

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

June 4, 2025

David Soule, P.E.
Rio Grande Engineering
PO BOX 93924
Albuquerque, NM 87199

**RE: 6408 Thunderbird Circle NW
Grading & Drainage Plan
Engineer's Stamp Date: 5/19/25
Hydrology File: E11D034
Case # HYDR-2025-00183**

Dear Mr. Soule:

PO Box 1293

Based upon the information provided in your submittal received 5/20/2025, the Grading plan is **approved** for Building Permit and Grading Permit. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

Albuquerque

PRIOR TO CERTIFICATE OF OCCUPANCY:

NM 87103

1. Engineer's Certification, per the DPM Part 6-14 (F): *Engineer's Certification Checklist For Non-Subdivision* is required.

www.cabq.gov

As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, jhughes@cabq.gov, 505-924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 505-924-3314 or amontoya@cabq.gov.

Sincerely,

Anthony Montoya, Jr., P.E., CFM
Senior Engineer, Hydrology
Planning Department, Development Review Services

Weighted E Method

Basin	Area (sf)	Area (acres)	100-Year, 6-hr					100 yr 24-hour					
			Treatment A (%)	Treatment B (%)	Treatment C (%)	Treatment D (%)	Weighted E (ac-ft)	Volume (ac-ft)	Flow (cfs)				
EXISTING	11440.00	0.263	75%	0.19%	25%	0.068	0%	0.000	0%	0.595	0.013	0.45	
FRONT BASIN	5756.00	0.132	0%	10%	0.013	16%	0.021	74%	0.098	1.883	0.021	0.49	
REAR BASIN	5684.00	0.130	0%	0	29%	0.038	35%	0.046	36%	0.047	1.351	0.015	0.41

Equations:

Weighted E = Ea**A*a + Eb**A*b + Ec**A*c + Ed**A*d / (Total Area)

Volume = Weighted D * Total Area

Flow = Qa * *A*a + Qb * *A*b + Qc * *A*c + Qd * *A*d

Where for 100-year, 6-hour storm(zone1)

Ea= 0.55
Eb= 0.73
Ec= 0.95
Ed= 2.24

Qa= 1.54
Qb= 2.16
Qc= 2.87
Qd= 4.12

WATER QUALITY VOLUME
=IMPERVIOUS X 0.42/12
220.6888 CF

Developed Conditions	Peak rate	VOLUME
EXISTING DISCHARGE	0.45 cfs	
DEVELOPED DISCHARGE(FRONT)	0.49 cfs	
DEVELOP DISCHARGE (REAR)	0 cf	694.3006 CF GENERATED
PROPOSED PONDING		695 CF RETAINED

This site is an existing lot within a fully developed subdivision. The site was part of the Taylor Ranch Masterplan. There are no drainage files regarding this development, the downstream property (E11-D028) allows free discharge, the entire basin drains too the boca negra channel. The proposed development will drain the front of the house to the roadway and retain the remaining onsite. The lot will overflow to historical location. The down stream infrastructure will not be impacted

EROSION CONTROL NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED

DATE: 6/4/2025

BY: *David Soule*

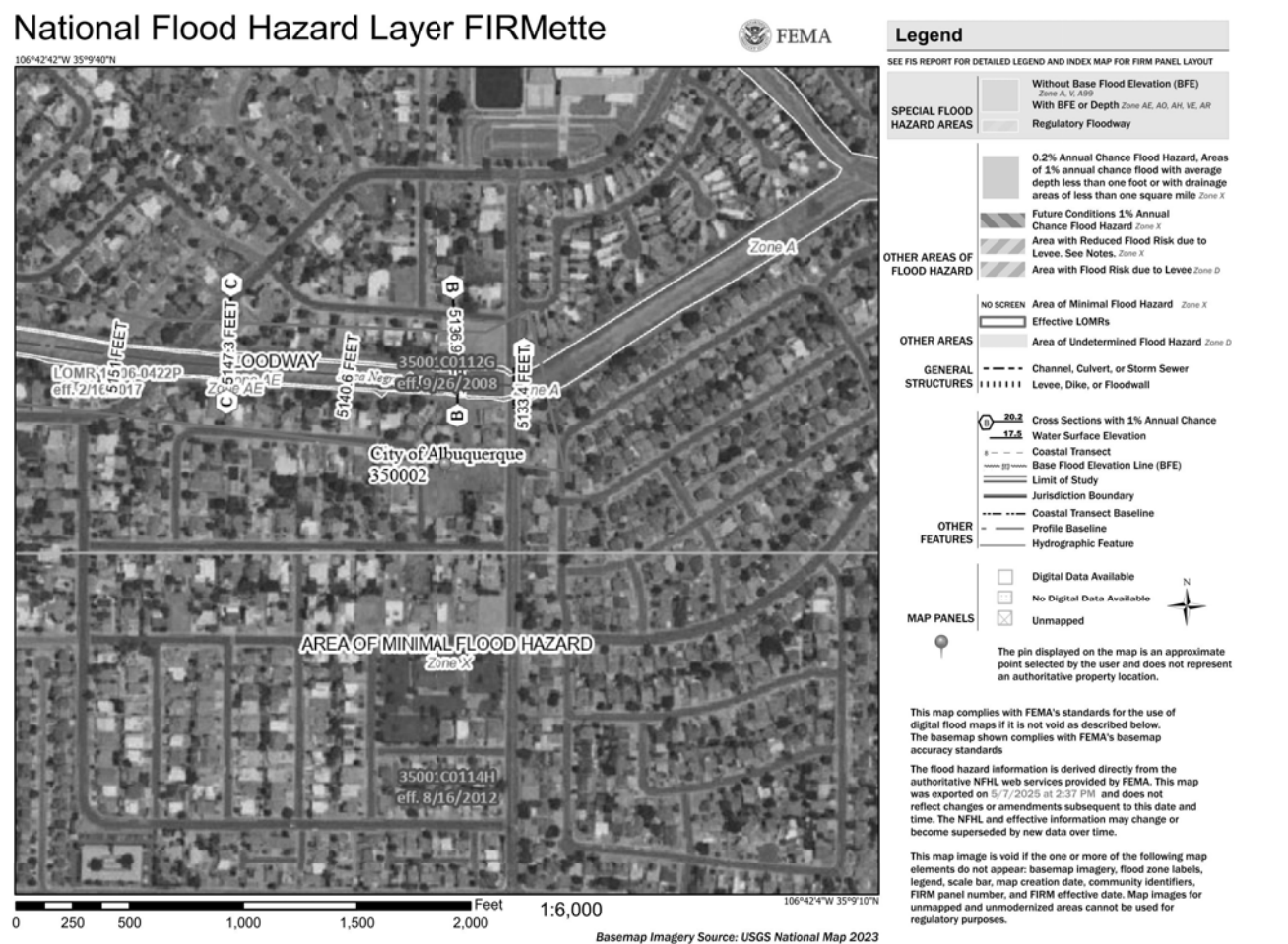
HydroTrans # E11D034

THE APPROVAL OF THESE PLANS/REPORTS SHALL NOT BE CONSTRUED TO PERMIT VIOLATIONS OF ANY CITY ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT THE CITY OF ALBUQUERQUE FROM REQUIRING CORRECTIONS FOR ERRORS OR OMISSIONS IN PLANS, SPECIFICATIONS, OR CONSTRUCTION DOCUMENTS. SUCH APPROVED PLANS/REPORTS SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT AUTHORIZATION.

THE APPROVAL OF THESE PLANS/REPORTS SHALL EXPIRE TWO(2) YEARS AFTER THE APPROVAL DATE IF NO BUILDING PERMIT HAS BEEN FILED ON THE DEVELOPMENT.



VICINITY MAP: E-12-Z



FIRM MAP:

LEGAL DESCRIPTION:

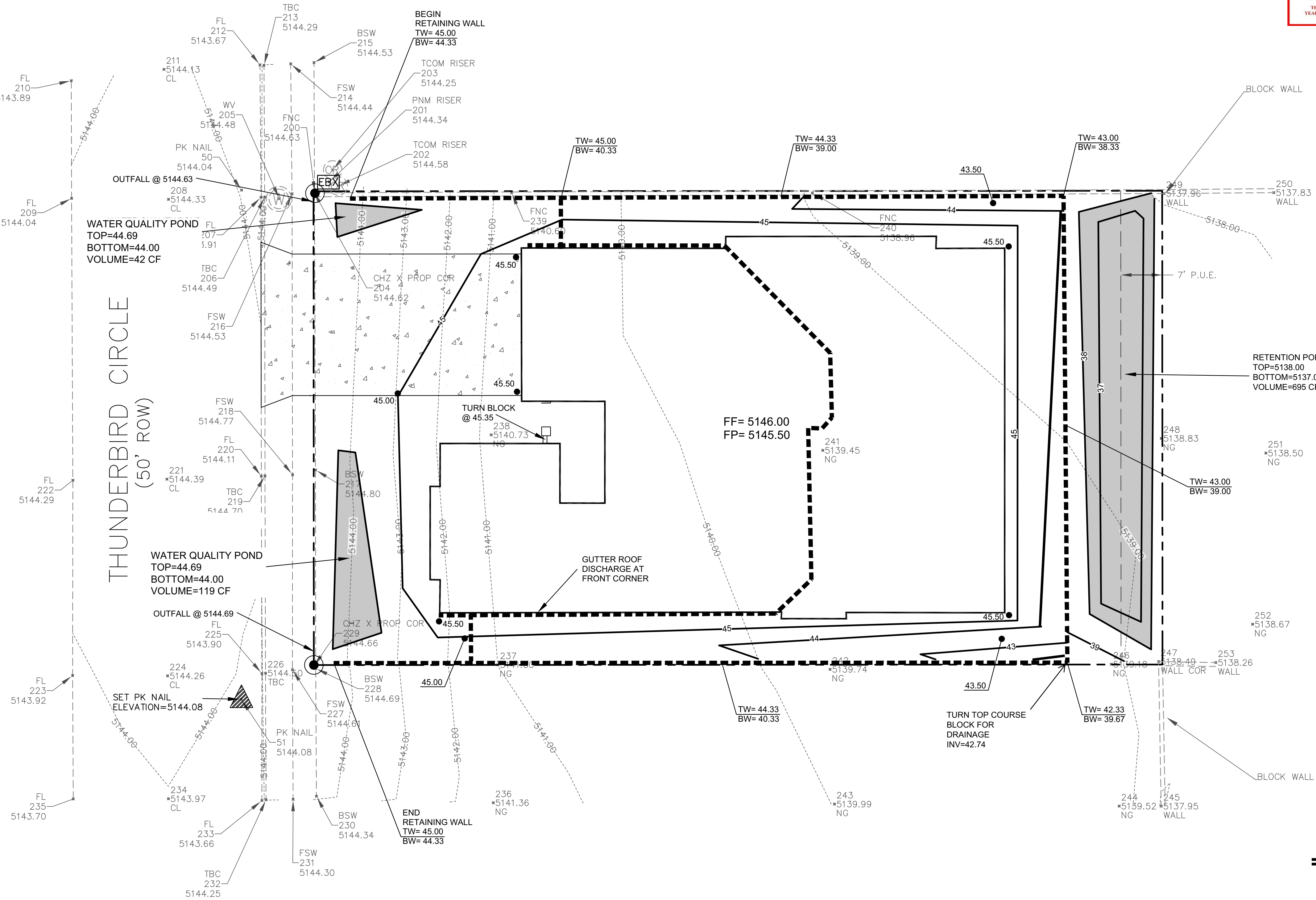
LOT 22, BLOCK 5 VOLCANO CLIFFS SUBDIVISION
CITY OF ALBUQUERQUE, BERNILLO COUNTY, NEW MEXICO

NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. ALL SLOPES SHALL BE 3:1 MAX. AND GRAVEL OR NATIVE SEEDING PRIOR TO CO.
3. ANY PERIMETER WALLS MUST BE PERMITTED SEPARATELY ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.
4. SURVEY INFORMATION PROVIDED BY DYNAMIC CONSTRUCTION AND TECHNOLOGY LLC USING NAVD DATUM 1988.
5. LONG TERM MAINTAINANCE OF ALL PONDS, SWALES AND OVERFLOWS IS REQUIRED
6. A PAD ELEVATION CERTIFICATION SHALL BE REQUIRED PRIOR TO RELEASE OF BUILDING PERMIT.

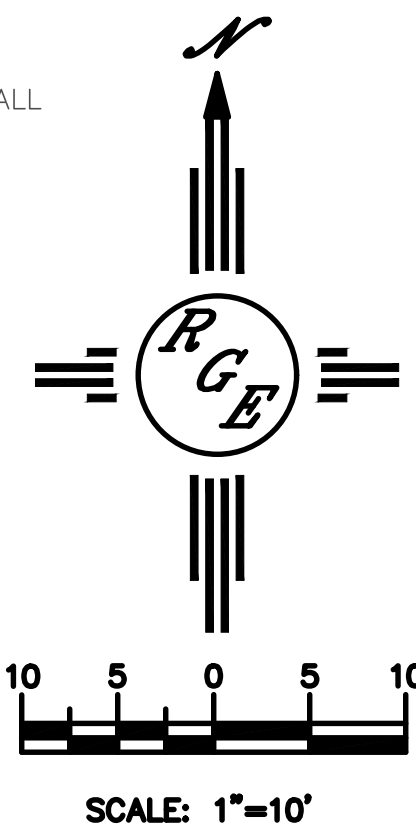
LEGEND


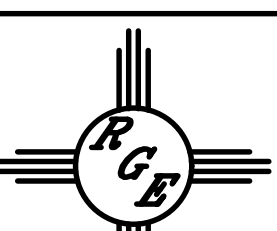
-----XXXX-----	EXISTING CONTOUR
-----XXXX-----	EXISTING INDEX CONTOUR
-----XXXX-----	PROPOSED CONTOUR
-----XXXX-----	PROPOSED INDEX CONTOUR
• XXXX	EXISTING SPOT ELEVATION
● XXXX	PROPOSED SPOT ELEVATION
-----	BOUNDARY
-----	ADJACENT BOUNDARY
=====	EXISTING CURB AND GUTTER
-----<-----	PROPOSED EARTHEN SWALE
-----	PROPOSED RETAINING WALL
-----	PROPOSED CONCRETE
-----	PROPOSED PONDING



CAUTION:

EXISTING UTILITIES ARE NOT SHOWN.
IT SHALL BE THE SOLE RESPONSIBILITY
OF THE CONTRACTOR TO CONDUCT ALL
NECESSARY FIELD INVESTIGATIONS PRIOR
TO ANY EXCAVATION TO DETERMINE THE
ACTUAL LOCATION OF UTILITIES & OTHER
IMPROVEMENTS.



ENGINEER'S SEAL  5/19/25 DAVID SOULE P.E. #14522	LOT 22 BLK 5 VC 6408 THUNDERBIRD CIRCLE GRADING AND DRAINAGE PLAN  Rio Grande Engineering P.O. BOX 33924 ALBUQUERQUE, NM 87199 (505) 321-9099	DRAWN BY DEM
		DATE 5-17-25
		6408 Thunderbird Circle N/A.dwg
		SHEET # C1
		JOB #