

MICRO-FILM INFORMATION
RECORDED BY — DATE
RECORDED BY — DATE
RECORDED BY — DATE

ENGINEER'S SEAL

NO.	DATE	REVISIONS REMARKS	BY
1		DESIGN	
2		DESIGNED BY: S.M.B. DATE: JAN. 2001	
3		DRAWN BY: R.J.S. DATE: JAN. 2001	
4		CHECKED BY: J.A.A. DATE: JAN. 2001	

RECORD DRAWING

THE LARKIN GROUP, INC.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

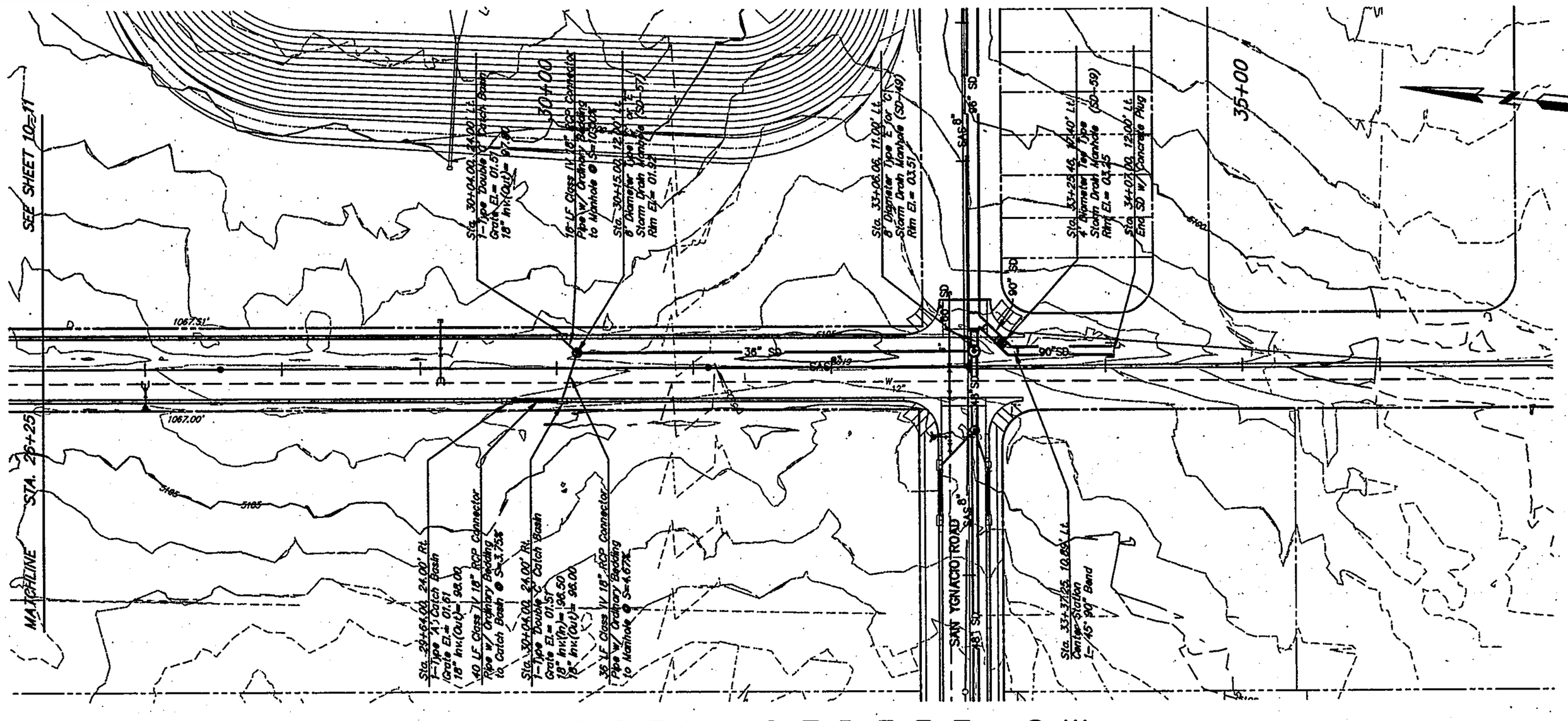
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

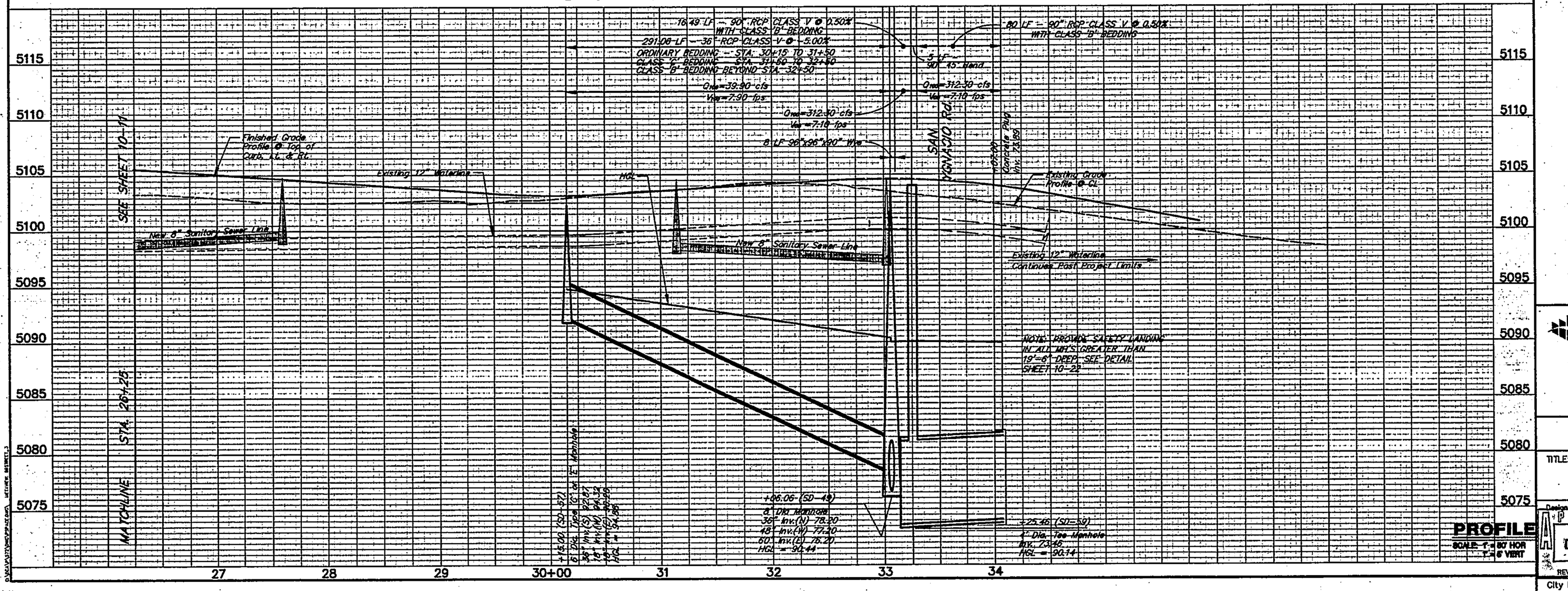
TITLE: SPECIAL ASSESSMENT DISTRICT 222
86TH STREET SW.
STORM DRAIN PLAN & PROFILE

Design Review Committee	City Engineer Approval	Last Design Update	No./Day/Yr.	No./Day/Yr.

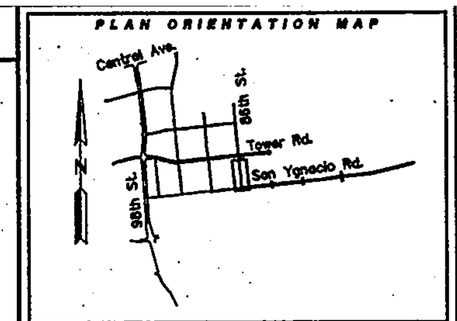
City Project No. 4188.91 | Zone Map No. L & M-9 | Sheet 10-12.1 of 10-23

THIS SHEET REPLACES SHT. 10-12 OF THE APPROVED PLANS DATED 12/12/2000. ADDENDUM NO. 1





PLAN ORIENTATION MAP



SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE
1		
2		
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5		
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BENCH MARKS

10-L9 LOCATED AT THE INTERSECTION OF I-40 AND 98th St., IN THE NE QUADRANT OF THE INTERSECTION.
AN ACS 1¼" ALUMINUM CAP STAMPED "10-L9, 1989" SET FLUSH IN THE TOP OF THE SSE CURB RETURN.
X=362794.84 Y=1482084.51
ELEV. 5204.437

AS BUILT INFORMATION

	DATE
CONTRACTOR	
STAKED BY	
INSPECTORS	
FIELD VERIFICATION BY	
CORRECTED BY	

MICRO-FILM INFORMATION

	DATE
RECORDED BY	
RECORDED BY	
RECORDED BY	

ENGINEER'S SEAL

REVISIONS

NO.	DATE	REMARKS	BY
1	DEC. 2000	DESIGN	
2	DEC. 2000		
3	DEC. 2000		
4			

DESIGNED BY: S.M.B.
DRAWN BY: R.J.S.
CHECKED BY: J.A.A.

THE LARKIN GROUP, INC.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

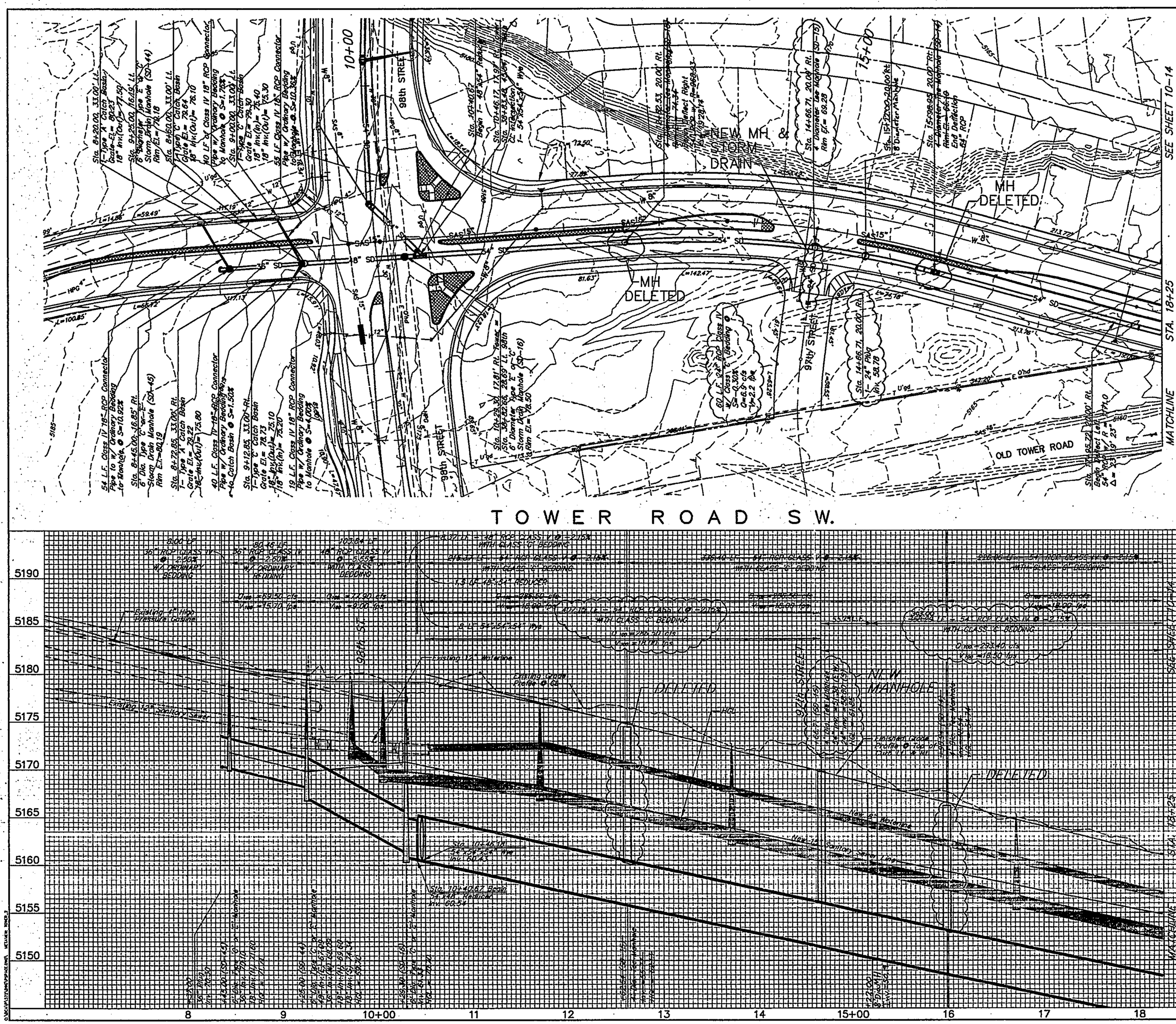
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: SPECIAL ASSESSMENT DISTRICT 222
86TH STREET SW.
STORM DRAIN PLAN & PROFILE

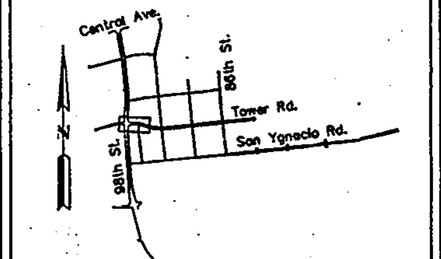
Design Review Committee	City Engineer Approval	Last Design Update	No./Day/Yr.	No./Day/Yr.
APPROVED DEC 12 2000 DESIGN REVIEW COMMITTEE	APPROVED DEC 12 2000 CITY ENGINEER			

City Project No.	Zone Map No.	Sheet	of
4188.91	L & M-9	10-12	10-23

THIS SHEET IS REPLACED BY SHT. 10-12.1



PLAN ORIENTATION MAP



SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE
1		
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BENCH MARKS

10-L9 LOCATED AT THE INTERSECTION OF I-40 AND 98th St., IN THE NE QUADRANT OF THE INTERSECTION.

AN ACS 1¾" ALUMINUM CAP STAMPED "10-L9, 1989", SET FLUSH IN THE TOP OF THE SSE CURB RETURN.

X=352794.84 Y=1482084.51

ELEV. 5204.437

AS BUILT INFORMATION

CONTRACTOR — DATE

WORK STAKED BY — DATE

AS-BUILTED BY — DATE

FIELD VERIFICATION BY — DATE

DRAWINGS CORRECTED BY — DATE

MICRO-FILM INFORMATION

RECORDED BY — DATE

RECORDED BY — DATE

RECORDED BY — DATE

ENGINEER'S SEAL

PROFESSIONAL ENGINEER — STATE OF NEW MEXICO — No. 3980 — REGISTERED — RICHARD A. SWEARINGEN

NO.	DATE	REVISIONS	BY
4			
3			
2		Added Manhole	R.S.
1		REMARKS	BY
		DESIGN	
		DESIGNED BY: S.M.B.	DATE: JULY 2001
		DRAWN BY: R.J.S.	DATE: JULY 2001
		CHECKED BY: J.A.A.	DATE: JULY 2001

RECORD DRAWING

THE LARKIN GROUP, INC.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

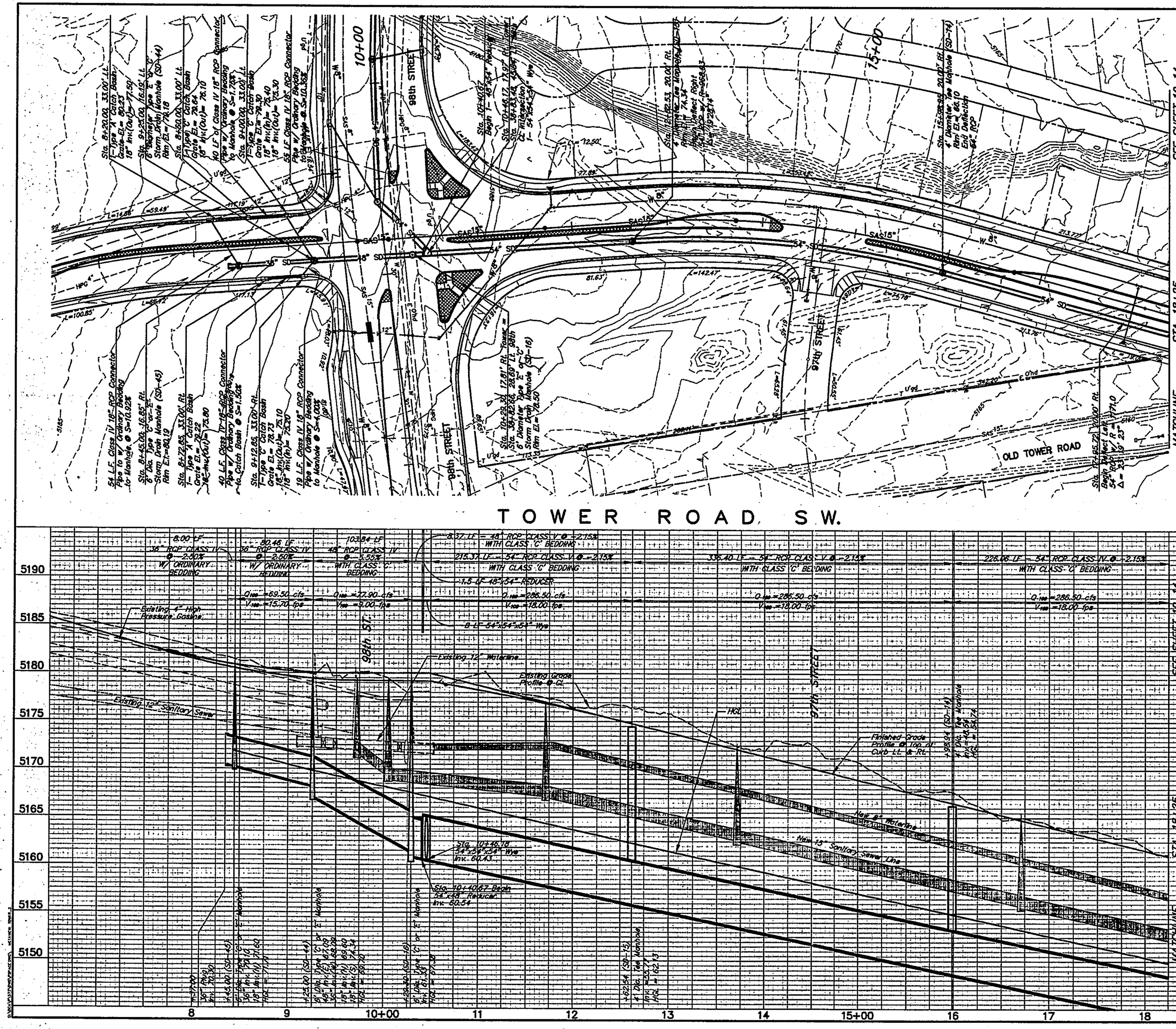
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

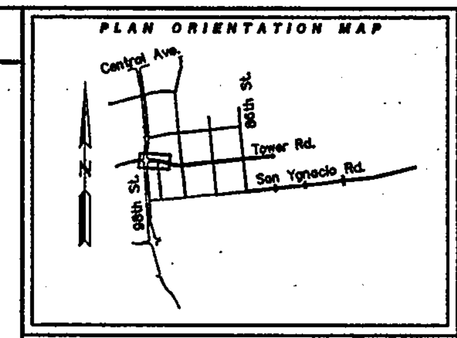
TITLE: SPECIAL ASSESSMENT DISTRICT 222
TOWER ROAD SW.
STORM DRAIN PLAN & PROFILE

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No.	Zone Map No.	Sheet	of
4188.92	L & M-9	10-13.1	10-23

THIS SHEET REPLACES SHT. 10-13 OF THE APPROVED PLANS DATED 12/12/2000





SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE
1		
2		
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5		
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BENCH MARKS

10-L9 LOCATED AT THE INTERSECTION OF I-40 AND 98th St., IN THE NE QUADRANT OF THE INTERSECTION.
AN ACS 3¼" ALUMINUM CAP STAMPED "10-L9, 1989" SET FLUSH IN THE TOP OF THE SSE CURB RETURN.
X=352794.84 Y=1482084.51
ELEV. 5204.437

AS BUILT INFORMATION

CONTRACTOR
WORK STARTED BY: DATE
ACCEPTANCE BY: DATE
FIELD INSPECTION BY: DATE
DRAWING CORRECTED BY: DATE

MICRO-FILM INFORMATION

RECORDED BY: DATE
RECORDED BY: DATE
RECORDED BY: DATE

ENGINEER'S SEAL

REVISIONS

NO.	DATE	REMARKS	BY
1	DEC. 2000	DESIGN	
2	DEC. 2000		
3	DEC. 2000		
4			

DESIGNED BY: S.M.B.
DRAWN BY: R.J.S.
CHECKED BY: J.A.A.

THE LARKIN GROUP, Inc.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

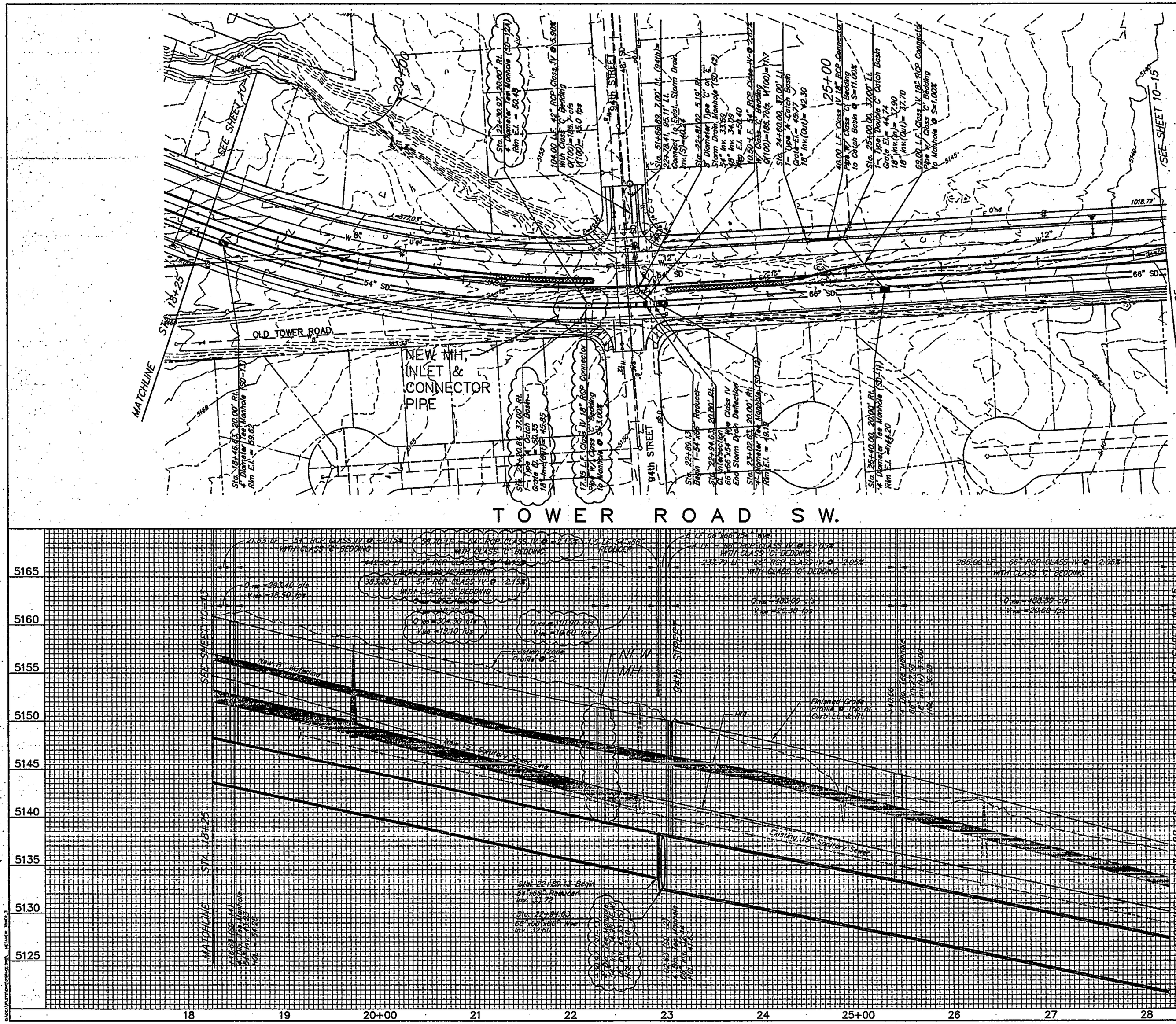
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: SPECIAL ASSESSMENT DISTRICT 222
TOWER ROAD SW.
STORM DRAIN PLAN & PROFILE

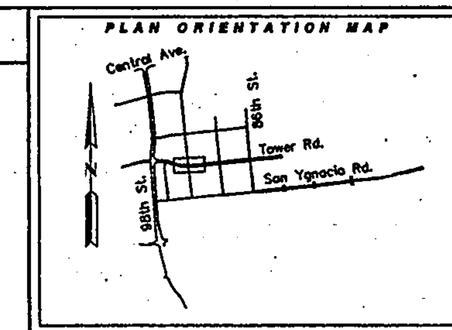
Design Review Committee: APPROVED DEC 12 2000 DESIGN REVIEW COMMITTEE
City Engineer Approval: APPROVED DEC 12 2000 CITY ENGINEER
Last Design Update: No./Day/Yr. | No./Day/Yr.

City Project No. 4188.91 | Zone Map No. L & M-9 | Sheet 10-13 of 10-23

THIS SHEET IS REPLACED BY SHT. 10-13.1



PLAN ORIENTATION MAP



AS BUILT INFORMATION

CONTRACTOR
SIGNED BY — DATE
INSPECTOR'S ACCEPTANCE BY — DATE
COMPLETION BY — DATE
CONNECTED BY — DATE

MICRO-FILM INFORMATION

RECORDED BY — DATE
RECORDED BY — DATE
RECORDED BY — DATE

BENCH MARKS

10-L9 LOCATED AT THE INTERSECTION OF I-40 AND 98th St., IN THE NE QUADRANT OF THE INTERSECTION.
AN ACS 1¼" ALUMINUM CAP STAMPED "10-L9, 1989" SET FLUSH IN THE TOP OF THE SSE CURB RETURN.
X=352794.84 Y=1482084.51
ELEV. 5204.437

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE
1		
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ENGINEER'S SEAL

REGISTERED PROFESSIONAL ENGINEER — STATE OF NEW MEXICO — No. 3980 — JOHN A. ARMIJO

NO.	DATE	REMARKS	BY
4			
3			
2			
1		DESIGN	
	DATE: JULY 2001	DESIGNED BY: L.M.B.	
	DATE: JULY 2001	DRAWN BY: R.J.S.	
	DATE: JULY 2001	CHECKED BY: J.A.A.	

RECORD DRAWING

THE LARKIN GROUP, P.A.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: SPECIAL ASSESSMENT DISTRICT 222
TOWER ROAD SW.
STORM DRAIN PLAN & PROFILE

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No.	Zone Map No.	Sheet	of
4188.92	L & M-9	10-14.1	10-23

THIS SHEET REPLACES SHT. 10-14 OF THE APPROVED PLANS DATED 12/12/2000

THIS SHEET IS REPLACED BY SHT.10-14J

City Project No. 4188.91 | Zone Map No. L & M-9 | Sheet 10-14 of 10-23

No./Date/Init.	Last Design Update	No./Date/Init.

PROJECT MANAGER: [illegible]

DESIGN REVIEW/CONSTRUCTION: DEC 1 2 2000

CITY ENGINEER: DEC 1 2 2000

TITLE: SPECIAL ASSESSMENT DISTRICT 222
TOWER ROAD SW.
STORM DRAIN PLAN & PROFILE

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

THE LARKIN GROUP
8500 MENAUL, NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

NO.	DATE	REVISIONS BY	REMARKS
1			
2			
3			
4			

DESIGN
DESIGNED BY: S.M.B. DATE: DEC. 2000
DRAWN BY: R.L.S. DATE: DEC. 2000
CHECKED BY: J.A.A. DATE: DEC. 2000

ENGINEER'S SEAL

SURVEY INFORMATION

NO.	FIELD NOTES BY	DATE
1		
2		
3		
4		
5		
6		
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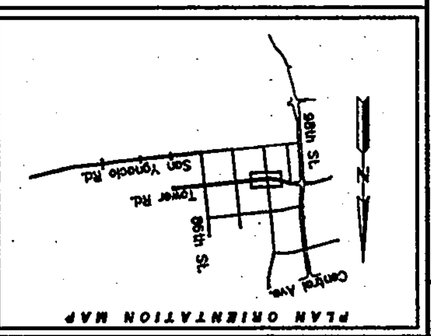
BENCH MARKS

10-L9 LOCATED AT THE INTERSECTION OF I-40 AND 98th St., IN THE NE QUADRANT OF THE INTERSECTION.
AN ACS 1½" ALUMINUM CAP STAMPED "10-L9, 1989" SET FLUSH IN THE TOP OF THE SSE CURB RETURN.
X=382794.84 Y=1482084.51
ELEV. 5204.437

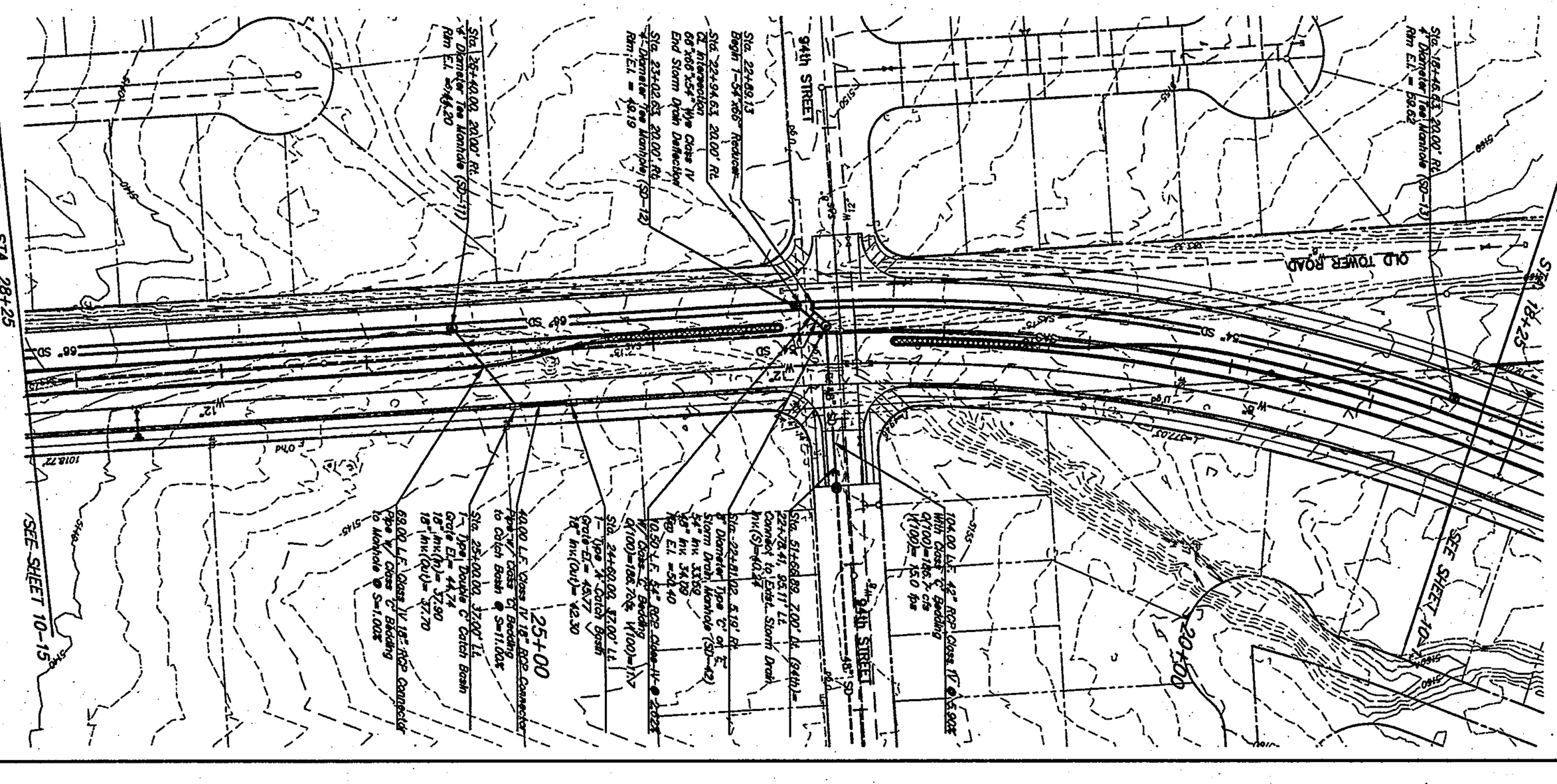
AS BUILT INFORMATION

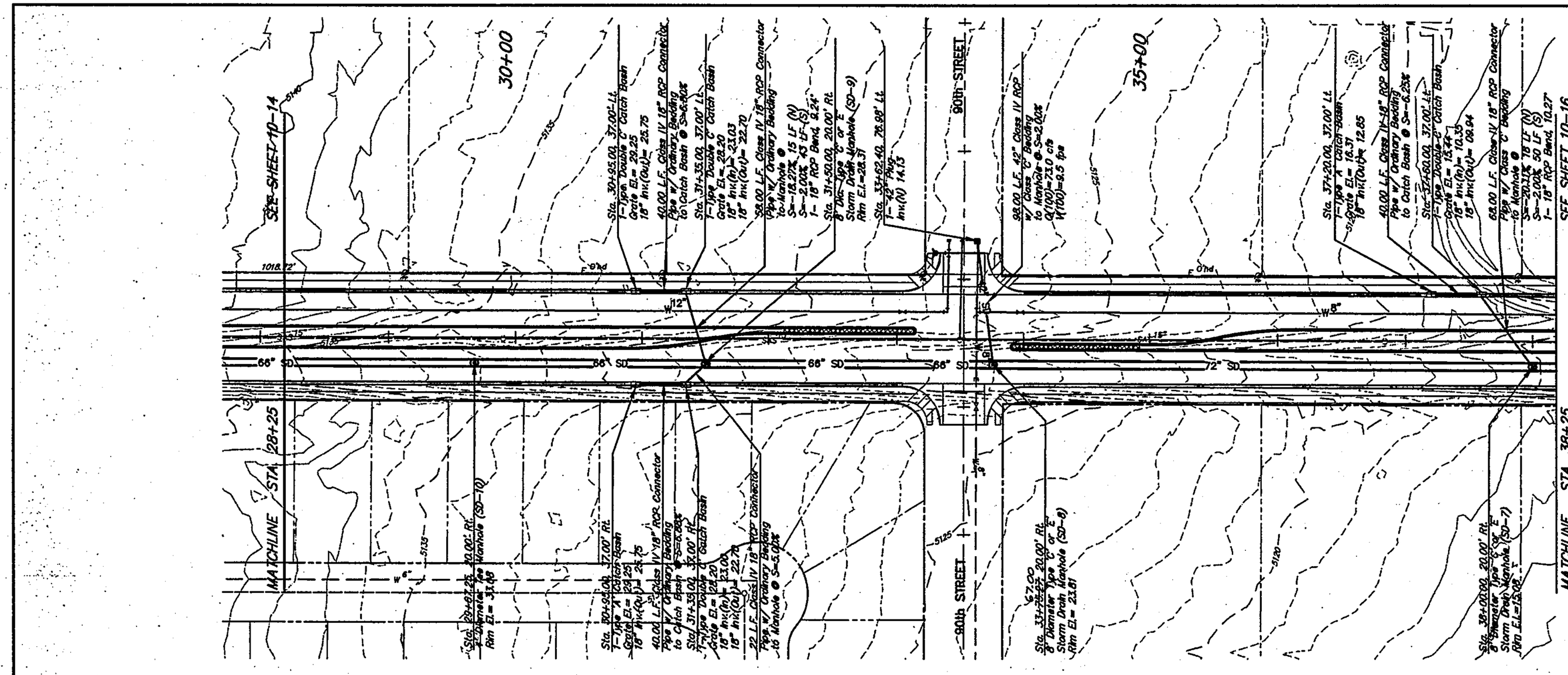
	CONTRACTOR	
	STAKED BY	DATE
	INSPECTOR'S FIELD CHANGES BY	DATE
	VERIFICATION BY	DATE
	MICRO-FILM INFORMATION	
	RECORDED BY	DATE
	RECORDED BY	DATE

PLAN ORIENTATION MAP

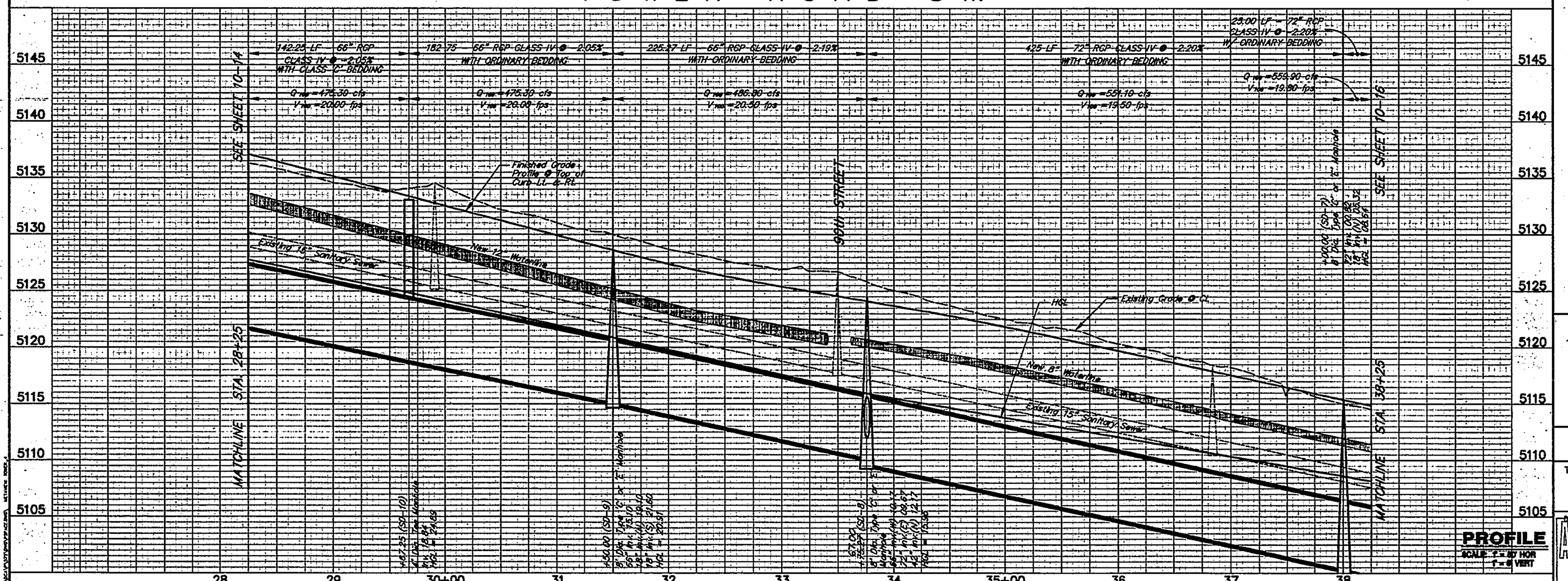


PLAN
SCALE 1" = 60'


TOWER ROAD SW.
MATCHLINE STA. 28+25
SEE SHEET 10-15
94th STREET
OLD TOWER ROAD
MATCHLINE STA. 18+25
SEE SHEET 10-13
94th STREET
SEE SHEET 10-14
Sta. 18+49.63, 20.00' Rt. 4' Diameter Tee Manhole (SD-13) Rim El. = 83.62
Sta. 22+94.63, 20.00' Rt. 4' Diameter Tee Manhole (SD-12) Rim El. = 90.19
Sta. 23+02.63, 20.00' Rt. Combination Inlet (SD-11) Rim El. = 94.20
Sta. 26+49.63, 20.00' Rt. 4' Diameter Tee Manhole (SD-10) Rim El. = 94.30
Sta. 22+94.63, 20.00' Rt. 10.00' Type 'R' Curb Opening Inlet Close to Manhole (SD-12) Grate El. = 90.19
Sta. 23+89.13 Begin 1-54" RCP Reducer
Sta. 24+08.13 Begin 54" RCP Reducer
Sta. 22+94.63, 20.00' Rt. 4' Diameter Tee Manhole (SD-12) Rim El. = 90.19
Sta. 25+00.00, 37.00' Lt. 4' Diameter Tee 'C' or 'E' Storm Drain Manhole (SD-E2) Rim El. = 94.40
Sta. 24+50.00, 47.00' Lt. 1 - Type 'R' Curb Opening Inlet Grate El. = 90.30
Sta. 25+00.00, 37.00' Lt. 1 - Type 'R' Double 'C' Curb Opening Inlet Grate El. = 44.74
Sta. 51+68.83, 7.00' Lt. (94th) 22+72.41, 95.11' Lt. Connect to Exist. Storm Drain Inl(S)=4.02%
Sta. 51+68.83, 7.00' Rt. (94th) 22+72.41, 95.11' Rt. Connect to Exist. Storm Drain Inl(S)=4.02%
104.00 L.F. 42" RCP Class IV Bedding Q(100)= 186.2 cfs V(100)= 15.0 fps
104.00 L.F. 42" RCP Class IV Bedding Q(100)= 186.2 cfs V(100)= 15.0 fps
10.50 L.F. 54" RCP Class IV Bedding W/ Cradle Q(100)= 186.2cfs V(100)= 10.53
10.50 L.F. 54" RCP Class IV Bedding W/ Cradle Q(100)= 186.2cfs V(100)= 10.53
20.00 L.F. Class IV 18" RCP Connector to Catch Basin @ S=1.00%
20.00 L.F. Class IV 18" RCP Connector to Catch Basin @ S=1.00%
98.00 L.F. Class V 18" RCP Bedding @ Manhole @ S=1.00%
98.00 L.F. Class V 18" RCP Bedding @ Manhole @ S=1.00%
Sta. 24+50.00, 47.00' Lt. 1 - Type 'R' Curb Opening Inlet Grate El. = 90.30 Inl(Q)= 12.30
Sta. 25+00.00, 37.00' Lt. 1 - Type 'R' Double 'C' Curb Opening Inlet Grate El. = 44.74 18" Inl(Q)= 27.90 18" Inl(Q)= 27.70
Sta. 25+00.00, 37.00' Lt. 1 - Type 'R' Double 'C' Curb Opening Inlet Grate El. = 44.74 18" Inl(Q)= 27.90 18" Inl(Q)= 27.70
98.00 L.F. Class V 18" RCP Connector Pipe W/ Cradle @ Manhole @ S=1.00%
98.00 L.F. Class V 18" RCP Connector Pipe W/ Cradle @ Manhole @ S=1.00%
Finished Grade Profile @ Curb & Gutter
Existing Grade Profile @ C&G
New 15" Sanitary Sewer Line
Existing 15" Sanitary Sewer Line
New 8" Waterline
Existing 8" Waterline
HGL
Q = 286.50 cfs
V = 18.80 fps
Q = 297.40 cfs
V = 18.70 fps
Q = 463.50 cfs
V = 19.80 fps
Q = 475.30 cfs
V = 20.00 fps
MATH CLASS 'C' BEDDING
MATH CLASS 'E' BEDDING
MATH CLASS 'C' BEDDING
MATH CLASS 'C' BEDDING
214.63 LF - 54" RCP CLASS IV @ 2.15%
142.50 LF - 54" RCP CLASS IV @ 2.15%
237.79 LF - 66" RCP CLASS IV @ 2.05%
285.00 LF - 66" RCP CLASS IV @ 2.05%
4 LF - 66"x66"x54" Wye
15 LF 54"x66" REDUCER
6 LF 66"x66"x54" Wye
Sta. 22+08.13 Begin 54" RCP Reducer
54"x66" Reducer Inv. 32.72
Sta. 22+94.63 66"x66"x66" Wye Inv. 32.80
Sta. 22+94.63 66"x66"x66" Wye Inv. 32.80
Sta. 23+89.13 Begin 1-54"x66" Reducer
Sta. 22+94.63, 20.00' Rt. 66"x66"x66" Wye Close IV End Storm Drain Deflection
Sta. 22+94.63, 20.00' Rt. 66"x66"x66" Wye Close IV End Storm Drain Deflection
Sta. 26+49.63, 20.00' Rt. 66"x66"x66" Wye Close IV End Storm Drain Deflection
Sta. 26+49.63, 20.00' Rt. 66"x66"x66" Wye Close IV End Storm Drain Deflection
Sta. 22+94

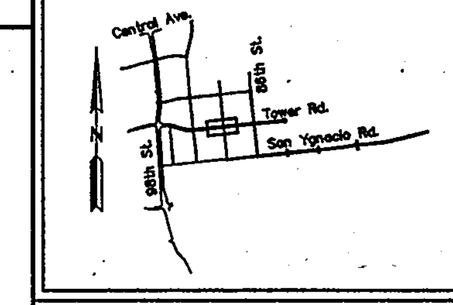


PLAN
SCALE 1" = 50'



PROFILE
SCALE 1" = 50' HOR
1" = 5' VERT

PLAN ORIENTATION MAP



SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
1		
2		
3		
4		
5		
6		
7		

BENCH MARKS
10-L9 LOCATED AT THE INTERSECTION OF I-40 AND 98th St. IN THE NE QUADRANT OF THE INTERSECTION.
AN ACS 1¾" ALUMINUM CAP STAMPED "10-L9, 1989". SET FLUSH IN THE TOP OF THE SSE CURB RETURN.
X=352784.84 Y=1482084.51
ELEV. 5204.437

AS BUILT INFORMATION
CONTRACTOR
WORK STARTED BY: DATE
WORK REPORTED AS COMPLETE BY: DATE
FINAL INSPECTION AND ACCEPTANCE BY: DATE
CONSTRUCTION STAKING BY: DATE
DRAWINGS AS-BUILTED BY: DATE
MICRO-FILM INFORMATION
RECORDED BY: DATE
RECORDED BY: DATE
RECORDED BY: DATE

ENGINEER'S SEAL
REGISTERED PROFESSIONAL ENGINEER
No. 10880
STATE OF NEW MEXICO
JOHN A. MANN

RECORD DRAWING

THE LARKIN GROUP, Inc.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

NO.	DATE	REVISIONS	BY
1		Adjusted Manhole	R.S.
2			
3			
4			

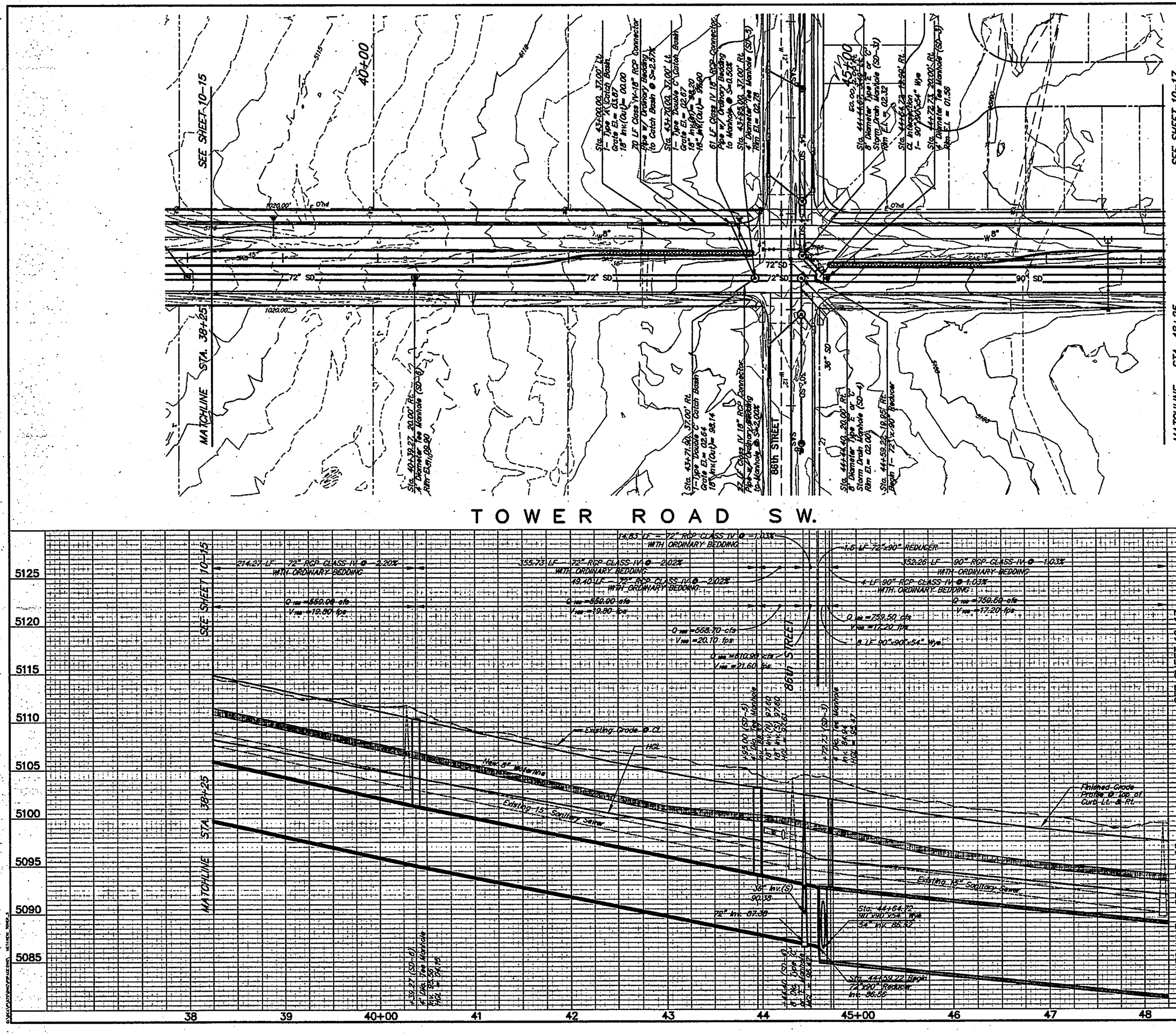
DESIGN
DESIGNED BY: S.M.B. DATE: DEC. 2000
DRAWN BY: R.J.S. DATE: DEC. 2000
CHECKED BY: J.A.A. DATE: DEC. 2000

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: SPECIAL ASSESSMENT DISTRICT 222
TOWER ROAD SW.
STORM DRAIN PLAN & PROFILE

City Design Review Committee: APPROVED DEC 12 2000 DESIGN REVIEW COMMITTEE
City Engineer: APPROVED DEC 12 2000 CITY ENGINEER
Last Design Update: No./Day/Yr. | No./Day/Yr.

City Project No. 4188.91 | Zone Map No. L & M-9 | Sheet 10-15 of 10-23


TOWER ROAD SW.
SEE SHEET 10-15
SEE SHEET 10-17
MATCHLINE STA. 38+25
MATCHLINE STA. 48+25
86th STREET
40+00
45+00
Sta. 43+20.00, 37.00' Rt. Type 'D' Double 'C' Catch Basin Grate El.= 03.07 18" Inv.(Out)= 00.00
20 LF Class IV 18" RCP Connector Pipe w/ Ordinary Bedding to Catch Basin @ S=2.5%
Sta. 43+20.00, 37.00' Lt. 1-Type 'Double C' Catch Basin Grate El.= 02.67 18" Inv.(Out)= 99.50 18" Inv.(In)= 99.00
61 LF Class IV 18" RCP Connector Pipe w/ Ordinary Bedding to Manhole @ S=1.00%
Sta. 43+33.00, 31.00' Rt. 4' Diameter Tee Manhole (SD-3) Rim El.= 02.28
Sta. 44+44.73, 20.00' Rt. 4' Diameter Type 'C' Storm Drain Manhole (SD-4) Rim El.= 02.12
Sta. 44+44.73, 19.95' Rt. 2' Interceptor 1- 90°30"x24" Wye
Sta. 44+72.73, 20.00' Rt. 4' Diameter Tee Manhole (SD-3) Rim El.= 01.56
Sta. 44+44.40, 20.00' Rt. 4' Diameter Type 'C' Storm Drain Manhole (SD-4) Rim El.= 02.02
Sta. 44+59.22, 19.85' Rt. Begin 1-72"x90" Reducer
Sta. 43+71.80, 37.00' Rt. 1-Type 'Double C' Catch Basin Grate El.= 02.64 18" Inv.(Out)= 98.14
72 LF Class IV 18" RCP Connector Pipe w/ Ordinary Bedding to Manhole @ S=2.00%
Sta. 40+58.27, 20.00' Rt. 4' Diameter Manhole (SD-3) Rim El.=09.80
1020.00'
1022.00'
5115
5118
72" SD
90" SD
36" SD
18" SD
W 8"
W 6"
OHP
OHP
72" SD
72" SD
72" SD
90" SD
36" SD
18" SD
W 8"
W 6"
OHP
OHP
OHP

City Project No. 4188.91 | Zone Map No. L & M-9 | Sheet 10-17 of 10-23

Last Design Update	No./Day/Yr.	No./Day/Yr.

APPROVED — CITY ENGINEER — DEC 1 2 2000 — DEC 1 2 2000 — APPROVED

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: SPECIAL ASSESSMENT DISTRICT 222
TOWER ROAD SW.
STORM DRAIN PLAN & PROFILE

THE LARKIN GROUP
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

RECORD DRAWING

NO.	DATE	REVISIONS	BY
1		Moved Inlet to Rmvd SAS MH	R.S.
2			
3			
4			

DESIGN — DATE: DEC. 2000
DRAWN BY: R.L.S. — DATE: DEC. 2000
CHECKED BY: V.A.A. — DATE: DEC. 2000

ENGINEER'S SEAL

REGISTERED PROFESSIONAL ENGINEER — STATE OF NEW MEXICO — No. 9672 — VICTOR A. ARAGON

SURVEY INFORMATION

NO.	FIELD NOTES BY	FIELD NOTES DATE
1		
2		
3		
4		
5		
6		
7		

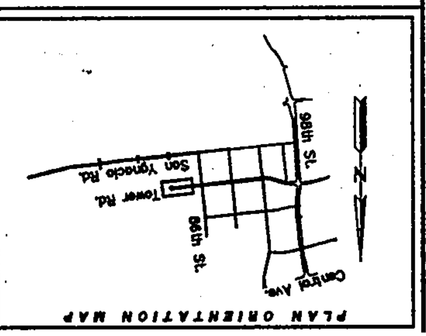
BENCH MARKS

10-L9 LOCATED AT THE INTERSECTION OF I-40 AND 98th St., IN THE NE QUADRANT OF THE INTERSECTION.
AN AGS 1¾" ALUMINUM CAP STAMPED "10-L9, 1989", SET FLUSH IN THE TOP OF THE SSE CURB RETURN.
X=352794.84 Y=1482084.51
ELEV. 5204.437

AS BUILT INFORMATION

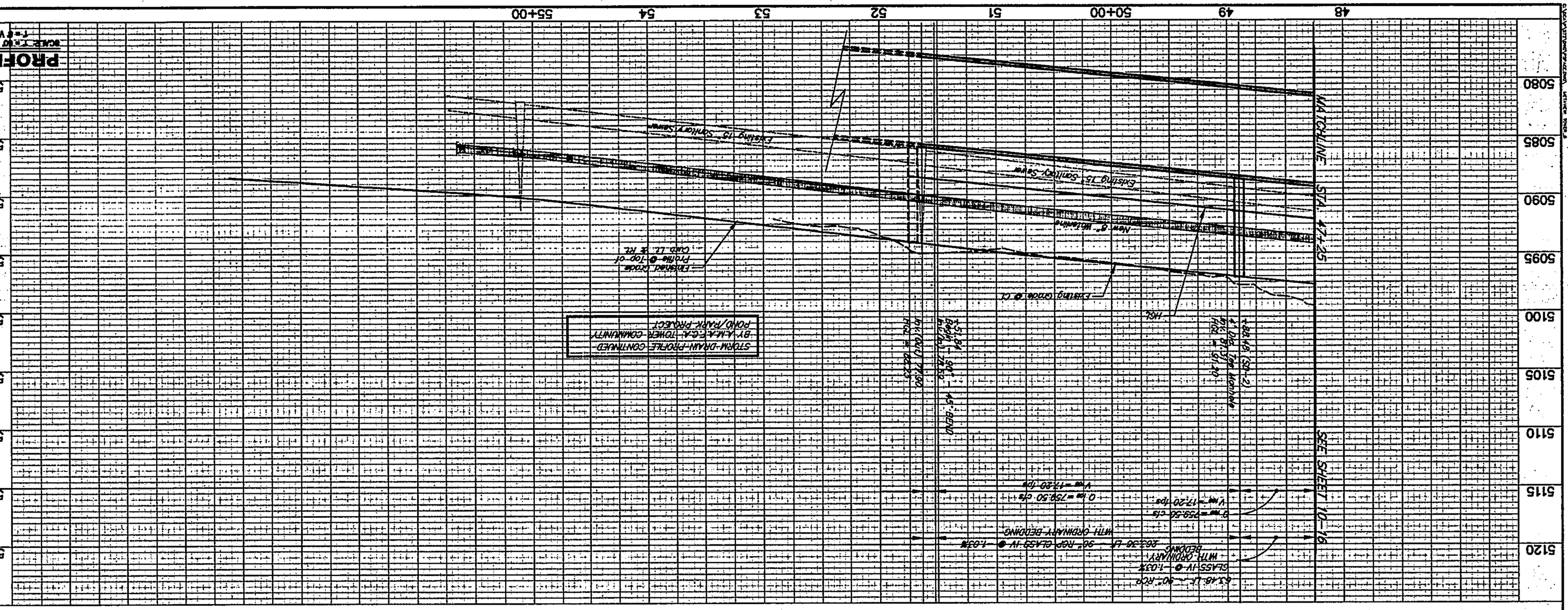
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	WORK STAKED BY	DATE
	WORK ACCEPTANCE BY	DATE
	FIELD AS-BUILTS BY DRAWINGS	DATE
	AS-BUILTS CORRECTED BY	DATE
	RECORDED BY MICRO-FILM INFORMATION	DATE
	RECORDED BY	DATE
	RECORDED BY	DATE

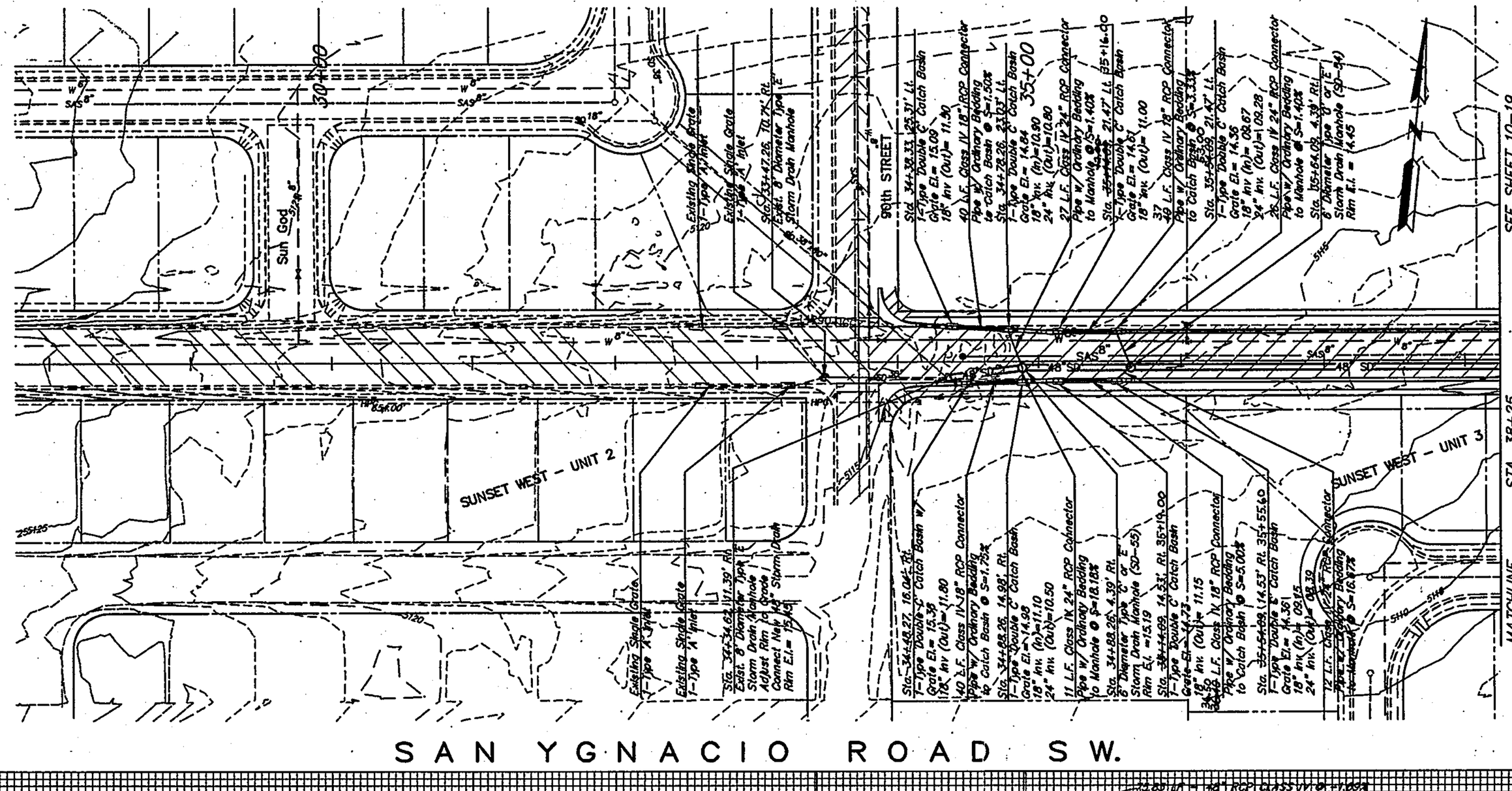
PLAN ORIENTATION MAP

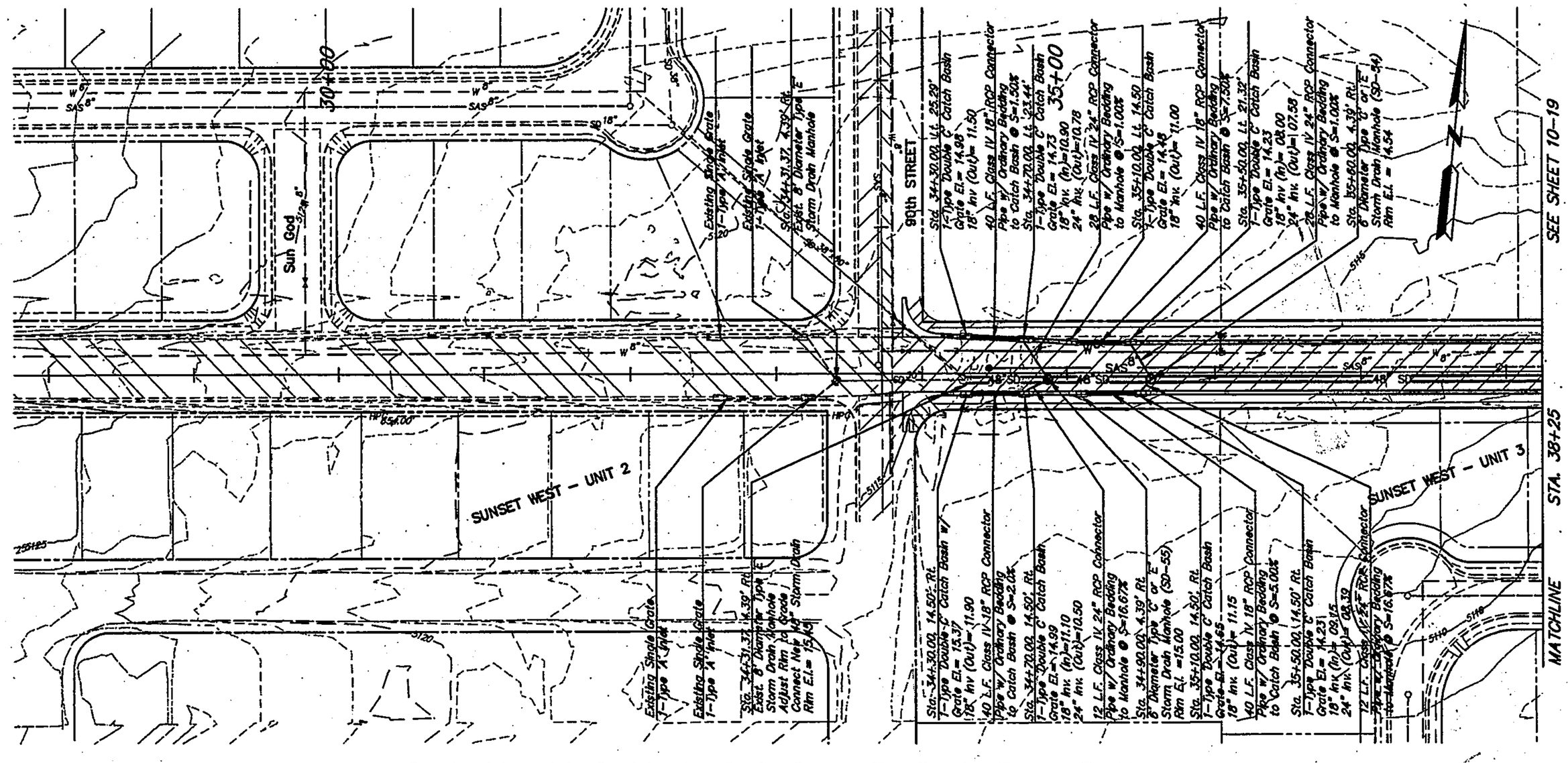


PLAN
SCALE 1" = 50'

PROFILE
SCALE: 1" = 50' HOR
1" = 5' VERT

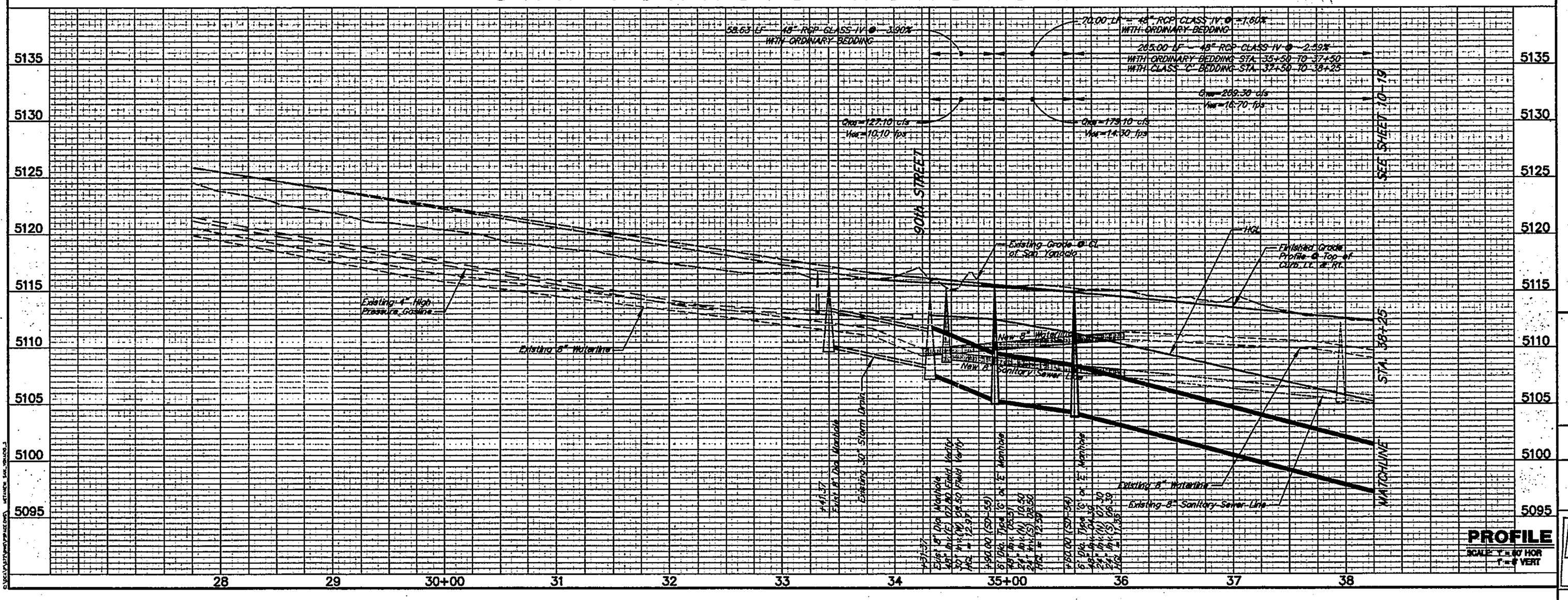



SAN YGNACIO ROAD SW.
SUNSET WEST - UNIT 2
SUNSET WEST - UNIT 3
98th STREET
SEE SHEET 10-19
STA. 38+25
MATCHLINE
Sun God
30+00
35+00
Existing Single Grate 1-Type 'A' Inlet
Existing Single Grate 1-Type 'A' Inlet
Sta. 34+47.26, 10.75' Rt. Exist. 8" Diameter Type 'E' Storm Drain Manhole
Sta. 34+48.27, 16.04' Rt. 1-Type Double 'C' Catch Basin w/ Grate El.= 15.39 18" Inv (Out)= 11.80
140 L.F. Class IV-18" RCP Connector Pipe w/ Ordinary Bedding to Catch Basin @ S=1.75%
Sta. 34+88.26, 14.98' Rt. 1-Type Double 'C' Catch Basin Grate El.=14.58 18" Inv. (In)=11.10 24" Inv. (Out)=10.50
111 L.F. Class IV-24" RCP Connector Pipe w/ Ordinary Bedding to Manhole @ S=18.18%
Sta. 34+88.26, 4.39' Rt. 8' Diameter Type 'C' or 'E' Storm Drain Manhole (30-56) Rim El.=15.19
Sta. 34+48.33, 25.31' Lt. 1-Type Double 'C' Catch Basin Grate El.= 15.09 18" Inv (Out)= 11.90
40 L.F. Class IV-18" RCP Connector Pipe w/ Ordinary Bedding to Catch Basin @ S=1.50%
Sta. 34+78.26, 21.97' Lt. 1-Type Double 'C' Catch Basin Grate El.= 14.64 18" Inv. (In)= 11.90 24" Inv. (Out)=10.90
27 L.F. Class IV-24" RCP Connector Pipe w/ Ordinary Bedding to Manhole @ S=1.40%
Sta. 35+16.00, 21.47' Lt. 1-Type Double 'C' Catch Basin Grate El.= 14.00 18" Inv. (Out)= 11.00
37 L.F. Class IV-18" RCP Connector Pipe w/ Ordinary Bedding to Catch Basin @ S=3.33%
Sta. 35+54.68, 21.47' Lt. 1-Type Double 'C' Catch Basin Grate El.= 14.36 18" Inv (Out)=11.67 24" Inv. (In)=10.89
26 L.F. Class IV-24" RCP Connector Pipe w/ Ordinary Bedding to Manhole @ S=1.40%
Sta. 35+54.68, 4.39' Rt. 8' Diameter Type 'C' or 'E' Storm Drain Manhole (30-56) Rim El.= 14.45
Sta. 35+54.68 (14.53' Rt. 35+55.40) 1-Type Double 'C' Catch Basin Grate El.=14.61 18" Inv. (In)= 08.15 24" Inv. (Out)= 08.10
12 L.F. Class IV-24" RCP Connector Pipe w/ Ordinary Bedding to Manhole @ S=16.92%
Sta. 35+54.68 (14.53' Rt. 35+19.00) 1-Type Double 'C' Catch Basin Grate El.=14.73 18" Inv. (Out)= 11.15
34.28 L.F. Class IV-18" RCP Connector Pipe w/ Ordinary Bedding to Catch Basin @ S=5.00%
Existing Single Grate 1-Type 'A' Inlet
Existing Single Grate 1-Type 'A' Inlet
Existing 6" High Pressure Gasoline
Existing 8" Interstate
Existing 8" Interstate
Existing 8" Interstate



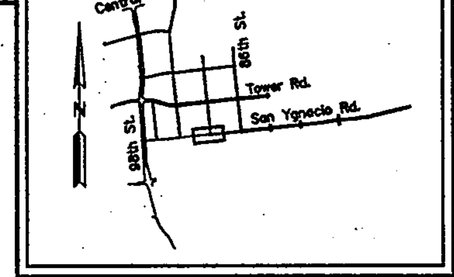
PLAN
SCALE: 1" = 50'

SAN YGNACIO ROAD SW.



PROFILE
SCALE: 1" = 50' HOR
1" = 5' VERT

PLAN ORIENTATION MAP



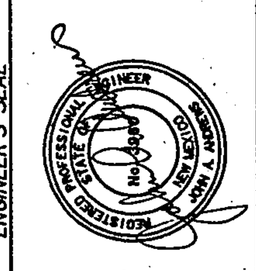
SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
1		
2		
3		
4		
5		
6		
7		

BENCH MARKS
10-L9 LOCATED AT THE INTERSECTION OF 1-40 AND 98th St., IN THE NE QUADRANT OF THE INTERSECTION.
AN ACS 1¾" ALUMINUM CAP STAMPED "10-L9, 1989", SET FLUSH IN THE TOP OF THE SSE CURB RETURN.
X= 352794.84 Y=1482084.51
ELEV. 5204.437

AS BUILT INFORMATION
CONTRACTOR — DATE
STAKED BY — DATE
INSPECTED BY
SURVEILLANCE BY — DATE
FIELD VERIFICATION BY
COMPUTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
RECORDED BY — DATE
RECORDED BY — DATE

ENGINEER'S SEAL



NO.	DATE	REVISIONS — REMARKS	BY
1	DEC. 2000	DESIGN	
2	DEC. 2000		
3	DEC. 2000		
4			

DESIGNED BY: R.M.M.
DRAWN BY: R.L.S.
CHECKED BY: J.A.A.

THE LARKIN GROUP, INC.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

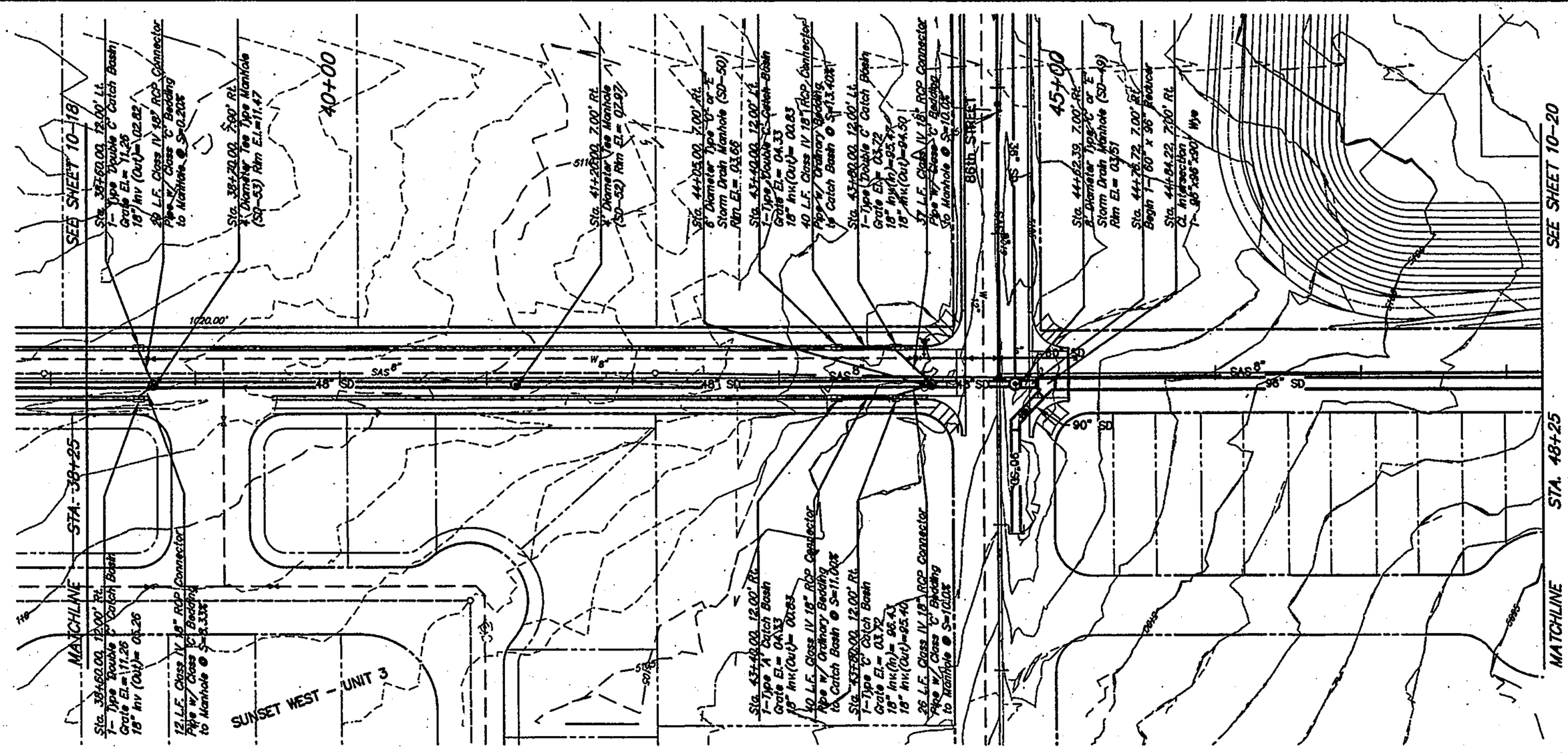
TITLE: SPECIAL ASSESSMENT DISTRICT 222
SAN YGNACIO ROAD SW.
STORM DRAIN PLAN & PROFILE

Design Review Committee: APPROVED DEC 12 2000 — DESIGN REVIEW COMMITTEE
City Engineer Approval: APPROVED DEC 12 2000 — CITY ENGINEER

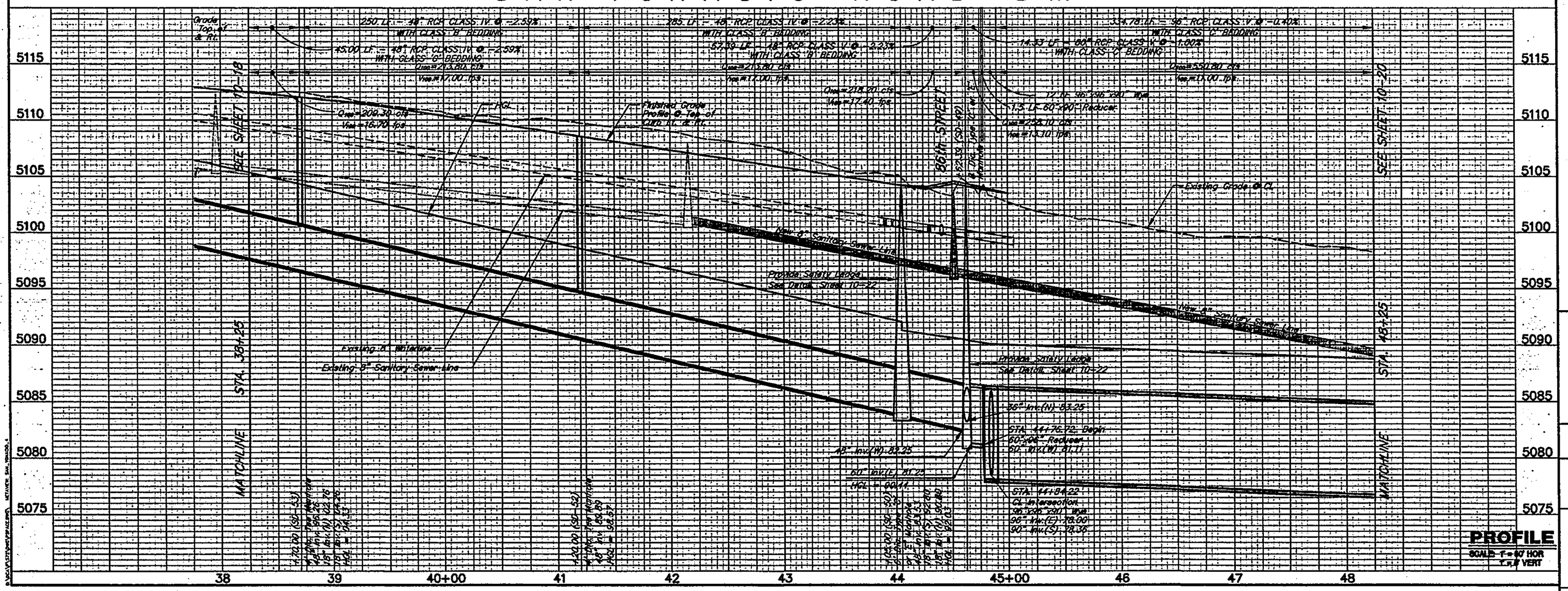
Last Design Update: No./Day/Yr. — No./Day/Yr.

City Project No. 4188.91 | Zone Map No. L & M-9 | Sheet 10-18 of 10-23

THIS SHEET IS REPLACED BY SHT. 10-18.1



PLAN
SCALE: 1" = 60'

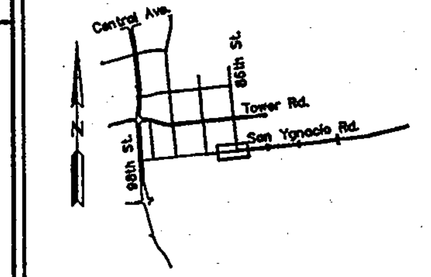


PROFILE
SCALE: 1" = 60' HOR
1" = 6' VERT

RECORD DRAWING

THE LARKIN GROUP
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

PLAN ORIENTATION MAP



AS BUILT INFORMATION
CONTRACTOR
SIGN: BY DATE
INSPECTOR'S ACCEPTANCE BY DATE
CERTIFICATION BY DATE
CONNECTED BY DATE

BENCH MARKS
10-L9 LOCATED AT THE INTERSECTION OF CENTRAL AND 98th St., IN THE NE QUADRANT OF THE INTERSECTION. AN ACS 1¾" ALUMINUM CAP STAMPED "10-L9, 1989". SET FLUSH IN THE TOP OF THE SSE CURB RETURN.
X=352794.84 Y=1482084.51
ELEV. 5204.437

MICRO-FILM INFORMATION
RECORDED BY DATE
RECORDED BY DATE
RECORDED BY DATE

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
1		
2		
3		
4		
5		
6		
7		

ENGINEER'S SEAL

NO.	DATE	REVISIONS	BY
1		REMARKS	
2		DESIGN	
3		DESIGNED BY: R.M.M.	DATE: MAY 2000
4		DRAWN BY: R.L.S.	DATE: MAY 2000
		CHECKED BY: J.A.A.	DATE: MAY 2000

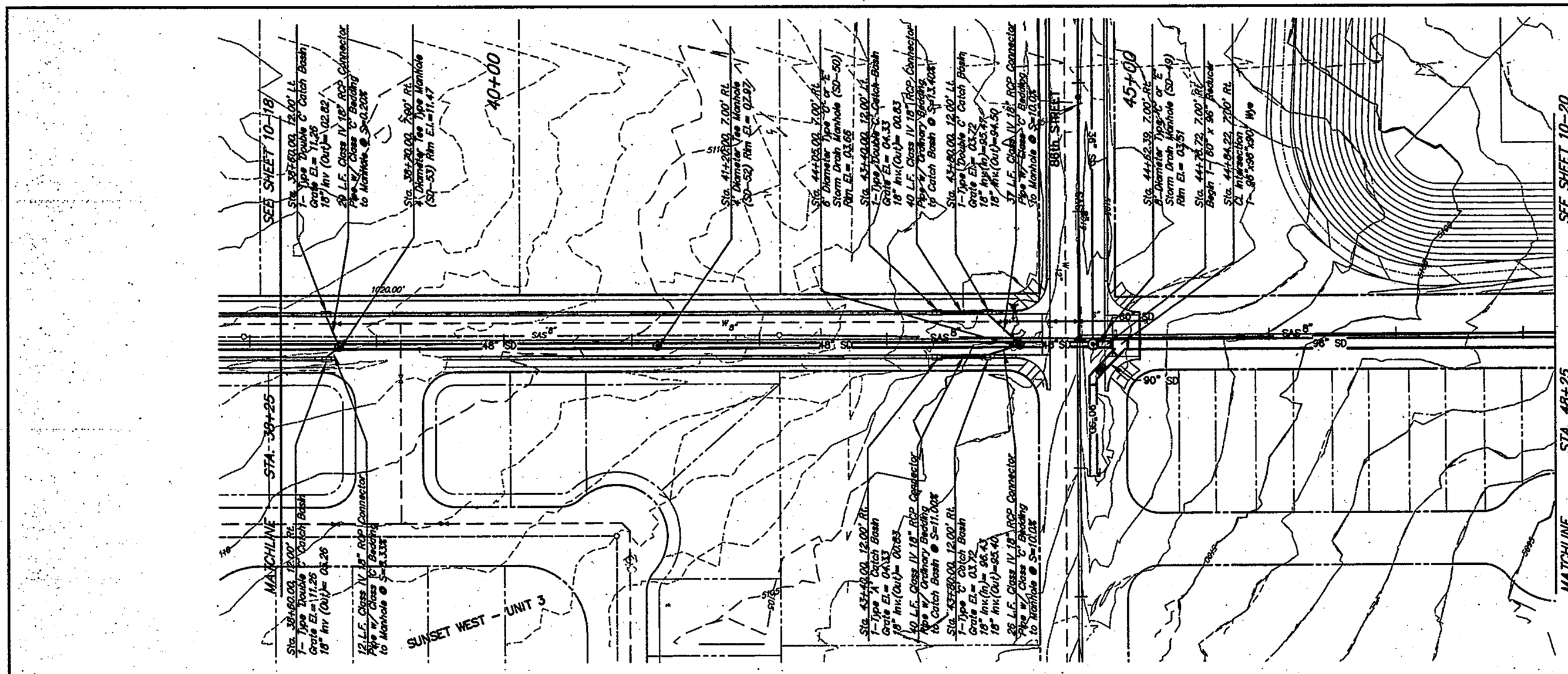
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

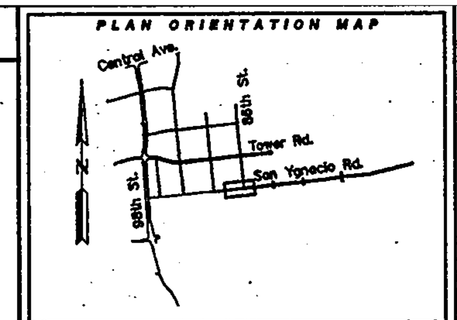
TITLE: SPECIAL ASSESSMENT DISTRICT 222
SAN YGNACIO ROAD SW.
STORM DRAIN PLAN & PROFILE

Design Review Committee	City Engineer Approval	Last Design Update	No./Day/Yr.	No./Day/Yr.

City Project No. 4188.91 | Zone Map No. L & M-9 | Sheet 10-19.1 of 10-23

THIS SHEET REPLACES SHT. 10-19 OF THE APPROVED PLANS DATED 12/12/2000 ADDENDUM NO.1





SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
1		
2		
3		
4		
5		
6		
7		

BENCH MARKS

10-19 LOCATED AT THE INTERSECTION OF 1-40 AND 98th St., IN THE NE QUADRANT OF THE INTERSECTION.
AN ACS 1¾" ALUMINUM CAP STAMPED "10-19, 1989" SET FLUSH IN THE TOP OF THE SSE CURB RETURN.
X=362794.84 Y=1482084.51
ELEV. 5204.437

AS BUILT INFORMATION

CONTRACTOR — STAKED BY — DATE
INSPECTOR'S FIELD VERIFICATION BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
RECORDED BY — DATE
RECORDED BY — DATE

ENGINEER'S SEAL
REGISTERED PROFESSIONAL ENGINEER STATE OF NEW MEXICO No. 9883 DONALD R. WARD

NO.	DATE	REMARKS	BY
4			
3			
2		DESIGN	
1		REVISIONS	

DESIGNED BY: R.W.M. DATE: MAY 2000
DRAWN BY: R.J.S. DATE: MAY 2000
CHECKED BY: J.A.A. DATE: MAY 2000

THE LARKIN GROUP, P.A.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: SPECIAL ASSESSMENT DISTRICT 222
SAN YGNACIO ROAD SW.
STORM DRAIN PLAN & PROFILE

Design Review Committee: APPROVED DEC 12 2000 DESIGN REVIEW COMMITTEE
City Engineer: APPROVED DEC 12 2000 CITY ENGINEER

Last Design Update	No./Day/Yr.	No./Day/Yr.

City Project No. 4188.91 | Zone Map No. L & M-9 | Sheet 10-19 of 10-23

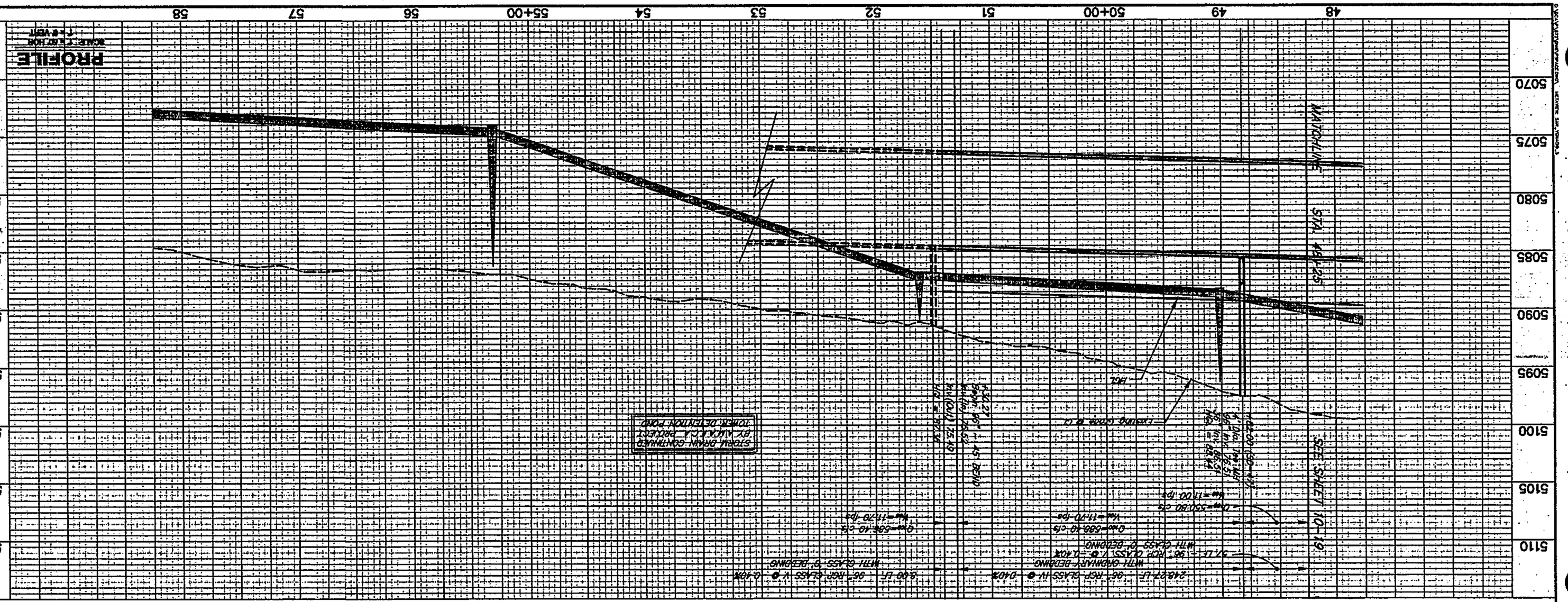
THIS SHEET IS REPLACED BY SHT. 10-19.1

THIS SHEET REPLACES SHT. 10-20 OF THE APPROVED PLANS DATED 12/12/2000 — ADDENDUM NO.1

SAN YGNACIO ROAD SW.

PROFILE

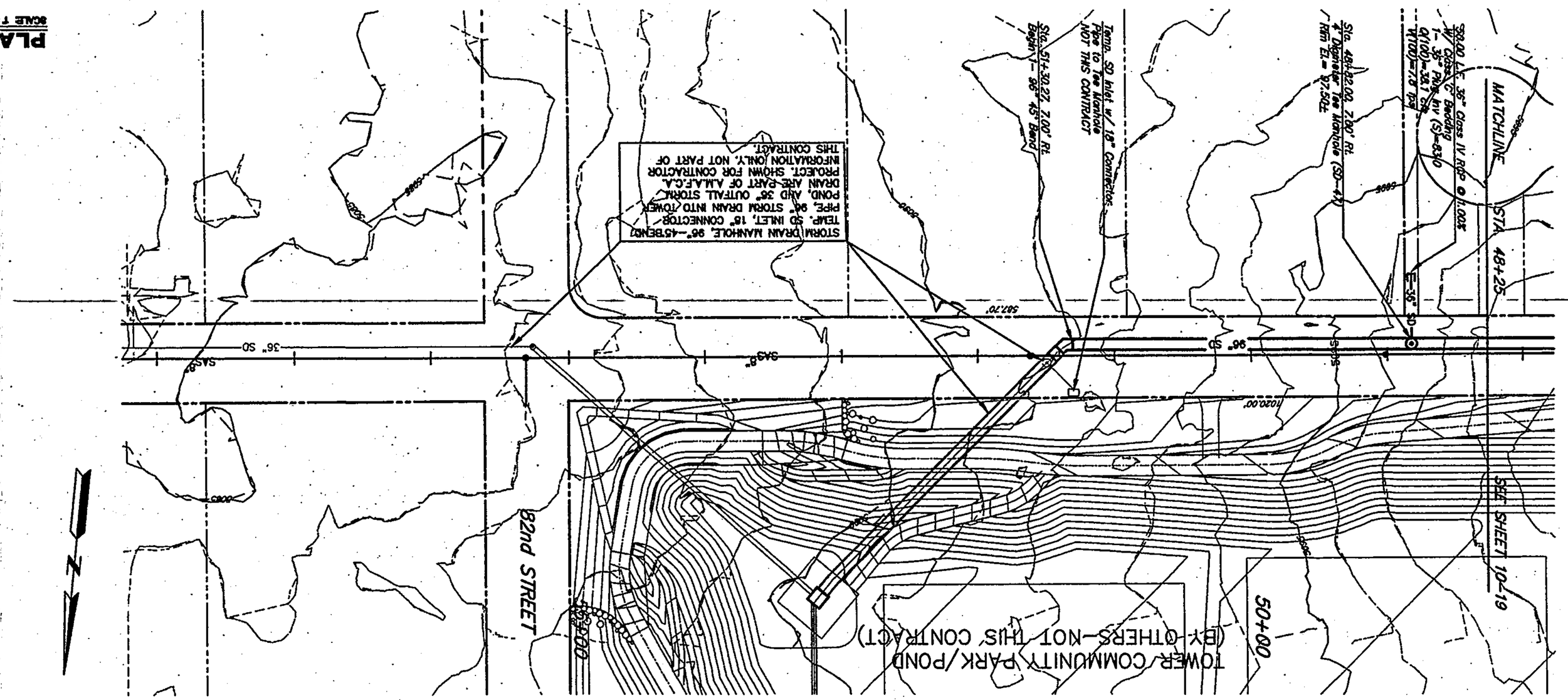
SCALE: 1" = 50' HOR.
1" = 5' VERT.



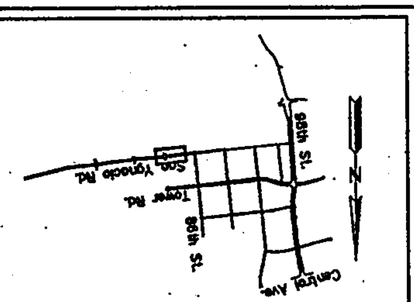
SAN YGNACIO ROAD SW.

PLAN

SCALE 1"=50'



PLAN ORIENTATION MAP



RECORD DRAWING

THE LARKIN GROUP
8500 MENAUL, NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

NO.	DATE	REVISIONS ▲ REMARKS	BY
1			
2			
3			
4			

DESIGN
DRAWN BY: P.A.S. DATE: JAN. 2001
DESIGNED BY: S.M.B. DATE: JAN. 2001
CHECKED BY: J.A.A. DATE: JAN. 2001

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: SPECIAL ASSESSMENT DISTRICT 222
SAN YGNACIO ROAD SW.
STORM DRAIN PLAN & PROFILE

Design Review Committee	City Engineer Approval	Last Design Update	No./Date/Rt.	No./Date/Rt.

City Project No.	Zone Map No.	Sheet of
4188.91	L & M-9	10-20.1 10-23

ADDENDUM NO.1

ENGINEER'S SEAL

REGISTERED PROFESSIONAL ENGINEER — STATE OF NEW MEXICO — JOSEPH M. MONTOYA

SURVEY INFORMATION

FIELD NOTES BY

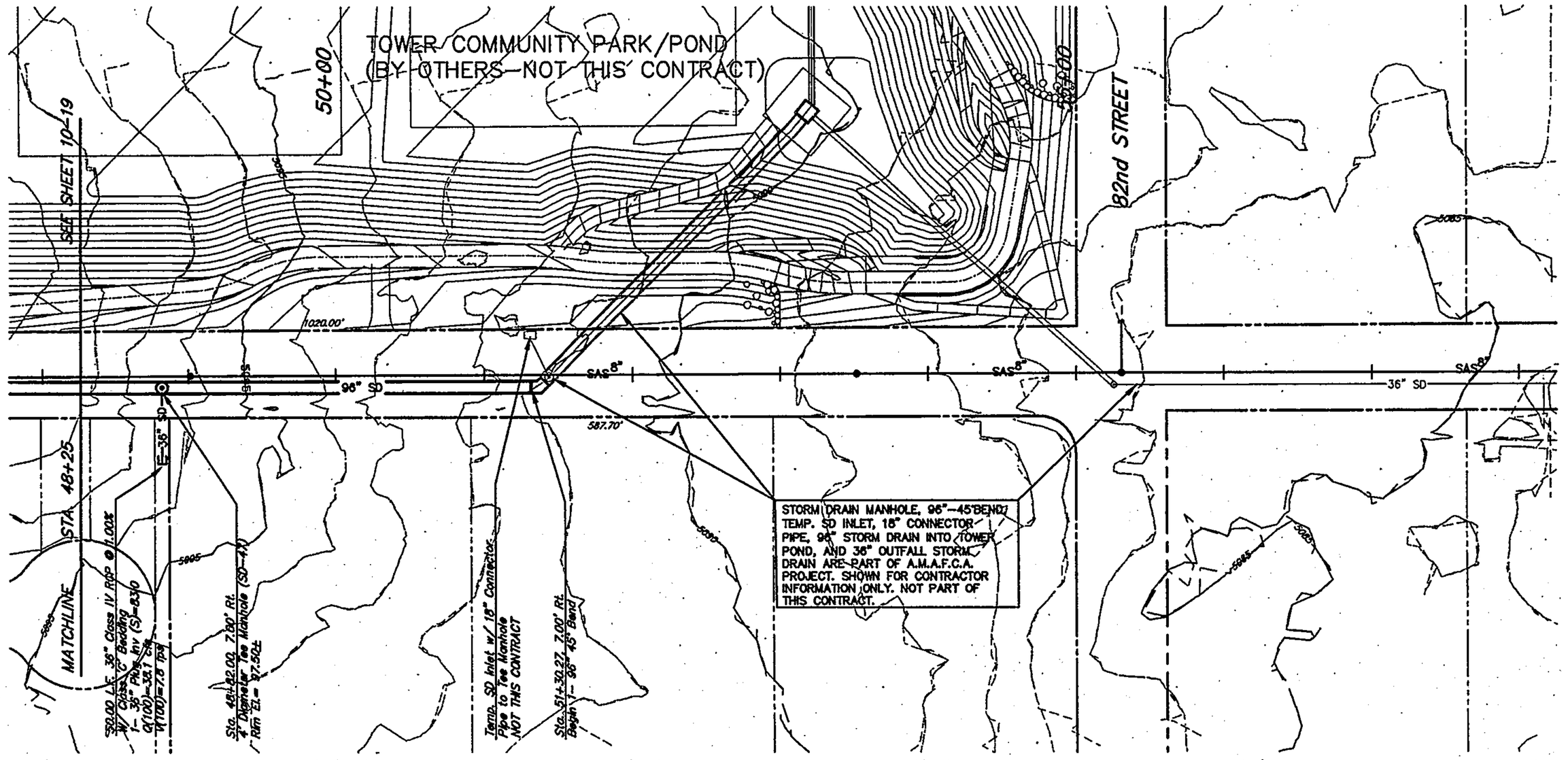
NO.	DATE	
1		
2		
3		
4		
5		
6		
7		

BENCH MARKS

10-L9 LOCATED AT THE INTERSECTION OF CENTRAL AND 98th St., IN THE NE QUADRANT OF THE INTERSECTION. AN ACS 1¾" ALUMINUM CAP STAMPED "10-L9, 1989", SET FLUSH IN THE TOP OF THE SSE CURB RETURN.
X=352794.84 Y=1482084.51
ELEV. 5204.437

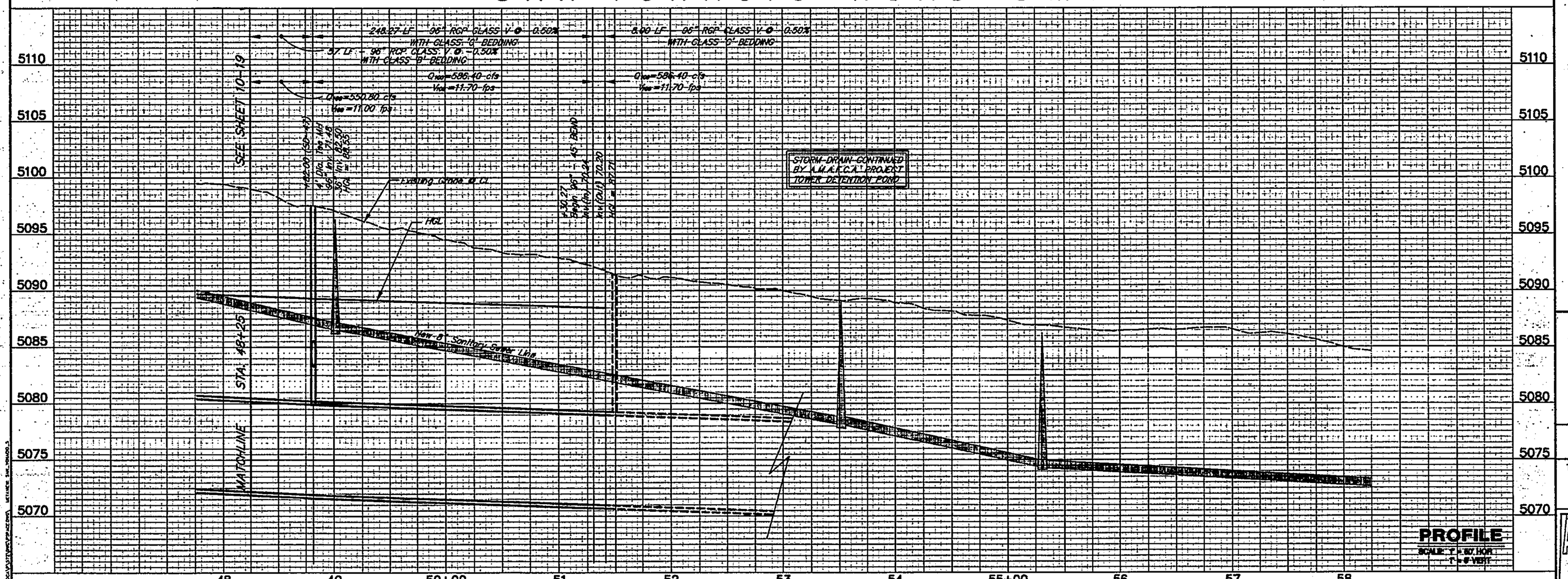
AS BUILT INFORMATION

CONTRACTOR	
AS BUILTS STAKED BY	DATE
AS BUILTS SURVEYED BY	DATE
AS BUILTS FIELD DRAWINGS BY	DATE
AS BUILTS DRAWINGS CORRECTED BY	DATE
RECORDED BY MICRO-FILM INFORMATION	DATE
RECORDED BY	DATE
RECORDED BY	DATE



PLAN
SCALE 1" = 50'

SAN YGNACIO ROAD SW.



PROFILE
SCALE: 1" = 50' HOR.
1" = 5' VERT.

PLAN ORIENTATION MAP



AS BUILT INFORMATION

CONTRACTOR
WORK STAKED BY — DATE
ACCEPTANCE BY — DATE
FIELD REVISION BY — DATE
DRAWINGS CORRECTED BY — DATE

MICRO-FILM INFORMATION

RECORDED BY — DATE
RECORDED BY — DATE
RECORDED BY — DATE

BENCH MARKS

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X=352794.84 Y=1482094.51
ELEV. 5204.437

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE
1		
2		
3		
4		
5		
6		
7		

ENGINEER'S SEAL

JOHN A. ANDERSON — NEW MEXICO — No. 12680 — PROFESSIONAL ENGINEER — STATE OF NEW MEXICO — 12/31/1998

REVISIONS

NO.	DATE	REMARKS	BY
1		DESIGN	
2	DEC. 2000		
3	DEC. 2000		
4	DEC. 2000		

DESIGNED BY: S.M.R. DATE: DEC. 2000
DRAWN BY: R.J.S. DATE: DEC. 2000
CHECKED BY: J.A.A. DATE: DEC. 2000

THE LARKIN GROUP, INC.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

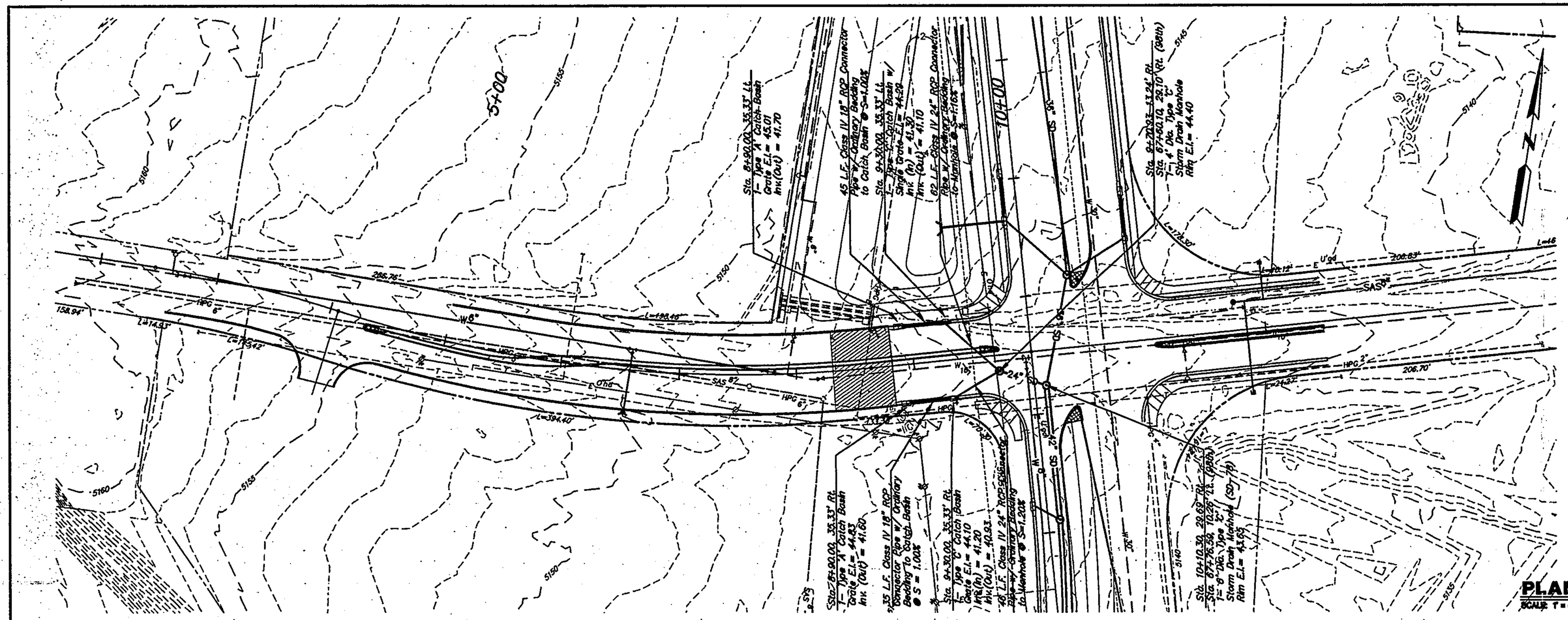
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: SPECIAL ASSESSMENT DISTRICT 222
SAN YGNACIO ROAD SW.
STORM DRAIN PLAN & PROFILE

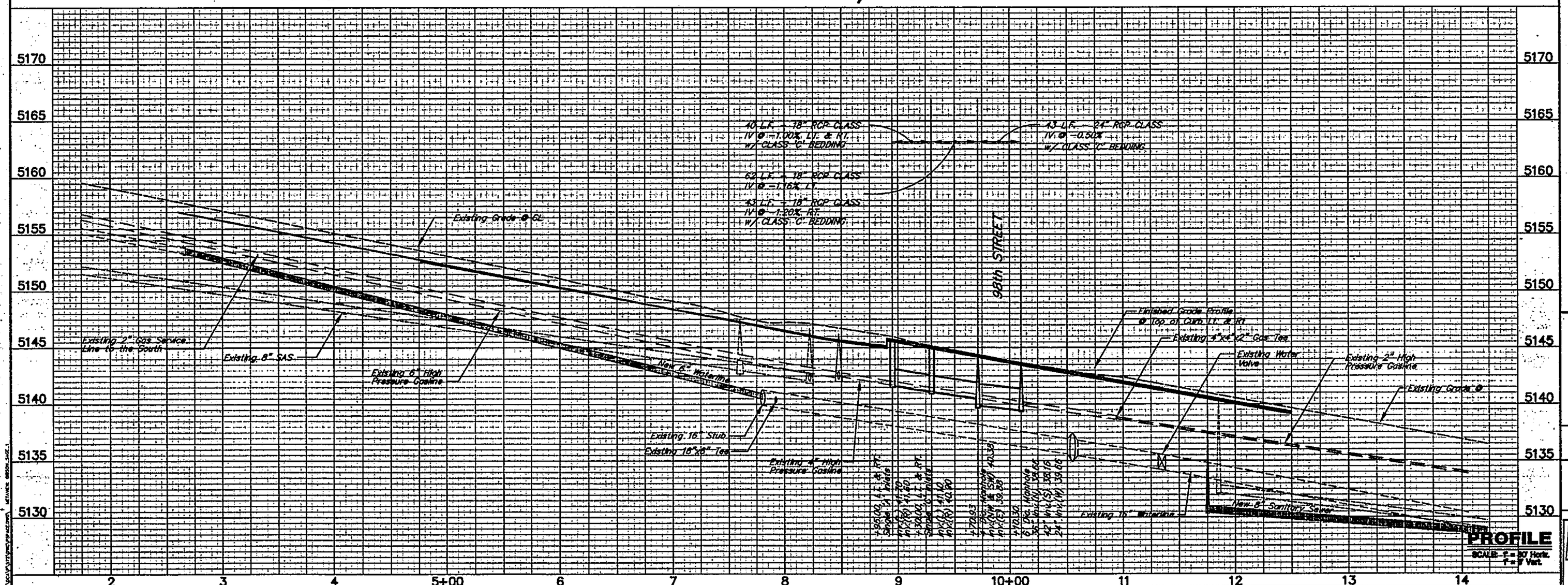
Traffic Engineering Approval: APPROVED DEC 12 2000 DESIGN REVIEW COMMITTEE
City Engineer Approval: APPROVED DEC 12 2000 CITY ENGINEER
Last Design Update — No./Day/Yr. — No./Day/Yr.

City Project No. 4188.91 | Zone Map No. L & M-9 | Sheet 10-20 of 10-23

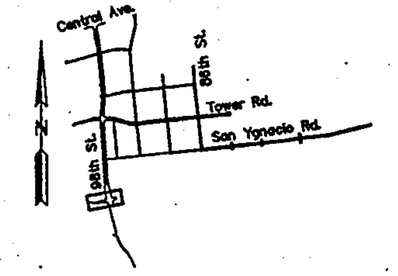
THIS SHEET IS REPLACED BY SHT. 10-20A



DE VARGAS ROAD SW. / SAGE ROAD SW.



PLAN ORIENTATION MAP



AS BUILT INFORMATION

CONTRACTOR	
NOTE TAKEN BY	DATE
INSPECTORS	
FIELD VERIFICATION BY	DATE
DRAWINGS CORRECTED BY	DATE

MICRO-FILM INFORMATION

RECORDED BY	DATE
RECORDED BY	DATE
RECORDED BY	DATE

BENCH MARKS

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X=352794.84 Y=1492084.51
ELEV. 5204.437

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE
1		
2		
3		
4		
5		
6		
7		

ENGINEER'S SEAL

PROFESSIONAL ENGINEER — STATE OF NEW MEXICO — No. 14880 — JOHN A. ANDREW — 12/31/2001

NO.	DATE	REMARKS	BY
1		REVISIONS	
2		DESIGN	
3		DATE: DEC. 2000	
4		DESIGNED BY: S.M.B.	
		DATE: DEC. 2000	
		DRAWN BY: R.J.S.	
		DATE: DEC. 2000	
		CHECKED BY: J.A.A.	

RECORD DRAWING

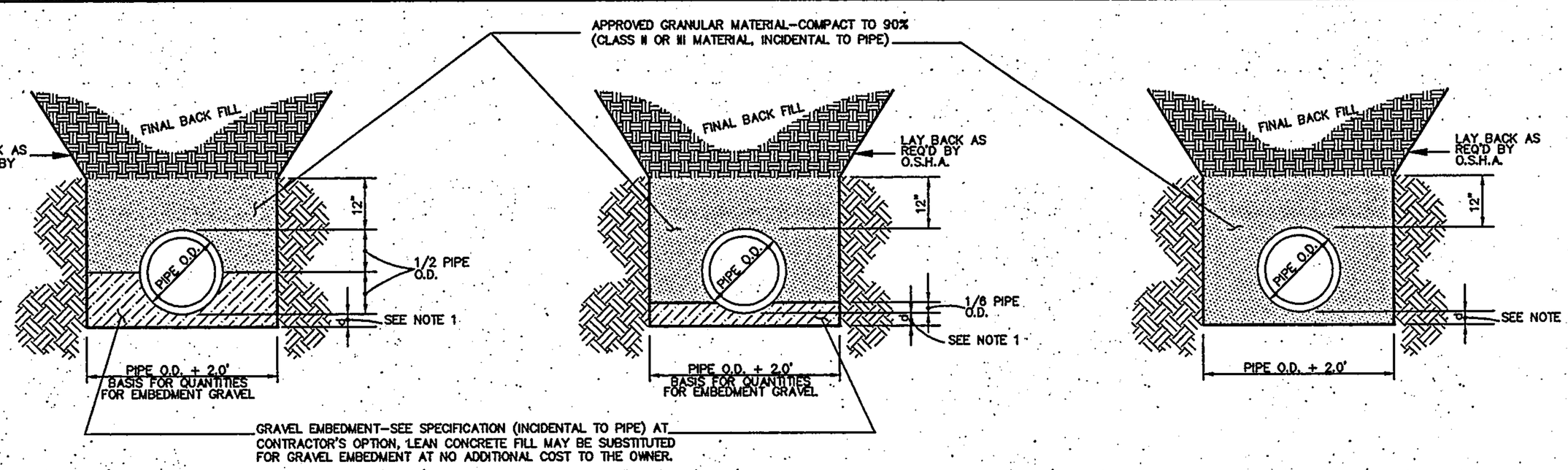
THE LARKIN GROUP, INC.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: SPECIAL ASSESSMENT DISTRICT 222
DE VARGAS ROAD SW. / SAGE ROAD SW.
STORM DRAIN PLAN & PROFILE

Design Review Committee	City Engineer Approval	No./Day/Yr.	No./Day/Yr.
APPROVED DEC 12 2000 DESIGN REVIEW COMMITTEE	APPROVED DEC 12 2000 CITY ENGINEER	Last Design Update	

City Project No.	Zone Map No.	Sheet	of
4188.91	L & M-9	10-21	10-23



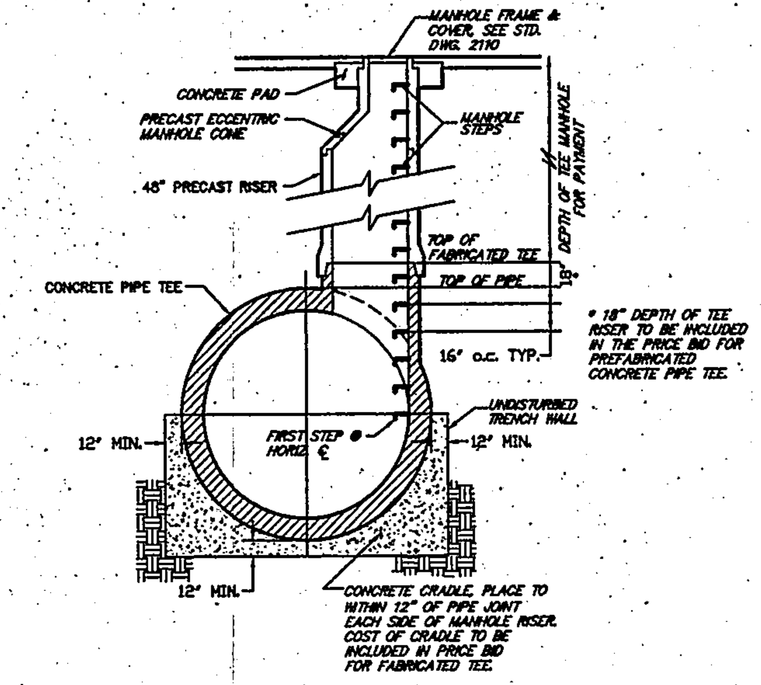
CLASS "B" BEDDING
NOT TO SCALE

CLASS "C" BEDDING
NOT TO SCALE

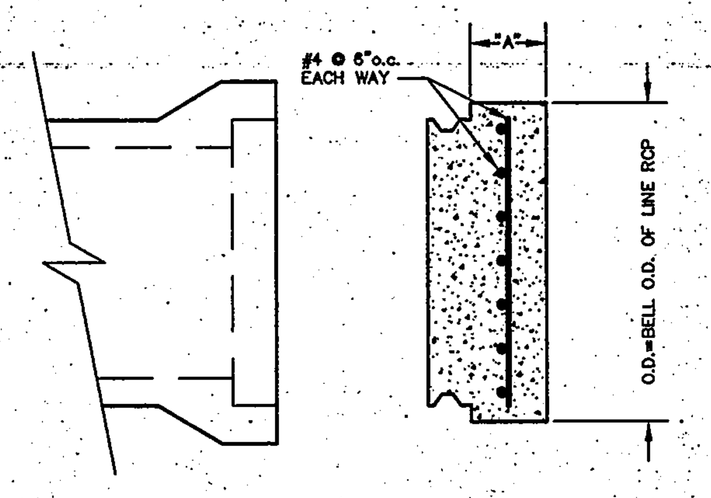
ORDINARY BEDDING
NOT TO SCALE

NOTES:

1. *MINIMUM "d" SHALL BE 3" FOR 27" AND SMALLER RCP, 4" FOR 30" TO 60" RCP AND 6" FOR 66" AND LARGER RCP.*
2. *MAXIMUM LIMITS OF PAYMENT FOR PAVEMENT REMOVAL AND REPLACEMENT OF EXISTING PAVEMENT FOR INSTALLATION OF STORM DRAIN PIPE SHALL BE PIPE O.D. +2' + 2x DEPTH OF TRENCH MEASURED FROM 12" ABOVE TOP OF PIPE TO PAVEMENT SURFACE.*

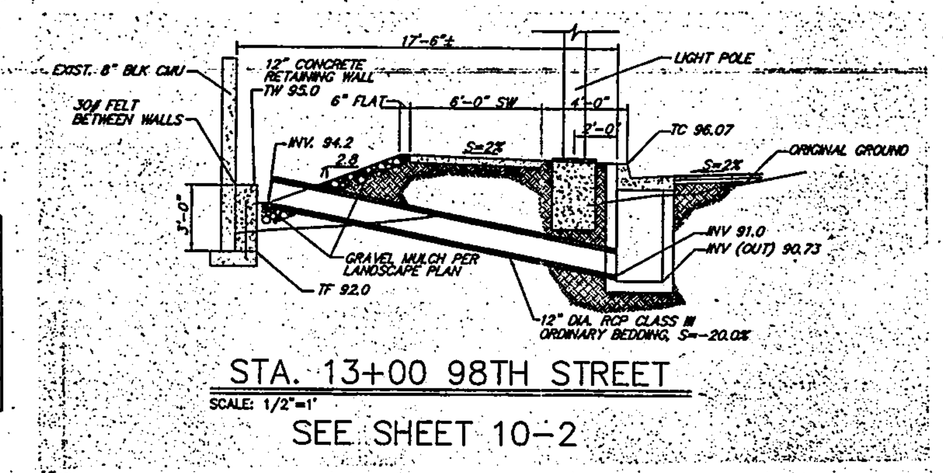


4' DIA. TEE MANHOLE DETAIL
NOT TO SCALE



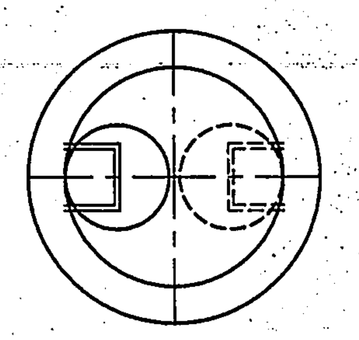
RCP I.D.	"A"
24" & SMALLER	3"
30" – 42"	6"
48" – 72"	8"
78" – 96"	10"

RCP END PLUG DETAIL
NOT TO SCALE

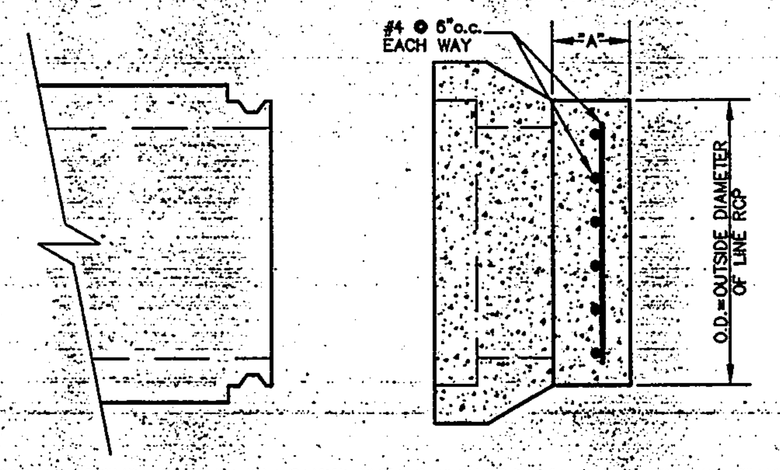


STA. 13+00 98TH STREET
SCALE: 1/2"=1'

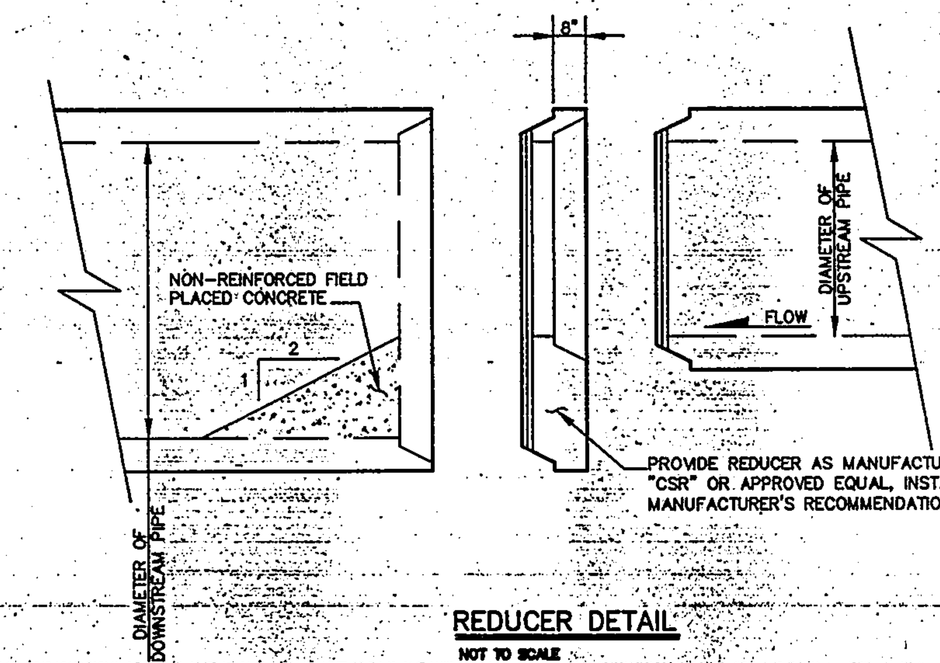
SEE SHEET 10-2



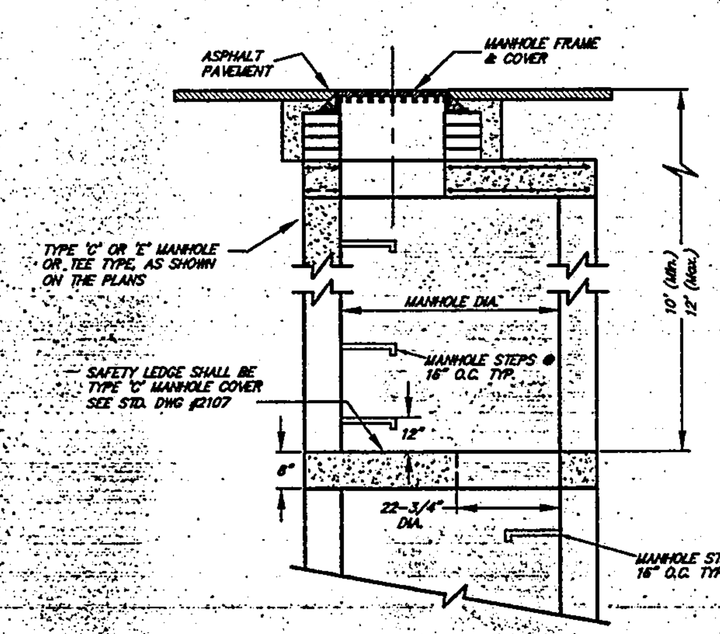
PLAN



RCP END CAP DETAIL
NOT TO SCALE



REDUCER DETAIL
NOT TO SCALE



SECTION

MANHOLE
SAFETY LEDGE DETAIL
SCALE: 1/2"= 1

RECORD DRAWING

AS BUILT INFORMATION

CONTRACTOR
WORK STAKED BY — DATE
AS-BUILTED BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE

MICRO-FILM INFORMATION
RECORDED BY — DATE
RECORDED BY — DATE
RECORDED BY — DATE

BENCH MARKS
10–L9 LOCATED AT THE INTERSECTION OF
I–40 AND 98th St., IN THE NE QUADRANT
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AN ACS 1¾" ALUMINUM CAP STAMPED
"10–L9, 1989", SET FLUSH IN THE TOP OF
THE SSE CURB RETURN.
X=352794.84 Y=1482084.51
ELEV. 5204.437

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
1		
2		
3		
4		
5		
6		
7		

ENGINEER'S SEAL
PROFESSIONAL ENGINEER
STATE OF NEW MEXICO
NO. 10193
RONALD M. BOHANNAN
FAY A. ARMIJO

NO.	DATE	REVISIONS	BY
1		Detail for Culvert–98th St. St. 13+00	R.S.
2			
3			
4			

DESIGNED BY: R.M.M. — DATE: DEC. 2000
DRAWN BY: R.L.S. — DATE: DEC. 2000
CHECKED BY: J.A.A. — DATE: DEC. 2000

THE LARKIN GROUP, P.A.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275–7500
FAX (505) 275–0745

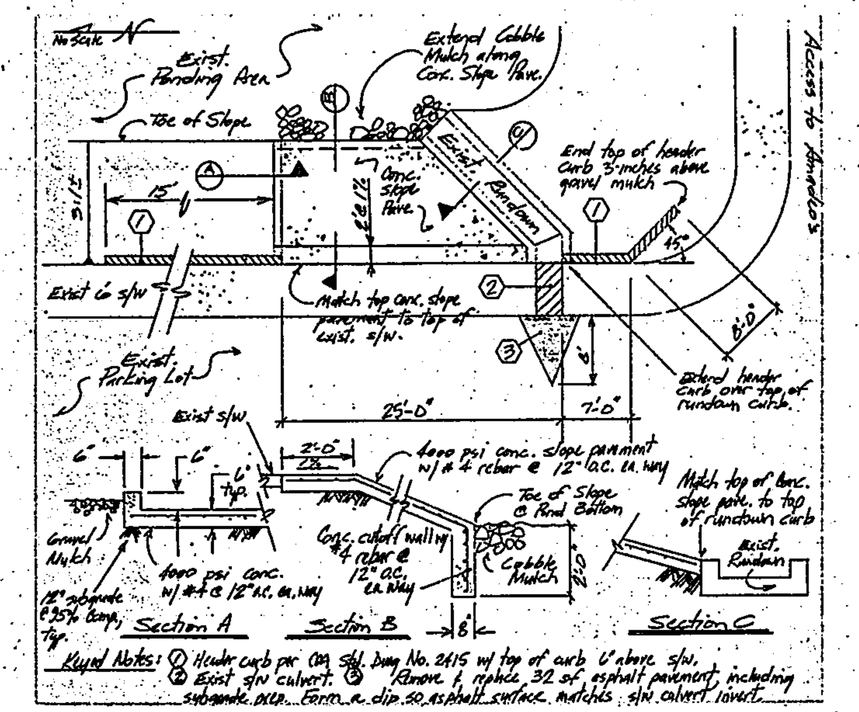
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: SPECIAL ASSESSMENT DISTRICT 222
STORM DRAIN DETAILS

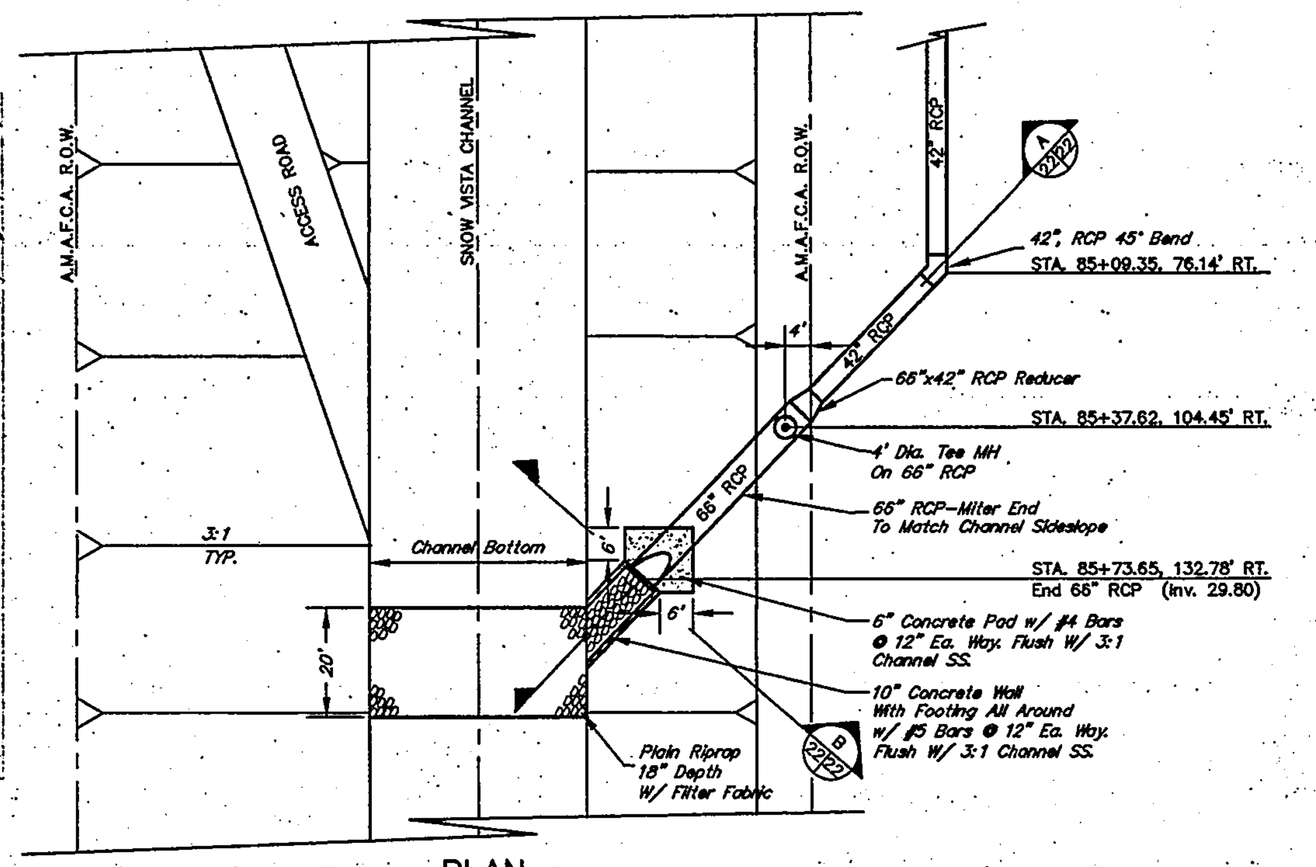
Design Review Committee: APPROVED DEC 12 2000 DESIGN REVIEW COMMITTEE
City Engineer: APPROVED DEC 12 2000 CITY ENGINEER

Last Design Update: mo./day/yr. — mo./day/yr.

City Project No. 4188.91 | Zone Map No. L & M–9 | Sheet 10–22 of 10–23

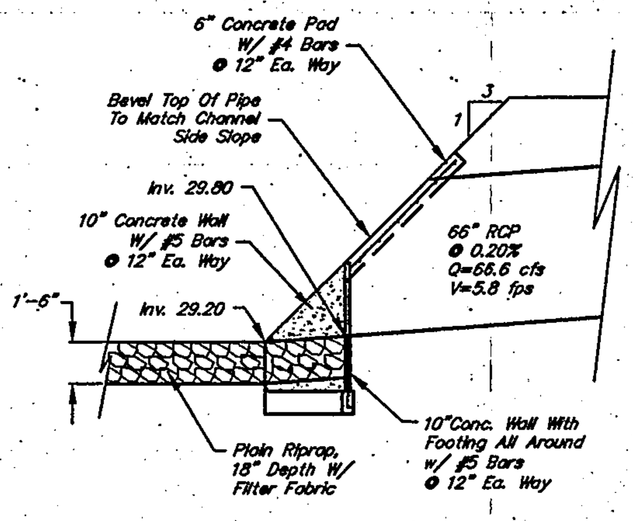


Rundown Detail - SeeSheet 5-32.2
Small Pond - 98th St. N. of Sage/DeYargas
Sta. 62+34.98

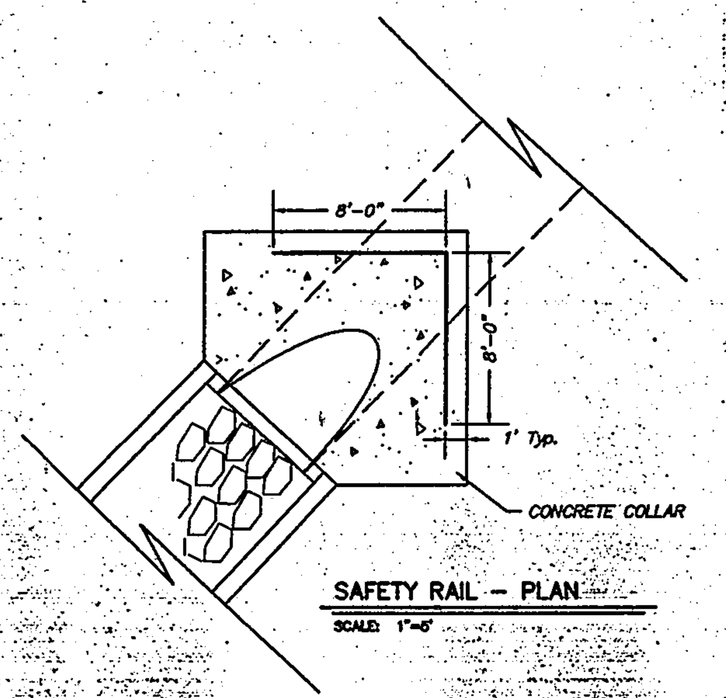


PLAN

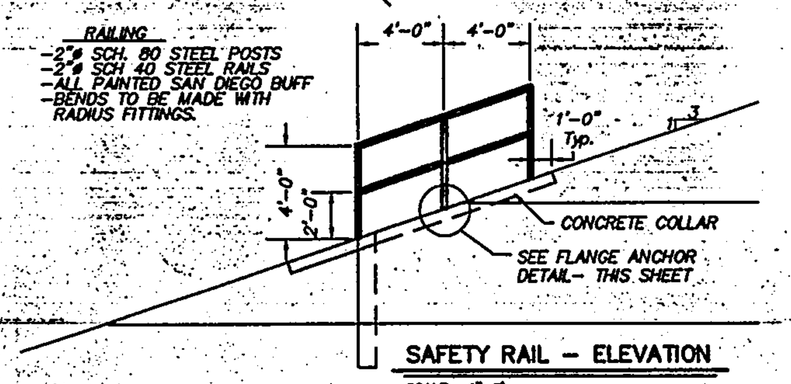
OUTLET INTO
SNOW VISTA CHANNEL
SCALE: 1"=20'



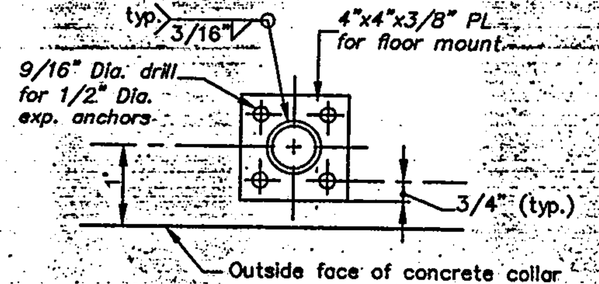
SECTION "A"
SNOW VISTA CHANNEL
SCALE: 1"=20' Horiz.
1"=5' Vert.



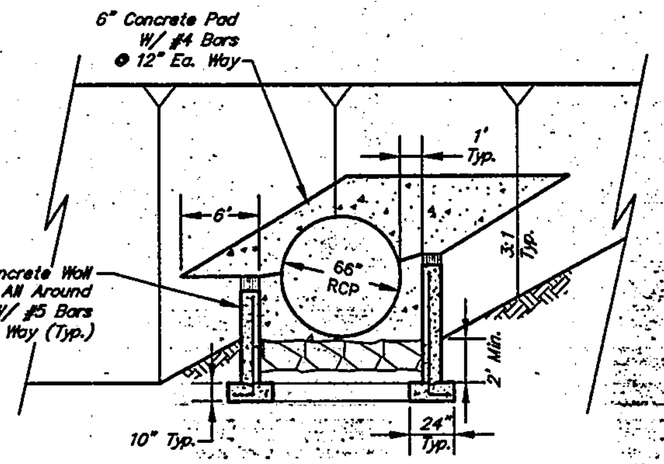
SAFETY RAIL - PLAN
SCALE: 1"=5'



SAFETY RAIL - ELEVATION
SCALE: 1"=5'



SAFETY RAIL
FLANGE ANCHOR
SCALE: 1/4" = 1"



SECTION "B"
SNOW VISTA CHANNEL
SCALE: 1"=5'

NOTES:

1. AMAFCA FIELD ENGINEER SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY WORK WITHIN THE AMAFCA R.O.W. TEL 844-2215 JERRY LOVATO.

2. NO WORK WILL BE PERFORMED IN THE AMAFCA R.O.W. BETWEEN APRIL 15 AND OCTOBER 15 WITHOUT WRITTEN PERMISSION FROM AMAFCA.

3. ALL SUBGRADE, BACKFILL AND EMBANKMENT SHALL BE COMPACTED TO 95% (MODIFIED PROCTOR) WITHIN THE AMAFCA R.O.W. TESTING REPORTS SHALL BE PROVIDED TO AMAFCA FIELD ENGINEER.

4. AMAFCA FIELD ENGINEER WILL BE NOTIFIED 48 HOURS PRIOR TO FINAL INSPECTION OF ANY FACILITIES WITHIN THE AMAFCA R.O.W.

RECORD DRAWING

THE LARKIN GROUP, INC.
8500 MENAUL NE. SUITE A440
ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
FAX (505) 275-0748

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: SPECIAL ASSESSMENT DISTRICT 222
STORM DRAIN DETAILS

APPROVED FOR CONSTRUCTION John P. Curley 12-7-00
FOR AMAFCA DATE

Design Review Committee: APPROVED DEC 12 2000 DESIGN REVIEW COMMITTEE
City Engineer: APPROVED DEC 12 2000 CITY ENGINEER

Last Design Update: Mo./Day/Yr. | Mo./Day/Yr.

City Project No. 4188.91 | Zone Map No. L & M-9 | Sheet 10-23 of 10-23

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
1		
2		
3		
4		
5		
6		
7		

BENCH MARKS
10-L9 LOCATED AT THE INTERSECTION OF I-40 AND 98th St., IN THE NE QUADRANT OF THE INTERSECTION.
AN ACS 1¾" ALUMINUM CAP STAMPED "10-L9, 1989", SET FLUSH IN THE TOP OF THE SSE CURB RETURN.
X= 352794.84 Y=1482088.51
ELEV. 5204.437

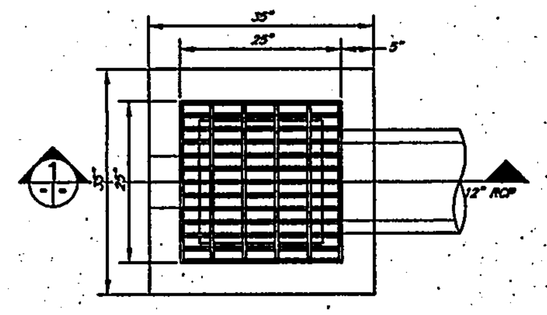
AS BUILT INFORMATION
CONTRACTOR
STAKED BY DATE
REDITOPOED BY DATE
FIELD VERIFICATION BY DATE
CORRECTED BY DATE

MICRO-FILM INFORMATION
RECORDED BY DATE
RECORDED BY DATE
RECORDED BY DATE

ENGINEER'S SEAL
REGISTERED PROFESSIONAL ENGINEER No. 9672 STATE OF NEW MEXICO RICHARD V. SIMMS

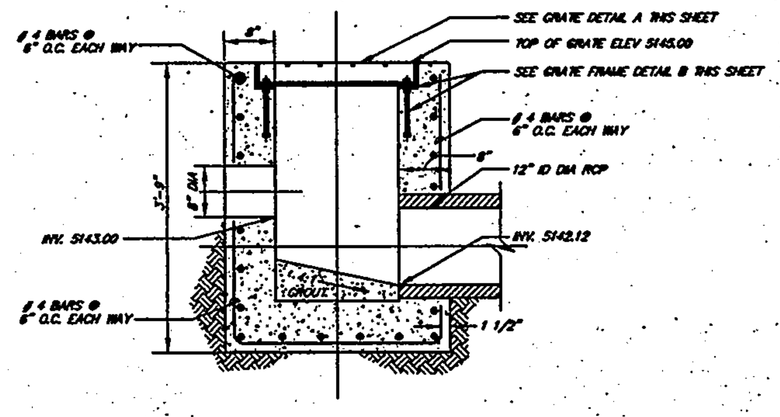
NO.	DATE	REVISIONS	BY
1	10/6/00	Added Rundown Detail	R.S.
2			
3			
4			

DESIGNED BY: R.W.M. DATE: DEC. 2000
DRAWN BY: R.L.S. DATE: DEC. 2000
CHECKED BY: J.A.A. DATE: DEC. 2000



STORM DRAIN INLET

SCALE: 1"=1'

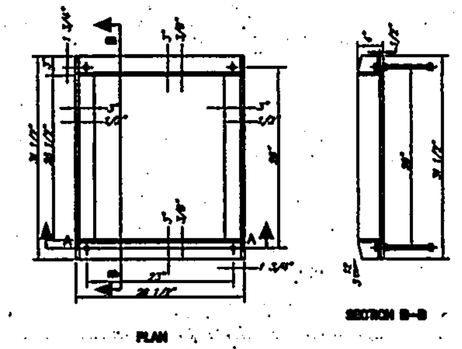


STORM DRAIN INLET SECTION

SCALE: 1"=1'

INTLET A

AREA INLET DETAIL – POND AREA
NW CORNER 98TH & SAGE
SEE SHEET 5-32.2

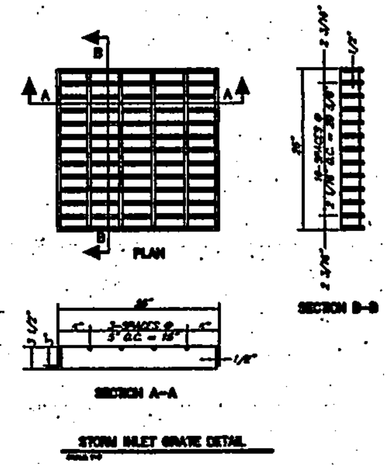


STORM INLET GRATE FRAME DETAIL

SCALE: 1"=1'

GENERAL NOTES

1. ALL EXPOSED METAL PARTS SHALL BE PAINTED PRIOR TO ASSEMBLY. WELDING MACHINING AND DRILLING SHALL BE DONE PRIOR TO PAINTING. ALL DIMENSIONS ARE FINISHED DIMENSIONS.
2. ALL PARTS SHALL BE STRUCTURAL STEEL, GRADE 36.
3. FOR CLEANING AND PAINTING OF FRAME SEE COA DWG 2215, GENERAL NOTE No. 4.
4. 4 1/2"x 8" BOLTS WITH SQUARE HEAD AND 2 NUTS AT EACH CORNER FOR ANCHORING FRAME INTO CONCRETE WALL.

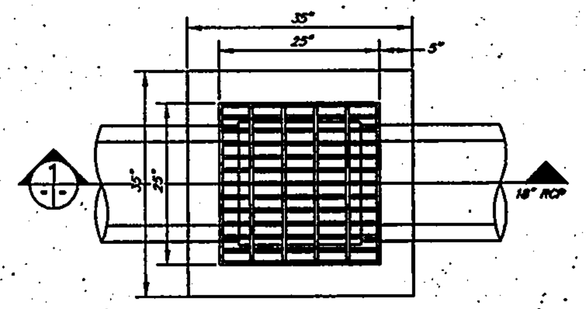


STORM INLET GRATE DETAIL

SCALE: 1"=1'

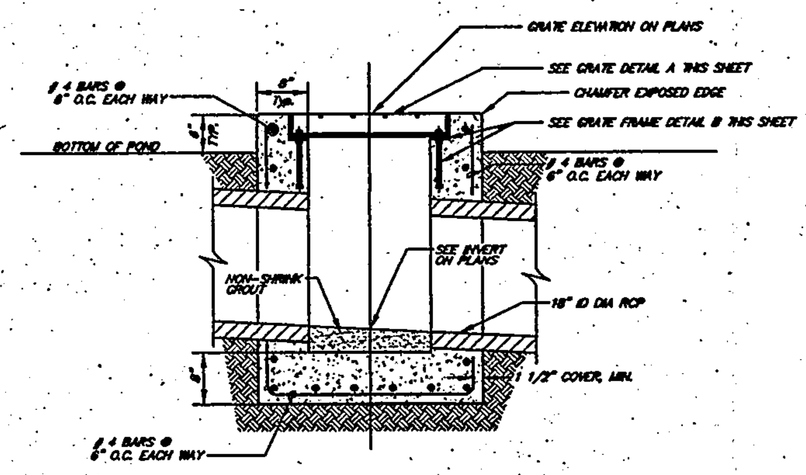
GENERAL NOTES

1. ALL BARS SHALL BE STRUCTURAL GRADE STEEL, GRADE A36.
2. THE GRATE SHALL BE WELDED AROUND WITH 1/8" FILLET WELD AROUND BOTH SIDES OF CROSSBARS, 1/4" FILLET WELD BOTH SIDES OF BEARING BARS TO END BARS.
3. AFTER CLEANING SURFACE OF SCALE, RUST, OILS, ETC., PAINT GRATE WITH ONE SHOP COAT RED OXIDE, TWO FINISH COATS ALUMINUM PAINT (AASHTO M 69).
4. TOP OF BARS SHALL BE FLUSH WITH TOP OF GRATE.
5. GRIND WELDS FLUSH WITH BEARING BARS.
6. WHEN INSTALLED IN FRAME, PUSH TIGHT TO ONE SIDE. OTHER SIDE SHALL HAVE 1/2" MAX OPENING. SPACERS WELDED TO FRAME MAY BE USED IF REQUIRED TO KEEP 1/2" SPACE OR LESS.



STORM DRAIN INLET–PLAN

N.T.S.

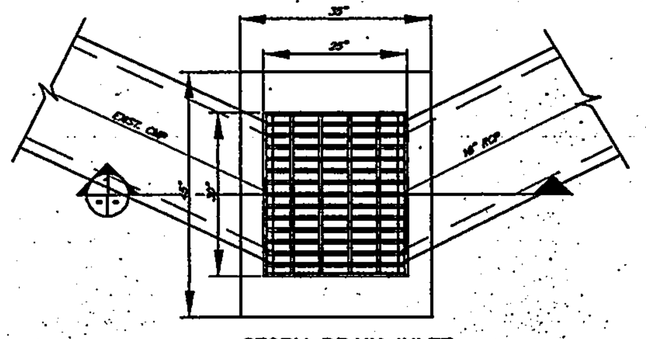


STORM DRAIN INLET–SECTION

N.T.S.

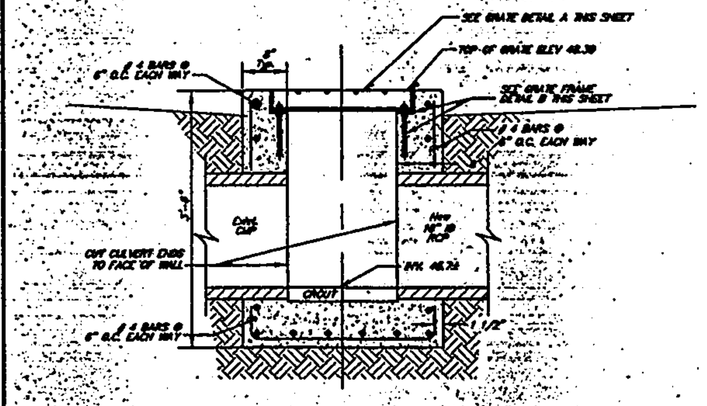
INTLET B

AREA INLET DETAIL – POND AREA
IN MEDIAN – 98TH S. OF SAGE
SEE SHEET 10-8



STORM DRAIN INLET

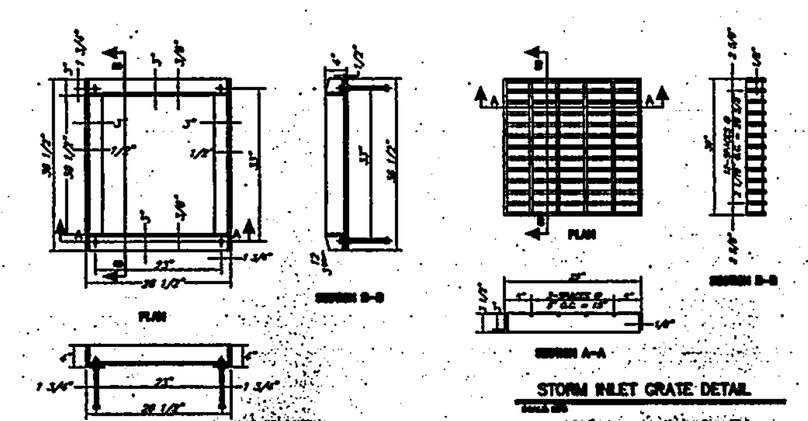
SCALE: NTS



STORM DRAIN INLET SECTION

NTS

4000 psi CONC. W/ 2" CLEAR TO ALL REINFORCING MIN
3/4" CHAMFER EXPOSED CONC. EDGES



STORM INLET GRATE DETAIL

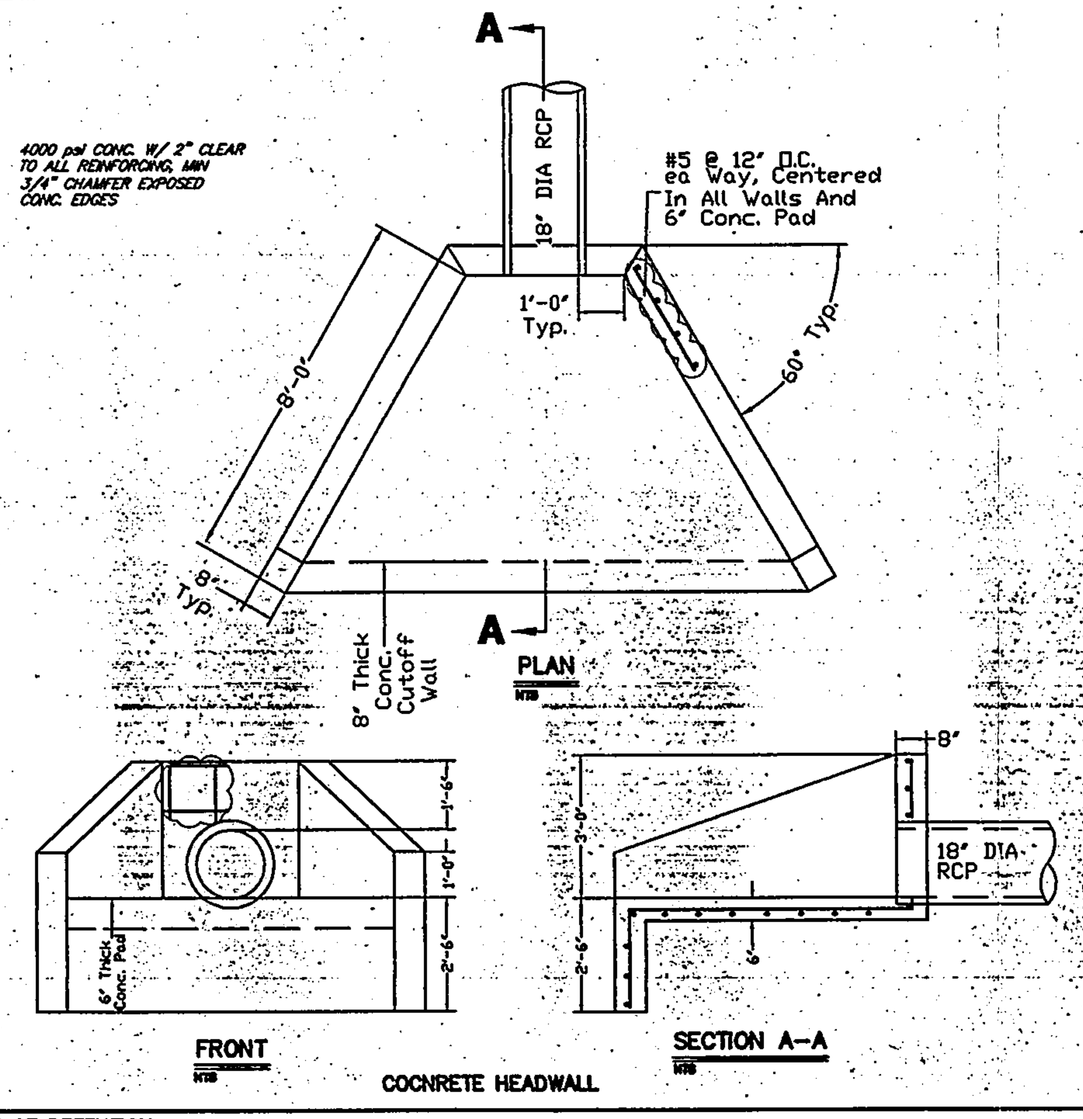
SCALE: 1"=1'

GENERAL NOTES

1. ALL BARS SHALL BE STRUCTURAL GRADE STEEL, GRADE A36.
2. THE GRATE SHALL BE WELDED AROUND WITH 1/8" FILLET WELD AROUND BOTH SIDES OF CROSSBARS, 1/4" FILLET WELD BOTH SIDES OF BEARING BARS TO END BARS.
3. AFTER CLEANING SURFACE OF SCALE, RUST, OILS, ETC., PAINT GRATE WITH ONE SHOP COAT RED OXIDE, TWO FINISH COATS ALUMINUM PAINT (AASHTO M 69).
4. TOP OF BARS SHALL BE FLUSH WITH TOP OF GRATE.
5. GRIND WELDS FLUSH WITH BEARING BARS.
6. WHEN INSTALLED IN FRAME, PUSH TIGHT TO ONE SIDE. OTHER SIDE SHALL HAVE 1/2" MAX OPENING. SPACERS WELDED TO FRAME MAY BE USED IF REQUIRED TO KEEP 1/2" SPACE OR LESS.

INTLET C

AREA INLET DETAIL



REVISION TO DRAINAGE AT DETENTION POND, NW CORNER OF 98TH & SAGE
SEE SHEET 5-32.2

AS BUILT INFORMATION

CONTRACTOR — DATE
STAKING ISSUED BY: — DATE
INSPECTOR'S FIELD CHANGE BY: — DATE
VERIFICATION BY: — DATE
CORRECTIONS COMPLETED BY: — DATE

BENCH MARKS

10-L9 LOCATED AT THE INTERSECTION OF I-40 AND 98th St. IN THE NE QUADRANT OF THE INTERSECTION.
AN ACS 1¼" ALUMINUM CAP STAMPED "10-L9, 1989" SET FLUSH IN THE TOP OF THE SSE CURB RETURN.
X=352794.84 Y=1482084.51
ELEV. 5204.437

MICRO-FILM INFORMATION

RECORDED BY: — DATE
RECORDED BY: — DATE
RECORDED BY: — DATE

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE
1		
2		
3		
4		
5		
6		
7		

ENGINEER'S SEAL

REGISTERED PROFESSIONAL ENGINEER — STATE OF NEW MEXICO — No. 3980 — RICHARD W. NAJM

NO.	DATE	REVISIONS	BY
1		DESIGN	
2			
3			
4			

DESIGNED BY: R.W.N.M — DATE: SEPT. 2002
DRAWN BY: R.J.S. — DATE: SEPT. 2002
CHECKED BY: J.A.A. — DATE: SEPT. 2002

RECORD DRAWING

THE LARKIN GROUP
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ALBUQUERQUE, NEW MEXICO 87112
TELEPHONE (505) 275-7500
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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: SPECIAL ASSESSMENT DISTRICT 222
STORM DRAIN DETAILS

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No. 4188.92 — Zone Map No. L & M-9 — Sheet 10-24 of

THIS SHEET HAS BEEN ADDED TO THE APPROVED PLANS DATED 12/12/2000