

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

January 9, 2023

Ron Hensley, P.E.
THE Group
300 Branding Iron Rd. SE
Rio Rancho, NM 87124

**RE: QUAKER HEIGHTS TOWNHOMES
99999 Quaker Heights Place NW
Grading and Drainage Plan
Engineer's Stamp Date: 11/22/2022
Hydrology File: F11D020A**

Dear Mr. Hensley:

Based upon the information provided in your submittal received 11/28/2022, the Grading & Drainage Plan is approved for Grading Permit and Building Permit approval. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

PRIOR TO CERTIFICATE OF OCCUPANCY:

1. Engineer's Certification, per the DPM Part 6-14 (F): *Engineer's Certification Checklist For Non-Subdivision* is required.
2. Please provide the executed paper Drainage Covenant (latest revision) printed on one-side only with Exhibit A and a check for \$25 made out to "Bernalillo County" for the stormwater quality ponds per Article 6-15(C) of the DPM to Hydrology for review. Once the review is done, Hydrology will send back an email stating our approval/comments.

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 505-924-3695 or tchen@cabq.gov.

Sincerely,

Tiequan Chen, P.E.
Principal Engineer, Hydrology
Planning Department, Development Review Services



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Project Title: QUAKER HEIGHTS TOWNHOMES Building Permit #: _____ Hydrology File #: F11D020

DRB#: _____ EPC#: _____ Work Order#: _____

Legal Description: Tracts 2-A and 2-B, Coors Village

City Address: 99999 Quaker Heights Pl.
UPC #101106116509431246

Applicant: THE Group Contact: Ron Hensley

Address: 300 Branding Iron Rd. SE, Rio Rancho, NM 87124

Phone#: 505-410-1622 Fax#: _____ E-mail: ron@thegroup.cc

Owner: Clearbrook Contact: Scott Henry

Address: 8801 Jefferson NE Bldg. A, ALBUQUERQUE, NM 87113

Phone#: 505-858-1800 Fax#: _____ E-mail: scotth@stillbrooke.com

TYPE OF SUBMITTAL: _____ PLAT (____# OF LOTS) _____ RESIDENCE _____ DRB SITE ADMIN SITE

IS THIS A RESUBMITTAL?: _____ Yes No

DEPARTMENT: _____ TRAFFIC/ TRANSPORTATION HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- _____ ENGINEER/ARCHITECT CERTIFICATION
- _____ PAD CERTIFICATION
- _____ CONCEPTUAL G & D PLAN
- GRADING PLAN
- _____ DRAINAGE MASTER PLAN
- _____ DRAINAGE REPORT
- _____ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- _____ ELEVATION CERTIFICATE
- _____ CLOMR/LOMR
- _____ TRAFFIC CIRCULATION LAYOUT (TCL)
- _____ TRAFFIC IMPACT STUDY (TIS)
- _____ OTHER (SPECIFY) _____
- _____ PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- BUILDING PERMIT APPROVAL
- _____ CERTIFICATE OF OCCUPANCY
- _____ PRELIMINARY PLAT APPROVAL
- _____ SITE PLAN FOR SUB'D APPROVAL
- _____ SITE PLAN FOR BLDG. PERMIT APPROVAL
- _____ FINAL PLAT APPROVAL
- _____ SIA/ RELEASE OF FINANCIAL GUARANTEE
- _____ FOUNDATION PERMIT APPROVAL
- GRADING PERMIT APPROVAL
- _____ SO-19 APPROVAL
- _____ PAVING PERMIT APPROVAL
- _____ GRADING/ PAD CERTIFICATION
- _____ WORK ORDER APPROVAL
- _____ CLOMR/LOMR
- _____ FLOODPLAIN DEVELOPMENT PERMIT
- _____ OTHER (SPECIFY) _____

DATE SUBMITTED: 11/22/22 By: THE Group / Ron Hensley

COA STAFF: _____

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

GENERAL NOTES:

1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER THIS CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREIN, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 2020 EDITION.
2. THE EROSION PROTECTION SPECIFIED ON THIS PLAN IS THE MINIMUM RECOMMENDED. THE OWNER IS ENCOURAGED TO INCORPORATE EROSION RESISTANT LANDSCAPING ON AREAS WHERE EROSION MAY OCCUR SUCH AS SLOPES AND SWALES. THE OWNER IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL FEATURES NECESSARY TO PRESERVE THE DESIGN INTENT OF THE GRADING PLAN.
3. THE DRAINAGE INFRASTRUCTURE SHOWN ON THIS PLAN IS THE RESPONSIBILITY OF THE PROPERTY OWNER.
4. ALL DISTURBED AREAS OUTSIDE THE BUILDING ENVELOPE MUST BE RESEED IN ACCORDANCE WITH THE SEED MIX INDICATED IN THE OXBOW GUIDELINES.
5. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, (260-1990) FOR LOCATION OF EXISTING UTILITIES.
6. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS AND EXISTING PAVEMENT. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR SURVEYOR SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM OF DELAY.

NOTES

THE ENGINEER HAS UNDERTAKEN LIMITED FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UNDERGROUND UTILITY LINES. MAKES NO REPRESENTATION PERTAINING THERETO AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES. THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES IN PLANNING AND CONDUCTING EXCAVATION, WHETHER BY CALLING OR NOTIFYING THE UTILITIES, COMPLYING WITH "BLUE STAKES" PROCEDURES, OR OTHERWISE.

THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR.

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, ARE INTENDED FOR USE ON THIS PROJECT AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF THE GROUP. IN THE EVENT OF UNAUTHORIZED USE, THE USER ASSUMES ALL RESPONSIBILITY AND LIABILITY WHICH RESULTS.

EROSION CONTROL NOTES

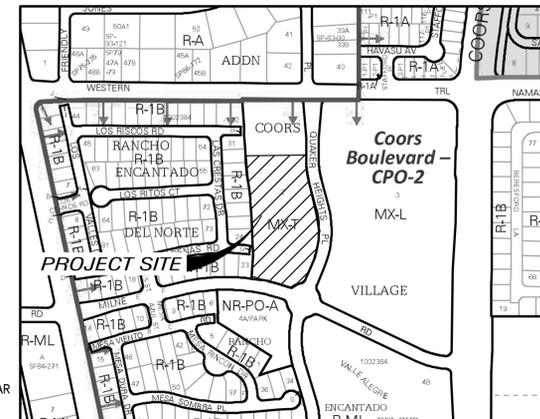
1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
4. REPAIR OF DAMAGED FACILITIES 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 (CITY) ACCEPTANCE OF ANY PROJECT.

LEGEND

- FLOW ARROW
- ↘ SLOPE ARROW
- EL=11.28 PROPOSED ELEVATION
- x 66.33 EXISTING ELEVATION
- ~~~~ GRADE BREAK
- 5000— PROPOSED CONTOUR
- - -5000- - - EXISTING CONTOUR
- - - - - PROPOSED EASEMENT
- - - - - EXISTING WALL
- — — PROPOSED WALL
- — — SWALE / FLOW LINE

BENCHMARK

ELEVATIONS ARE BASED ON CP-26 PK WASHER ON CURB NEAR SW CORNER BY SURV-TEK INC. EL 5113.2



DRAINAGE INFORMATION

LOCATION & DESCRIPTION

THE PROPOSED SITE IS A TRACT OF 3.56 ACRES LOCATED AT QUAKER HEIGHTS AND MILNE. AS SEEN ON THE VICINITY MAP.

FLOODPLAIN STATUS

THE CONSTRUCTION OF THIS PROJECT, AS SHOWN ON FEMA'S FLOOD INSURANCE RATE MAP 35001C012G, DATED SEPTEMBER 26, 2008 IS NOT WITHIN A DESIGNATED 100-YEAR FLOODPLAIN. AN EXHIBIT WITH THE SITE SHOWN ON THE FIRM PANEL IS INCLUDED ON THIS SHEET.

METHODOLOGY

EQUATIONS:
WEIGHTED E = $E_a \cdot A_a + E_b \cdot A_b + E_c \cdot A_c + E_d \cdot A_d$ / (Total Area)

FLOW = $Q_a \cdot A_a + Q_b \cdot A_b + Q_c \cdot A_c + Q_d \cdot A_d$

WHERE FOR 100-YEAR, 6-HOUR STORM(ZONE1)

$E_a = 0.55$ $Q_a = 1.54$
 $E_b = 0.73$ $Q_b = 2.16$
 $E_c = 0.95$ $Q_c = 2.87$
 $E_d = 2.24$ $Q_d = 4.12$

PRECIPITATION

THE 100-YR 6-HR DURATION STORM WAS USED AS THE DESIGN STORM FOR THIS ANALYSIS. THIS SITE IS WITHIN ZONE 1 AS IDENTIFIED IN THE DEVELOPMENT PROCESS MANUAL, SECTION 6-2.

EXISTING DRAINAGE

THIS SITE IS LOCATED WITHIN BASIN 160 OF THE COORS VILLAGE DRAINAGE MASTER PLAN, F11-0007. THE DRAINAGE MASTER PLAN DATED FEBRUARY 2000 INCORPORATES THE DEVELOPED FLOWS FROM THE BASIN AT APPROXIMATELY 19.4 CFS. TO DISCHARGE TO THE STORM DRAIN IN MILNE ROAD.

| BASIN | AREA (sf) | TREATMENT A % sf | TREATMENT B % sf | TREATMENT C % sf | TREATMENT D % sf | WEIGHTED E | VOLUME (cu.-ft.) | FLOW (cfs) | ALLOWED FLOW (cfs) | CFS/AC (cfs) | ALLOWED (cfs/ac) |
|-------------|-----------|------------------|------------------|------------------|------------------|------------|------------------|------------|--------------------|--------------|------------------|
| EXISTING | 220823 | 100% | 220823 | 0% | 0 | 0.55 | 10121 | 7.81 | 19.42 | 1.54 | 3.83 |
| PROPOSED A1 | 25490 | 0% | 0 | 65% | 16569 | 0% | 0 | 35% | 8922 | 1.26 | 2.673 |
| PROPOSED A2 | 46141 | 0% | 0 | 5% | 2307 | 0% | 0 | 95% | 43834 | 2.16 | 8323 |
| PROPOSED A3 | 60856 | 0% | 0 | 5% | 3043 | 0% | 0 | 95% | 57813 | 2.16 | 10977 |
| PROPOSED A4 | 20390 | 0% | 0 | 65% | 13254 | 0% | 0 | 35% | 7137 | 1.26 | 2138 |
| PROPOSED A | 152877 | 0% | 0 | 23% | 35172 | 0% | 0 | 77% | 117705 | 1.89 | 24111 |
| PROPOSED B | 65537 | 0% | 0 | 15% | 9831 | 0% | 0 | 85% | 55706 | 2.01 | 10997 |
| PROP. TOT. | 218414 | 0% | 0 | 21% | 45003 | 0% | 0 | 79% | 173411 | 1.93 | 35108 |

DEVELOPED CONDITION

THIS SITE WILL BE DEVELOPED AS TOWNHOMES WITH DEVELOPED RUNOFF ROUTED TO THE STORM DRAIN IN MILNE AS REQUIRED IN THE DRAINAGE MASTER PLAN WITH A DEVELOPED FLOW OF 18.63 CFS FROM THE BASIN.



FIRM MAP NO. 35001C114H

VICINITY MAP F-11-Z

LEGEND

- 5000 — POINT FLOW
- 5000 — PROPOSED CONTOUR
- 5000 — EXISTING CONTOUR
- - - - - BASIN BOUNDARY
- ## BASIN DESIGNATION



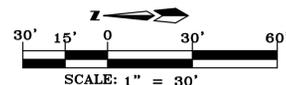
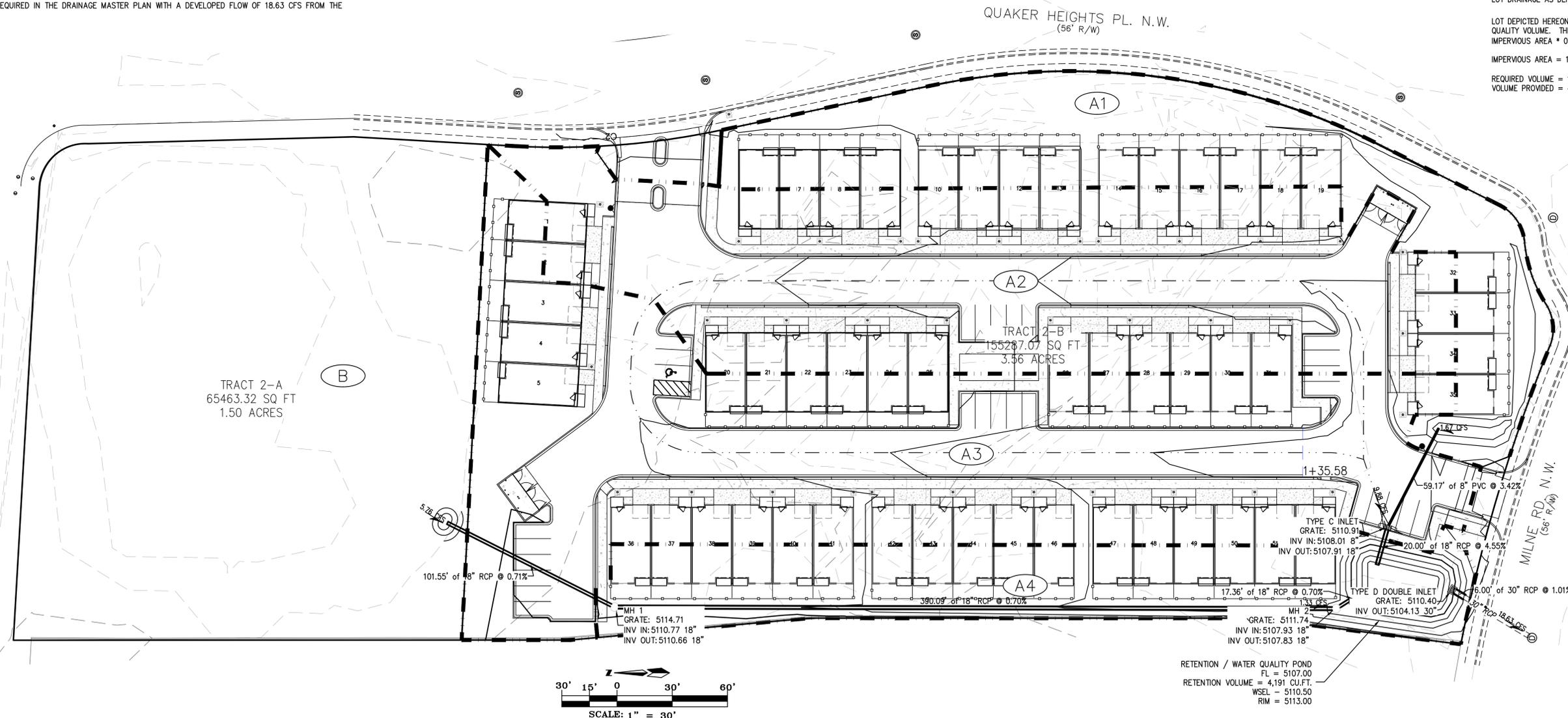
REQUIRED WATER QUALITY VOLUME

LOT DRAINAGE AS DEPICTED ON THIS PLAN SHALL BE MAINTAINED.

LOT DEPICTED HEREON SHALL BE RESPONSIBLE FOR THE WATER QUALITY VOLUME. THE VOLUME SHALL BE EQUAL TO:
IMPERVIOUS AREA * 0.42/12 IN CUBIC FEET.

IMPERVIOUS AREA = 117,705 SQ.FT.

REQUIRED VOLUME = 117,705 * 0.42/12 = 4,120 CU.FT.
VOLUME PROVIDED = 4,191 CU.FT.



RETENTION / WATER QUALITY POND
FL = 5107.00
RETENTION VOLUME = 4,191 CU.FT.
WSEL - 5110.50
RIM = 5113.00

THE group
THE HENSLEY ENGINEERING GROUP
300 BRANCHO IRON RD. SE
RIO RANCHO, NEW MEXICO 87124
Phone:(505) 410-1622

RON E. HENSLEY
NEW MEXICO
21850
11/22/22

1. THIS SET OF DRAWINGS EXIST AS A WHOLE. IF THE SCALE CONTRACTOR INVOLVED IN THE DRAWINGS AS SUCH, EACH SHEET TO THEIR RESPECTIVE DISCIPLINES.
2. DUE TO POTENTIAL INCONSISTENCIES DURING PLAN INCORPORATION, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LOCATIONS WITH THE ORIGINAL DRAWINGS TO VERIFY OR OBTAIN DIMENSIONS THAT IS RECOMMENDED.

PROJECT ADDRESS:
99999 QUAKER HEIGHTS PL. N.W. ALBUQUERQUE, NM

PROJECT NUMBER:
PROJECT PROGRESS:
SITE PLAN

DRAIN BY:
REH

CHECKED BY:
REH / REH

DATE:
NOV. 22, 2022

SCALE:
AS NOTED

SHEET:
GD2