

City of Albuquerque P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

July 23, 2003

Pierce Runnels III, PE ASCG, Inc. 6501 Americas Parkway NE Ste 400 Albuquerque, NM 87110

Re: Telecommunications Distribution System – Sandia Science and Tech Park

Grading and Drainage Plan

Engineer's Stamp dated 7-10-03 (M21/D14)

Dear Mr. Runnels,

Based upon the information provided in your submittal dated 7-17-03, the above referenced plan is approved for Building Permit and SO#19 Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

A separate permit is required for construction within City R/W. A copy of this approval letter must be on hand when applying for the excavation permit. Also, prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

If you have any questions, you can contact me at 924-3986.

Sincerely,

Bradley L. Bingham, PE

Sr. Engineer, Planning Dept.

Development and Building Services

C: Chuck Caruso, CoA

file



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file

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

PROJECT TITLE: Bintof Presence Fiber Hut	03rd) ZONE MAP/DRG. FILE #: M - 2 (
DRB #:EPC#:	WORK ORDER#:
LEGAL DESCRIPTION: Section 33, Township 10 Dutler CITY ADDRESS: 1505 INNOVATION PARKWAY	RANGE 45, TRACK.G
ENGINEERING FIRM: ASCG INCO POLATED O ADDRESS: 6501 AMERICAS YARMUM CITY, STATE: 41BQ NM	
CITY, STATE: ALBQ NM	ZIP CODE: 87110
OWNER: Science Technology MARK Development ADDRESS: 10520 Research RD 38 CITY, STATE: ALBO, RAM	CONTACT: CARI BECKER PHONE: 505. 284.6248 ZIP CODE: 27/2 3
ARCHITECT: ASCG INCURRATED OF NW ADDRESS: 650 I MMERCH'S PARKUW NO CITY, STATE: A 130, MM	CONTACT: JAMES R. W. LULL 5#400 PHONE: 505.348.5202 ZIP CODE: 87110
SURVEYOR:	CONTACT:
ADDRESS	PHONE:
CITY, STATE:	ZIP CODE:
CONTRACTOR:ADDRESS:CITY, STATE:	CONTACT:PHONE:ZIP CODE:
CHECK TYPE OF SUBMITTAL:	CHECK TYPE OF APPROVAL SOUGHT:
DRAINAGE REPORT DRAINAGE PLAN 1st SUBMITTAL, REQUIRES TCL or equal DRAINAGE PLAN RESUBMITTAL CONCEPTUAL GRADING & DRAINAGE PLAN GRADING PLAN EROSION CONTROL PLAN ENGINEER'S CERTIFICATION (HYDROLOGY) CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TCL) ENGINEERS CERTIFICATION (TCL) ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN) OTHER	SIA / FINANCIAL GUARANTEE RELEASE PRELIMINARY PLAT APPROVAL S. DEV. PLAN FOR SUB'D. APPROVAL S. DEV. PLAN FOR BLDG. PERMIT APPROVAL SECTOR PLAN APPROVAL FINAL PLAT APPROVAL FOUNDATION PERMIT APPROVAL BUILDING PERMIT APPROVAL CERTIFICATE OF OCCUPANCY (PERM.) CERTIFICATE OF OCCUPANCY (TEMP.) GRADING PERMIT APPROVAL PAVING PERMIT APPROVAL WORK ORDER APPROVAL OTHER (SPECIFY)
WAS A PRE-DESIGN CONFERENCE ATTENDED:	
YES NO COPY PROVIDED	
DATE SUBMITTED:BY:BY:	
Requests for approvals of Site Development Plans and/or Susubmittal. The particular nature, location and scope of the propose One or more of the following levels of submittal may be required but 1. Conceptual Grading and Drainage Plan: Required for (5) acres and Sector Plans.	sed development defines the degree of drainage detail ased on the following:

acres.

(5)

3. **Drainage Report**: Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

2. Drainage Plans: Required for building permits, grading permits, paving permits and site plans less than five

June 26, 2003

Bradley L. Bingham, P.E.
Sr. Engineer
Utility Development Section
Hydrology Section
Development & Building Services
P.O. Box 1293
Albuquerque, NM 87103

RE: DRAINAGE PLAN SUBMITTAL - POINT OF PRESENCE FIBER HUT, SANDIA SCIENCE AND TECHNOLOGY PARK

Dear Mr. Bingham:

In response to review comments received on April 24, 2003, regarding the above referenced project, I am submitting a drainage plan for site development building permit approval. Attached please find the following:

- 1- Drainage Information Sheet
- 1- Site Layout and Grading Plan
- 1- Master Drainage Plan, taken from the Sandia Science & Technology Park Master Development Plan, June 2001.
- 1- FEMA FIRM map

If there is any additional information you need, or if you have any questions, please contact me. You can e-mail or call me at 505.247.0294 (jgilletly@ascg.com).

Sincerely.

ASCG Incorporated of New Mexico

BY: John Gilletly, E.I. Project Engineer

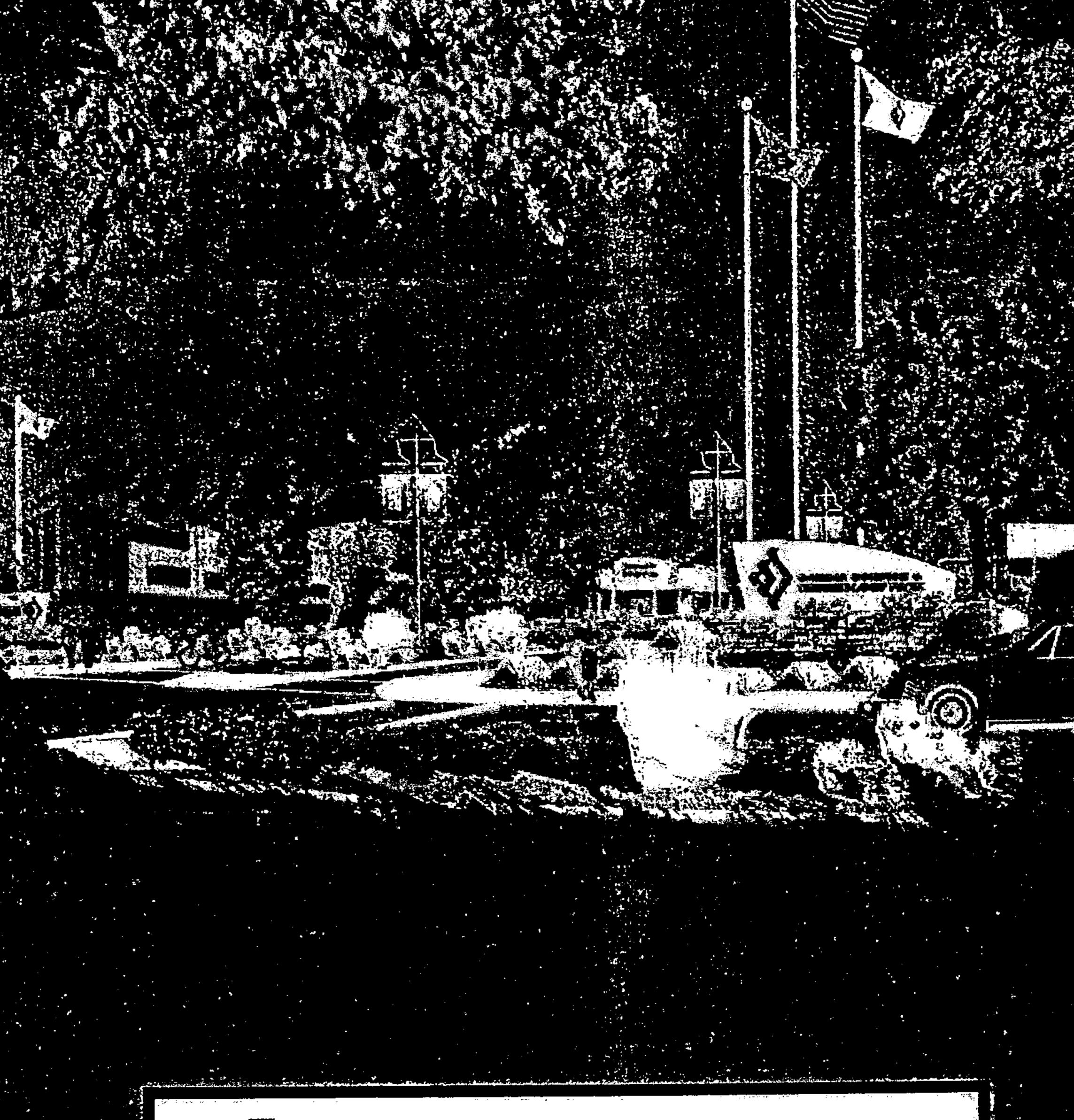
JG/cs

Enclosures

Return to: Sandia Science & Technology Park

Master Development Dlan

Approved June, 2001





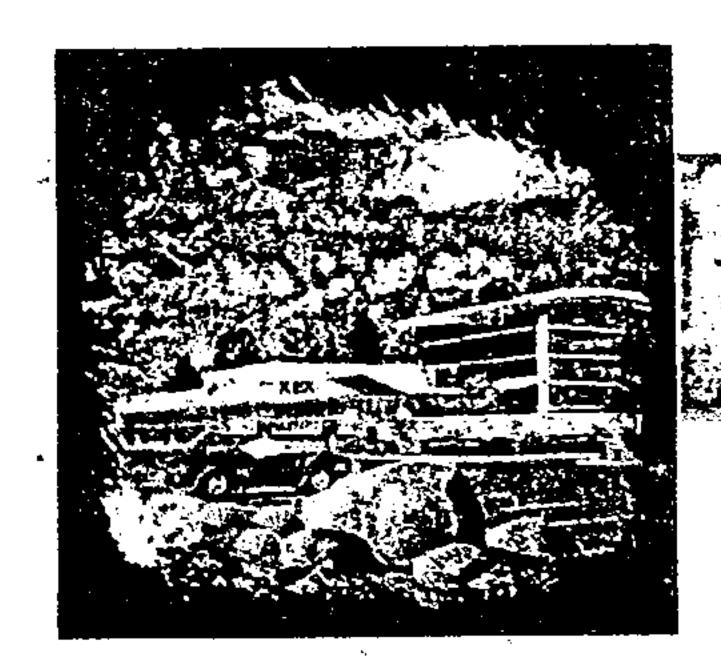
SANDIA SCIENCE & TECHNOLOGY PARK

APPROVALS

Project #1001031
EPC #01110-00000-00120/01128-00000-00121
DRB #0145-00000-00787

This site plan is consistent with the Master Development Plan approved by the Environmental Planning Commission on March 22, 2001 and Conditions of Approval have been met.

	7701
Planning Department	Date
Planning Department Out- Out	8-17-01
Transportation Development	Date
Love IMe	8/14/01
City Engineer/AMAFCA	'Date'
Row Allen	6-20-01
Utility Development	Date
Unexe E. Cardelano	6/20/01
Parks and Recreation Department	Date



6. INFRASTRUCTURE & ENGINEERING

DRAINAGE MASTER PLAN

Previous Drainage Management Plans

There are a number of existing drainage reports, master drainage plans, and drainage studies which address the drainage conditions within the SS&TP vicinity. These governing documents are as follows:

- The South Eubank Storm Drainage Analysis, (dated November 1995, prepared by Smith Engineering Company).
- Amendment #2 to the South Eubank Storm Drainage Analysis, (dated November 2, 1998, prepared by Smith Engineering Company)
- The Manzano Mesa Master Drainage Plan, (dated August 1996, prepared by Smith Engineering Company)

This Master Drainage Plan conforms to these plans.

Existing Drainage Infrastructure

The most important drainage feature for the SS&TP is the existing and planned large diameter South Eubank Storm Drain. Phase I of this storm drainage project, which runs from the Manzano Mesa Park Detention Pond to the Tijeras Arroyo, is complete. Phase 2 is currently under construction, and runs from the Manzano Mesa Park Detention Pond north up Elizabeth Street to Central Ave. The large majority of SS&TP currently drains to this existing storm drain.

Drainage From Existing Tracts

All of the land within the SS&TP, with the exception of the approximately 40-acre State Land Office (SLO) lands holding the existing landfill, generally drains via surface runoff from east to west. Flows are conveyed across the tracts by natural sheet flow and shallow concentrated flows within existing natural

swales. Again, with the exception of the above SLO tract, none of the lands within the SS&TP are impacted by offsite drainage. Flows from the SS&TP lands drain to Eubank, where they are picked up by the Phase I South Eubank Storm Drain. For the far southern portion of the site, small amounts of drainage may cross the Eubank alignment and enter the base via sheet flow and shallow concentrated flows.

The existing South Pointe Mobile Home Park (MHP), located east of the SMM Partnership Tract A, currently drains to the southwest corner of the MHP and south across the SLO lands, directly to the Tijeras Arroyo in a non-engineered fashion. There is no existing drainage downstream easement for this MHP drainage. This drainage runs to the southwest corner of the SLO tract, where flows join the offsite drainage from the MHP. The combined flows then drain directly to the Tijeras Arroyo.

The western half of the approximately 20-acre SLO tract located north of the existing PNM switching station is currently being developed by EMCORE. The drainage plan calls for the site to drain to a large pond on the south side of the site. The controlled discharge from the pond drains to a new storm drain to be constructed with the EMCORE project. The new storm drain will tie to the South Eubank Storm Drain and extend east to the edge of the EMCORE site. The eastern half of the tract drains to a small pond located adjacent to the EMCORE project. That pond also drains to the new storm drain.

Proposed Conditions

The significant proposed drainage management concepts and goals are as follows:

- Minimize or eliminate large, dedicated ponds that reduce buildable area
- Minimize expensive public and private storm drainage infrastructure



- Water harvesting within parking lot islands and other landscape areas are encouraged.
- Individual tracts will drain to the streets or public storm drains, to the greatest extent possible and/or practical.
- All development within the SS&TP will conform to this master plan's drainage requirements.
- Where the sites can not drain to the street, private ribbon channels, with easements, will be constructed to convey drainage to proposed public storm drains or to public streets.
- The SS&TP has restricted allowable discharge rates. Peak flow rates will be mitigated using on-site detention ponds and control structures.
- Public storm drains will be constructed throughout the site such that all streets within the Park are restricted to the depth of street flow at the top of curb height and the energy grade line within the right-of-way.

The Illustrative Master Plan identifies primary streets and potential lot configurations. The street system is anticipated to remain through out the project life, however, the lot lines shown should be construed only as conceptual, for reference and subject to change as individual developments arise.

Lots 1-8 have an allowable discharge of 167cfs in the 100yr storm. This will allow free discharge from that portion of the SS&TP provided that the developed impervious area (including public streets) does not exceed 90% of the total area. The Manzano Mesa Master Drainage Plan defines allowable discharge for this portion of the SS&TP.

Lots 20, 21, 39, and 40 will follow the guidelines provided in Amendment #2 to the South Eubank Storm Drainage Analysis, which indicates that those areas may discharge 1.3cfs/acre to the South Eubank Storm Drain. Lots 20 and 21 will require onsite ponds that will drain to the proposed storm drain in Innovation Parkway. Similarly, Lots 39 and 40 will re-

quire onsite ponds that will drain to the proposed storm drain in Progress Place.

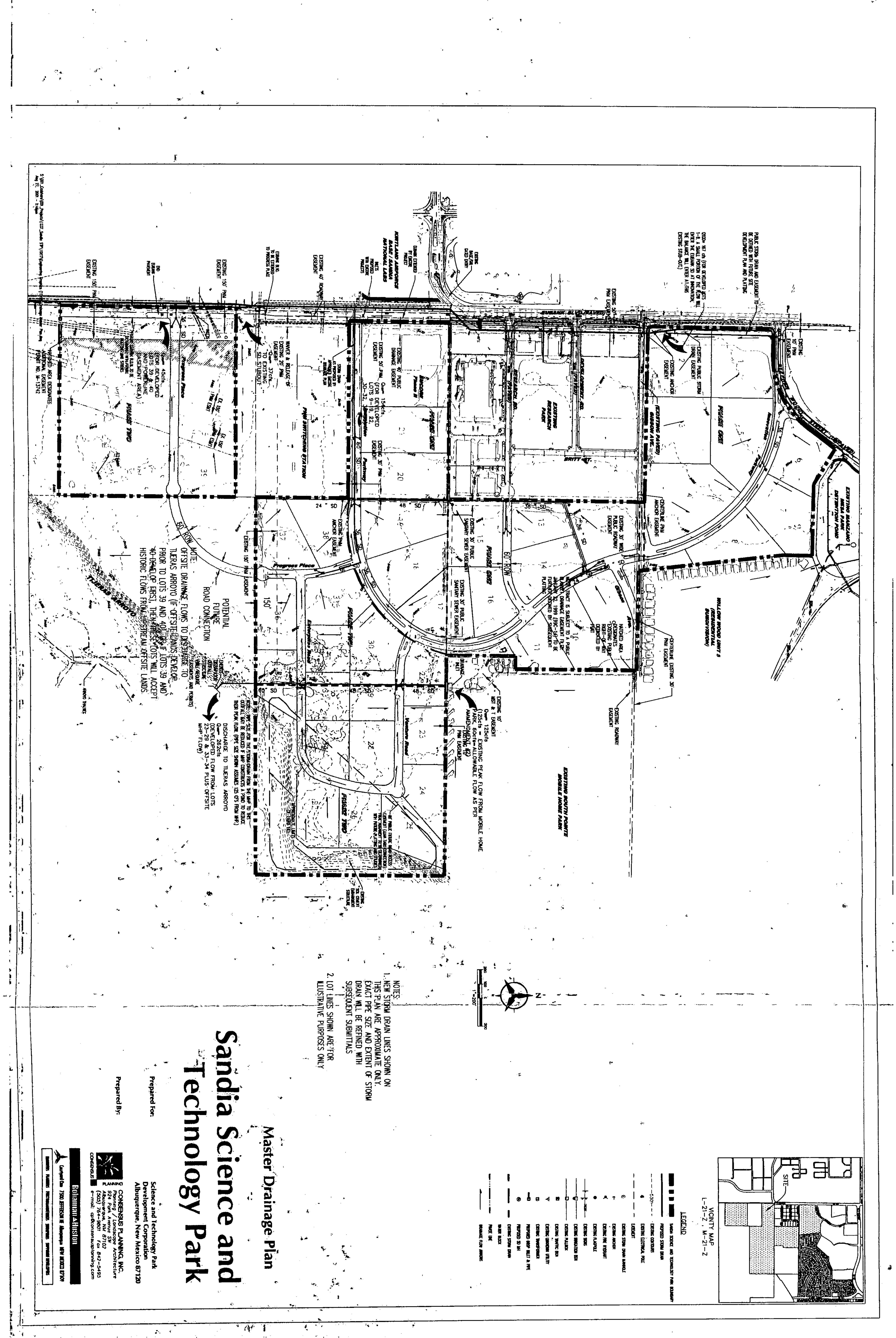
This Drainage Master Plan proposes to construct a new storm drain from the southwest corner of the existing MHP and south through the SS&TP (the SLO lands) directly to the Tijeras Arroyo. This new storm drain would accept flows from the MHP, as well as accept fully developed flows from Lots 23-29 and 33-34. Pipe sizes for the storm drain outfall may be reduced if an agreement for ponding on MHP lands is made between the MHP and the SS&TP. A new outfall line, energy dissipation structure, and easements to the Tijeras Arroyo will be required. Phasing of the Park will allow deferral of this new line to Phase 2. This phase begins to develop the eastern SLO lands (Lots 22-36), and thus the storm line is not required until that time.

Allowable discharge rates for all of the remaining lands (Lots 9-19, 22, 30-32, and 35-38) within the Park are defined by Amendment #2 to the South Eubank Storm Drainage Analysis, with a minor modification. This plan proposes to modify Amendment #2 by allowing the MHP to have free discharge to the new storm drain (discharging MHP and site flows to the Tijeras Arroyo) described in the paragraph above. This modification has a number of advantages:

- No land within the Park will have to be encumbered for massive dedicated public ponding areas and instead, reduces the ponding requirements sufficiently to allow ponding within the developments (parking and driveway areas, landscaping areas, etc.).
- Lots 23-29 and 33-34 get free discharge, this is an advantage since ponding over the existing landfill areas has the potential to increase methane gas generation.
- Lots 9-19, 22, 30-32, and 35-37 have a less restrictive allowable discharge rate, which will allow those lots to have smaller ponds than would otherwise be required.

This Drainage Master Plan provides a safe, innovative, and economical solution to drainage management requirements of the SS&TP.







City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

July 8, 2003

W. Pierce Runnels III, PE ASCG Incorporated of NM 6501 Americas Parkway NE, Suite 400 Albuquerque, NM 87110-5372

RE: Point of Presence Fiber Hut at Sandia Science and Technology Park Grading and Drainage Plan (M-21/D14) Engineer's Stamp Dated 6-13-03

Dear Mr. Runnels:

The above referenced grading and drainage plan received 6-13-03 is approved for Site Development Plan for Building Permit Action by the DRB. Prior to Building Permit signoff by Hydrology, please address the following comment:

• The plan provided in the Site Plan package showed ponding onsite to reduce runoff to 1.57cfs/acre. Please provide the basin map of the master plan to verify allowable runoff to Innovation Parkway.

If you have any questions please call me at 924-3986.

Sincerely, Best J. Bill

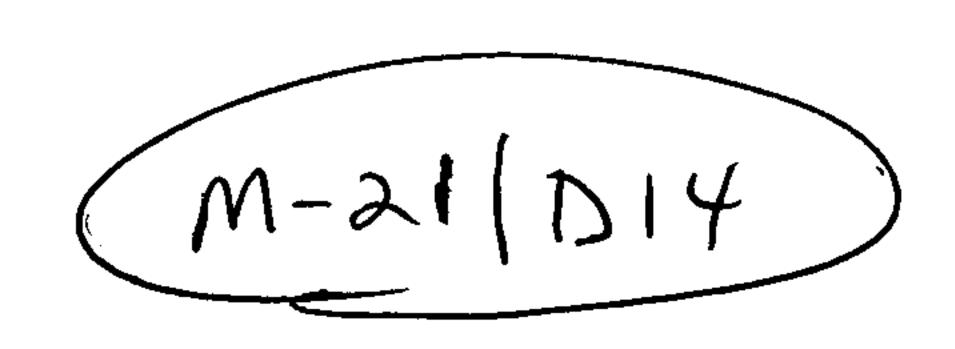
Bradley L. Bingham, PE

Sr. Engineer, Planning Dept.

Development and Building Services

C: File

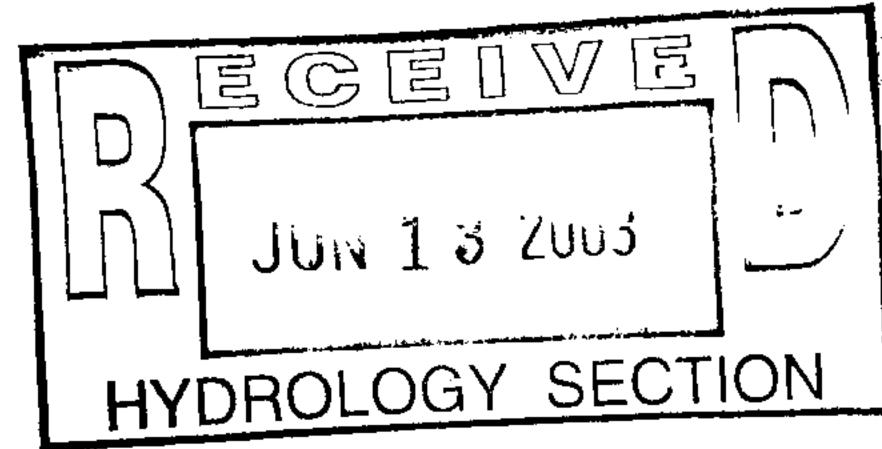
DRAINAGE INFORMATION SHEET



Point of Presence Fiber Hut

PROJECT TITLE: Sandia Science and Technology	Park ZONE ATLAS/DRNG.FILE #: M-21
DRB #: <u>01450-00000-00787</u> EPC #: <u>01110-000</u>	00-00120/01128-00000-00121 WORK ORDER #:_
LEGAL DESCRIPTION: Tract 'G' of Sandia Science	ce and Technology Park
CITY ADDRESS: <u>1505 Innovation Parkway S.E</u>	
	CONTACT: John Gilletly
ADDRESS: 6501 Americas Parkway NE, Sui	
Albuquerque, NM 87110	IC TOO_ I ITOTAL. <u>OOO.Z.T.OZ.OT</u>
	ant CaroCANITACT, Carl Daakar
OWNER: Science and Technology Park Development Appropriate Appropriate Appropriate Park Development (1959)	•
ADDRESS: 10520 Research Rd. SE	
ARCHITECT: <u>ASCG, Incorporated</u>	CONTACT: Steve James
ADDRESS: 6501 Americas Parkway NE, Sui	ite 400_ PHONE: <u>505.247.0294</u>
SURVEYOR: <u>Bohannan Huston, Inc.</u>	CONTACT: Alan Benham
ADDRESS: <u>7500 Jefferson NE</u>	PHONE: <u>505.823.1000</u>
CONTRACTOR: Summit Construction	CONTACT: John Ahlgrim
ADDRESS: 400 Hazeldive Ave. SE 87106	PHONE: 505.842.8113
TYPE OF SUBMITTAL:	CHECK TYPE OF APPROVAL SOUGHT:
DRAINAGE REPORT	SKETCH PLAT APPROVAL
X_ DRAINAGE PLAN	PRELIMINARY PLAT APPROVAL
CONCEPTUAL GRADING & DRAINAGE PLAN	S.DEV. PLAN FOR SUB'D. APPROVAL
GRADING PLAN	X S.DEV. PLAN FOR BLDG. PERMIT APPROVAL
EROSION CONTROL PLAN	SECTOR PLAN APPROVAL
ENGINEER'S CERTIFICATION	FINAL PLAT APPROVAL
OTHER	FOUNDATION PERMIT APPROVAL
	BUILDING PERMIT APPROVAL
PRE-DESIGN MEETINGS:	CERTIFICATE OF OCCUPANCY APPROVAL
YES	GRADING PERMIT APPROVAL
NO	PAVING PERMIT
COPY PROVIDED	S.A.D. DRAINAGE REPORT
	DRAINAGE REQUIREMENTS
	OTHER(SPECIFY)
DATE SUBMITTED: June 13, 2003	下(CEIVE)

John Gilletly, El





ENGINEERS • ARCHITECTS • SURVEYORS • INSPECTION SERVICES

ASCG Project # 20288

June 13, 2003

Bradley L. Bingham, P.E. Sr. Engineer
Utility Development Section
Hydrology Section
Development & Building Services
P.O. Box 1293
Albuquerque, NM 87103

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- 1- FEMA FIRM map

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Sincerely.

ASCG Incorporated

of New Mexico

BY: John Gilletly, E.I.

Project Engineer

JG/cs

Enclosures

D JUN 1 3 2003

HYDROLOGY SECTION

9