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File **SPR-1996-160** Name: Timberline Aviation Hangar – Walker Field -

Present	Scanned	
		A few items are denoted with an asterisk (*), which means they are to be scanned for permanent record on the ISYS retrieval system. In some instances, items are found on the list but are not present in the scanned electronic development file because they are already scanned elsewhere on the system. These scanned documents are denoted with (**) and will be found on the ISYS query system in their designated categories. Documents specific to certain files, not found in the standard checklist materials, are listed at the bottom of the page. Remaining items, (not selected for scanning), will be listed and marked present. This index can serve as a quick guide for the contents of each file.
X	X	**Table of Contents**
		***Review Sheet Summary**
		***Application form**
X		Review Sheets
		Receipts for fees paid for anything
X	X	***Submittal checklist**
		***General project report**
		Reduced copy of final plans or drawings
X		Reduction of assessor's map.
		Evidence of title, deeds, easements
		***Mailing list to adjacent property owners**
		Public notice cards
		Record of certified mail
		Legal description
		Appraisal of raw land
		Reduction of any maps – final copy
		***Final reports for drainage and soils (geotechnical reports)**
		Other bound or non-bound reports
		Traffic studies
X	X	***Review Comments**
		***Petitioner's response to comments**
		***Staff Reports**
		***Planning Commission staff report and exhibits**
		***City Council staff report and exhibits**
		***Summary sheet of final conditions**

DOCUMENT DESCRIPTION:

X	X	Site Plan – to be scanned			
X	X	Correspondence			
X	X	Planning Clearance - ** - issued 7/15/96			
X	X	Drainage Plan			
X		Ground Lease Agreement – 6/1/96			
X		Timberline Aviation Lease Description Exhibits– not recorded			
X	X	Proposed Grading and Drainage Plan – not signed – will scan for records			

SUBMITTAL CHECKLIST

SITE PLAN REVIEW

Location: W end of Walker Field Project Name: Timberline Aviation

Date Received 6-21-96

Receipt # 4258

File # SPR96-161

ITEMS		DISTRIBUTION																													
DESCRIPTION	SSID REFERENCE	City Community Development	City Dev. Eng.	City Utility Eng.	O City Property Agent	O City Parks/Recreation	City Fire Department	City Attorney	O City Downtown Dev. Auth.	O County Planning	County Bldg. Dept.	O Irrigation District	O Drainage District	Water District - UTE	O Sewer District	O U.S. West	O Public Service	O GVRP	O CDOT	O Corps of Engineers	Walker Field	O Persigo WWT	O Mesa County Health	O State Environ. Health	O City Sanitation	O School Dist #51						TOTAL REQ'D.
Application Fee $100	VII-1	1																													
Submittal Checklist *	VII-3	1																													
Review Agency Cover Sheet*	VII-3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1						
Planning Clearance*	VII-3	1																													
11"x17" Reduction of Assessor's Map	VII-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1						
Evidence of Title	VII-2	1			1			1																							
O Deeds	VII-1	1			1			1																							
O Easements	VII-2	1	1	1	1			1																							
O Avigation Easement	VII-1	1			1			1																							
O ROW	VII-2	1	1	1	1			1																							
O Improvements Agreement/Guarantee*	VII-2	1	1	1				1																							
O CDOT Access Permit	VII-3	1	1																												
O Industrial Pretreatment Sign-off	VII-4	1		1																											
General Project Report	X-7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1						
O Elevation Drawing	IX-13	1	1																												
Site Plan	IX-29	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1						
O 11"x17" Reduction of Site Plan	IX-29					1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1						
Grading and Drainage Plan	IX-16	1	2										1							1											
O Storm Drainage Plan and Profile	IX-30	1	2										1			1	1	1													
O Water and Sewer Plan and Profile	IX-34	1	2	1			1							1	1	1	1	1													
O Roadway Plan and Profile	IX-28	1	2										1																		
O Road Cross-Sections	IX-27	1	2																												
O Detail Sheet	IX-12	1	2																												
Landscape Plan	IX-20	2	1	1																											
O Geotechnical Report	X-8	1	1								1																				
O Final Drainage Report	X-5,6	1	2										1																		
O Stormwater Management Plan	X-14	1	2										1							1											
O Phase I and II Environmental Rerpot	X-10,11	1	1																												
O Traffic Impact Study	X-15	1	2																1												

NOTES: * An asterisk in the item description column indicates that a form is supplied by the City.

PRE-APPLICATION CONFERENCE

Date: 3/13/96
Conference Attendance: B. Turner ; M. Drollinger
Proposal: Hanger / Office Facility
Location: W side of Walker Field

Tax Parcel Number: 2705-251-00-941
Review Fee: $100
(Fee is due at the time of submittal. Make check payable to the City of Grand Junction.)

Additional ROW required? —
Adjacent road improvements required? —
Area identified as a need in the Master Plan of Parks and Recreation? —
Parks and Open Space fees required? — Estimated Amount: _____
Recording fees required? — Estimated Amount: _____
Half street improvement fees/TCP required? TCP Estimated Amount: _____
Revocable Permit required? —
State Highway Access Permit required? —
On-site detention/retention or Drainage fee required? As per Eng.

Applicable Plans, Policies and Guidelines Devel. Code

Located in identified floodplain? FIRM panel # —
Located in other geohazard area? —

Located in established Airport Zone? Clear Zone, Critical Zone, Area of Influence? at airport
Avigation Easement required? —

While all factors in a development proposal require careful thought, preparation and design, the following "checked" items are brought to the petitioner's attention as needing special attention or consideration. Other items of special concern may be identified during the review process.

● Access/Parking	O Screening/Buffering	O Land Use Compatibility
● Drainage	O Landscaping	O Traffic Generation
O Floodplain/Wetlands Mitigation	● Availability of Utilities	O Geologic Hazards/Soils

O Other _____
Related Files: — HOUSE HANGAR?

It is recommended that the applicant inform the neighboring property owners and tenants of the proposal prior to the public hearing and preferably prior to submittal to the City.

PRE-APPLICATION CONFERENCE

WE RECOGNIZE that we, ourselves, or our representative(s) must be present at all hearings relative to this proposal and it is our responsibility to know when and where those hearings are.

In the event that the petitioner is not represented, the proposed item will be dropped from the agenda, and an additional fee shall be charged to cover rescheduling expenses. Such fee must be paid before the proposed item can again be placed on the agenda. Any changes to the approved plan will require a re-review and approval by the Community Development Department prior to those changes being accepted.

WE UNDERSTAND that incomplete submittals will not be accepted and submittals with insufficient information, identified in the review process, which has not been addressed by the applicant, may be withdrawn from the agenda.

WE FURTHER UNDERSTAND that failure to meet any deadlines as identified by the Community Development Department for the review process may result in the project not being scheduled for hearing or being pulled from the agenda.

X _____ X _____
Signature(s) of Petitioner(s) Signature(s) of Representative(s)

REVIEW COMMENTS

FILE # SPR-96-161

TITLE HEADING: Site Plan Review - Timberline Aviation

LOCATION: 2780 Landing View Lane

PETITIONER: Timberline Aviation

PETITIONER'S ADDRESS/TELEPHONE: 2780 Landing View Lane
Grand Junction, CO 81506
242-1423

PETITIONER'S REPRESENTATIVE: Bob Turner, Alco Building Company

STAFF REPRESENTATIVE: Kristen Ashbeck

NOTE: THE PETITIONER IS REQUIRED TO SUBMIT FOUR (4) COPIES OF WRITTEN RESPONSE AND REVISED DRAWINGS ADDRESSING ALL REVIEW COMMENTS.

CITY COMMUNITY DEVELOPMENT **7/9/96**
Kristen Ashbeck **244-1437**

GENERAL:

1. "Existing building" doesn't exist (?) Which building is already under construction, the hangar or the "existing building"?
2. Proposed development extends beyond boundary of ground lease with Airport. Provide a copy of agreement with adjacent property to the west.

PARKING:

1. According to project narrative, only 25 parking spaces are required (7,500 sf office @ 1 space/300 gsf). What are the additional 37 spaces for?
2. If parking exceeds 50 spaces (as shown on plan submitted), it must meet all requirements of section 5-5-1F. of the Zoning and Development Code regarding landscaping and lighting.
3. Parking lot does not meet ADA standards (3 accessible stalls required).
4. Curbing is required around edge of parking areas (not shown).

LANDSCAPING

1. Identify species, numbers and planting size of plants (trees - minimum 1.5" caliper, shrubs - minimum 5 gallon).
2. Identify ground cover (e.g. grass, plants) in all landscape areas).
3. Add note on plan indicating all landscape areas will have underground pressurized irrigation system.

MESA COUNTY BUILDING DEPARTMENT **7/5/96**
Bob Lee **244-1656**

No comments.

CITY FIRE DEPARTMENT **7/10/96**
Hank Masterson **244-1414**

1. The Fire Department has no problems with this proposal.
2. Submit complete building plans for the new hangar to the Fire Department for our review.
3. Fuel farm permit applications have been submitted to Fire Department-preliminary plans are acceptable.

CITY DEVELOPMENT ENGINEER **7/10/96**
Jody Kliska **244-1591**

1. Please provide spot elevations on the site plan and provide floor elevations for the building.
2. Please provide dimensions and volumes of the retention ponds along with calculations of the runoff and necessary retention volume.

WALKER FIELD AIRPORT AUTHORITY **7/8/96**
Dennis Wiss **244-9100**

The Walker Field Airport Authority has no objections to this proposed construction provided that a Form 7460, Notice of Proposed Construction or Alteration, is submitted to the FAA and approved by the FAA. The Airport Authority would appreciate a copy of the approved 7460 when available.

CITY UTILITY ENGINEER **7/11/96**
Trent Prall **244-1590**

1. Please contact Jodi Romero of the City Customer Service Division at 244-1520 for information regarding sewer plant investment fees.
2. Please contact Dan Tonello with the Industrial Pretreatment section (244-1489) at the Persigo Sewer Treatment Plant for industrial waste review.

TO DATE, NO COMMENTS RECEIVED FROM:
City Attorney
Ute Water

WALKER FIELD Airport Authority

2828 Walker Field Drive, Suite 211
Grand Junction, Colorado 81506
(970) 244-9100
FAX (970) 241-9103

TO: City of Grand Junction Planning Office

DATE: June 21, 1996

RE: Timberline Aviation Building Plans

The Walker Field Airport Authority has reviewed the proposed building plans submitted by Timberline Aviation. The Airport Authority has no objections to any of the proposed development. The only outstanding item to be addressed by Timberline is a stormwater drainage plan however the Airport will not require immediate submittal of this and will allow construction on the building and site to begin without formal submittal of the drainage plan.

Should you have any questions, please feel free to call me at 244-9100.

Sincerely;

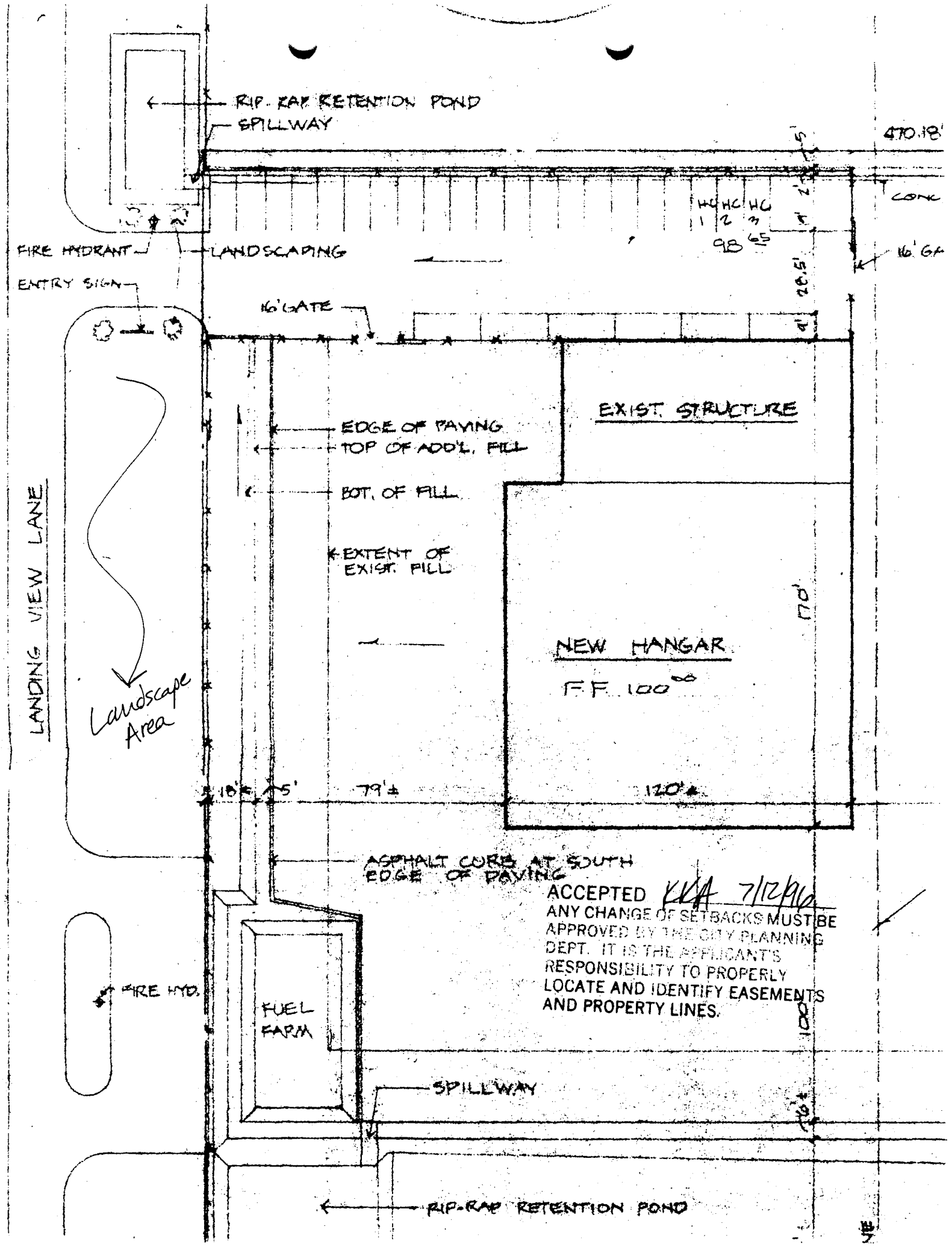
Dennis Wiss, A.A.E.
Director of Operations and Planning

"We've got the world at our wingtips"

CornH2O

Good to issue if okay w/ Jody on drainage

OK J. Wade 1-12-96


RIP-RAP RETENTION POND
SPILLWAY
470.18'
CONC
HC 1
HC 2
HC 3
98
65
FIRE HYDRANT
LANDSCAPING
ENTRY SIGN
16' GATE
16' GA
28.5'
EXIST. STRUCTURE
EDGE OF PAVING
TOP OF ADD'L. FILL
BOT. OF FILL
EXTENT OF EXIST. FILL
NEW HANGAR
F.F. 100
70'
LANDING VIEW LANE
Landscape Area
10'
5'
79'±
120'±
ASPHALT CURB AT SOUTH EDGE OF PAVING
ACCEPTED KKA 7/12/96
ANY CHANGE OF SETBACKS MUST BE APPROVED BY THE CITY PLANNING DEPT. IT IS THE APPLICANT'S RESPONSIBILITY TO PROPERLY LOCATE AND IDENTIFY EASEMENTS AND PROPERTY LINES.
FIRE HYD.
FUEL FARM
100'
SPILLWAY
RIP-RAP RETENTION POND

Alco Building Company, Inc.

TO WHOM IT MAY CONCERN June 20, 1996

RE: Timberline Aviation

This proposal is for the construction of a 14,400 square foot airplane hangar building and the finish out of an existing structure with 7,500 square feet of office space and 2,500 square feet of storage.

Sincerely,

Robert V. Turner, President
Alco Building Company, Inc.

P.O. Box 996 529 25 1/2 Road Grand Junction, Colorado 81502 (970) 242-1423 FAX (970) 242-6918

DRAINAGE PLAN

for

Timberline Ground Services
Walker Field Airport
Grand Junction, CO

Prepared For:
Timberline Aviation
P.O. Box 60099
Grand Junction, CO 81506

Prepared By:
HydroTerra Environmental Consulting
1179 Santa Clara Ave.
Grand Junction, CO 81503
970-242-4454

July 12, 1996

Table of Contents

1. General Location and Description

The proposed Timberline Ground Services development is located at the Walker Field Airport approximately 1000 ft west of West Star Aviation on the south side of the east-west runway (City of Grand Junction, Mesa County, Colorado). The west boundary of the subject leased property borders land leased by RUST Geotech and the east side borders vacant land belonging to the Airport. To the north is the east-west runway and to the south is Landing View Lane. Adjoining property north of the airport is public land under BLM management, and to the south of Landing View Road is vacant land belonging to 3D Corp.

The development is on 4.5 acres of uncultivated native soils and fill dirt. The site is currently bare ground. The soil at the site is classified as SCS type "D" soil, being primarily silty clay. At the time of the site inspection, there was no standing water on the site. The groundwater table is most likely quite deep in this area as it is upgradient of any irrigated land and there is very little alluvium; however, no inspection trench was excavated.

Development will consist of erecting two metal buildings and paving most of the property.

2. Existing Drainage Conditions

The site topography and observations from the site inspection indicate that, at present, precipitation runoffs to the southeast and ponds on Airport property north of Landing View Lane, with little or no off-site drainage. A concrete culvert placed to convey runoff under the east-west runway was excavated and found to be plugged at the south end. This pipe has been unplugged and will be extended under the proposed apron area fill and will continue to convey runoff from the east-west runway to the southeast where it will pond on Airport property. The culvert does not drain any of the area related to the proposed development, thus, the Airport Authority will not require the developer to deal with this drainage. No other drainage concerns were apparent at the

time of the site inspection.

3. Drainage Design Criteria

Drainage design criteria are taken from the *Stormwater Management Manual* (Public Works Department, City of Grand Junction, CO; June, 1994). Reference is also made to the Appendices in the *Stormwater Management Manual* for development of design parameters. The Rational Method is used to develop a total runoff estimate for post-development conditions. Because the developed runoff will be 100% retained on site, runoff is only calculated for the 100-year precipitation event for the Mesa County urbanized area. For drainage purposes the property was divided into two drainage basins, sub-basin A and sub-basin B. Because the developed runoff from sub-basins A & B will be retained on site, the simple formula for total retention was used to size the retention basins ($Q=P100_{24} \times A \times C_{100d}$).

4. Drainage Design for Developed Conditions

As shown on the Grading and Drainage Plan, post-development drainage will consist of channeling surface flows to two retention basins. One will be located in an unpaved area at the southeast corner of the leased property and the other will be located in a drainage swale located on the west side of the property. It is assumed that if future development is undertaken east of the property, another drainage plan will be required and the new plan will address the new drainage issues.

Developed runoff is estimated using the *Rational Method.* Peak runoff flow for two site scenarios is calculated. The scenarios include runoff for the 100 year precipitation event for developed conditions in sub-basins A & B.

Sub-basin A Developed Drainage Calculation:

Total Area of sub-basin A = 136,350 sq.ft.

Total Roof/Paved Area = 111,100 ft^2, "C" number = .95 for Type D soil, slope 0-2%, from Table B-1 SWMM.

Total bare dirt = 25,250 ft^2 , "C number = .34 for type D soil, slope 0-2%, from Table B-1

Depth/duration/frequency from Appendix A = 2.01 inches for 100-year storm

$Q=P100_{24} \times A \times C_{100d}$ - **paved/roof area** = (2.01in.)(1ft/12in.)(111,100 ft^2)(.95) = 17,680ft^3

$Q=P100_{24} \times A \times C_{100d}$ - **bare dirt area** = (2.01in.)/(1ft/12in.)(25,250ft^2)(.34) = 1,440ft^3

(Note: the bare dirt area will remain as historic and runoff will not go to the retention basin.)

Thus, the total 100 year developed runoff for Sub-basin A to be retained is 17,680ft^3.

Calculation for Retention Basin A:

Total runoff volume = 17,680ft^3

Total proposed ponding depth = 4 ft

19,120ft^3/4ft = 4420 ft^2

The square root of 4420 ft^2 = 66.5 feet, thus, the basin footprint needs to be 66.5 feet x 66.5 feet square or equivalent. Therefore, if the effective storage of the retention pond is 4 ft, the basin will have to be approximately 66.5 feet square to hold the design storm runoff.

Due to property boundary constraints, retention basin A is designed as a rectangle approximately 30 ft wide and 160 ft long providing a 4800 ft^2 footprint. The basin will have maximum slopes on the berms of 3H:1V and will have over 2 ft of freeboard while containing the runoff from the 100 year event.

Sub-basin B Developed Drainage Calculation:

Total Area of sub-basin B = 55,550 sq.ft.

Total Roof/Paved Area = 50,550 ft^2, "C" number = .95 for Type D soil, slope 0-2%, from Table B-1 SWMM.

Total bare dirt = 5,000 ft^2 , "C number = .34 for type D soil, slope 0-2%, from Table B-1

Depth/duration/frequency from Appendix A = 2.01 inches for 100-year storm

$Q=P100_{24}$ x A x C_{100d} - **paved/roof area** = (2.01in.)(1ft/12in.)(50,550 ft^2)(.95) = 8,050ft^3

$Q=P100_{24}$ x A x C_{100d} - **bare dirt area** = (2.01in.)/(1ft/12in.)(5,000ft^2)(.34) = 290ft^3

The total 100 year developed runoff for Sub-basin B is 8,340ft^3.

Calculation for Retention Basin B:

Total runoff volume = 8,340ft^3

Total proposed ponding depth = 2 ft

8340ft^3/2ft = 4170 ft^2

The square root of 4170 ft^2 = 64.5 feet, thus, the basin footprint needs to be 64.5 feet x 64.5 feet square or equivalent. Therefore, if the effective storage of the retention pond is 2 ft, the basin will have to be approximately 64.5 feet square to hold the design storm runoff. The basin will have maximum slopes on the berms of 3H:1V.

Due to the existence of a natural swale on the west side of the property, retention basin B is designed to take advantage of the existing topography. The footprint within the 95 ft contour is approximately 3,600 ft^2, and the ponded volume at 1.5 ft depth is approximately 8400 ft^3. Thus, the basin will contain the 100 year runoff from the new development at water level 96.5 ft. The basin will have maximum slopes on the berms of 3H:1V and will have 2 ft of freeboard while containing the runoff from the 100 year event.

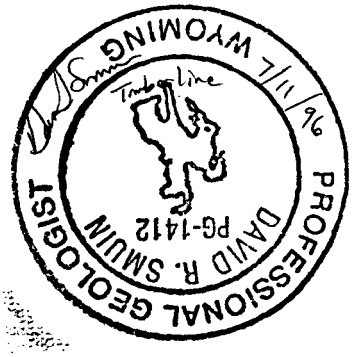
5. Results and Conclusions

The historic peak flow runoff was not estimated because 100% of the runoff from the development will be retained on site. The total developed runoff for the 100-year event from sub-basin A is calculated as 19,120ft^3 and for sub-basin B it is 8,340ft^3. The grading and drainage plan shows the proposed runoff flow routing and drainage basin design.

6. Certification

I, David R. Smuin, hereby certify this drainage report for Timberline Ground Services was completed by myself or under my direct supervision and has been prepared in accordance with good hydrological engineering practices.

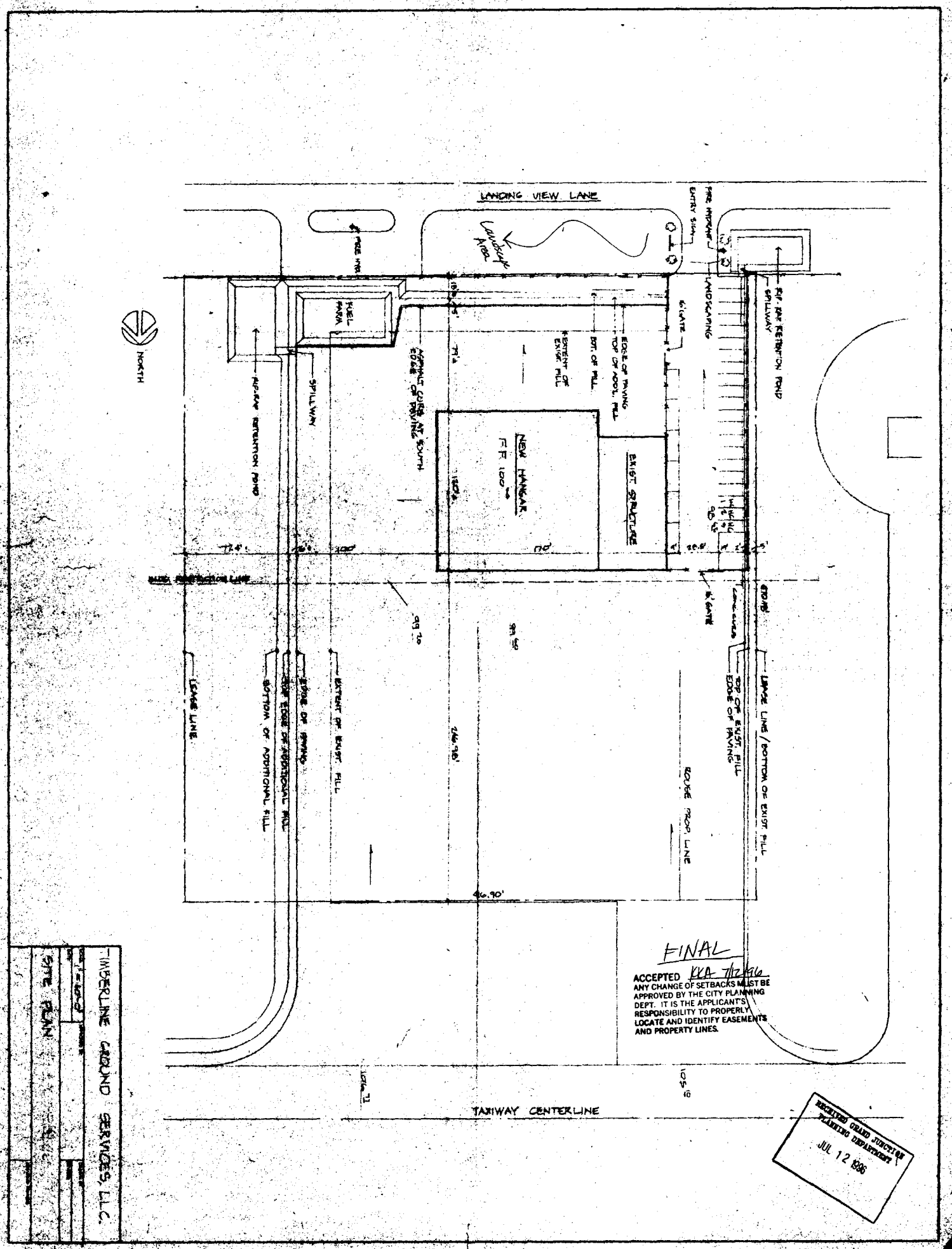
Seal



David R. Smuin RPG/Hydrologist

Date

7/11/96



FINAL

ACCEPTED KKA 7/12/96

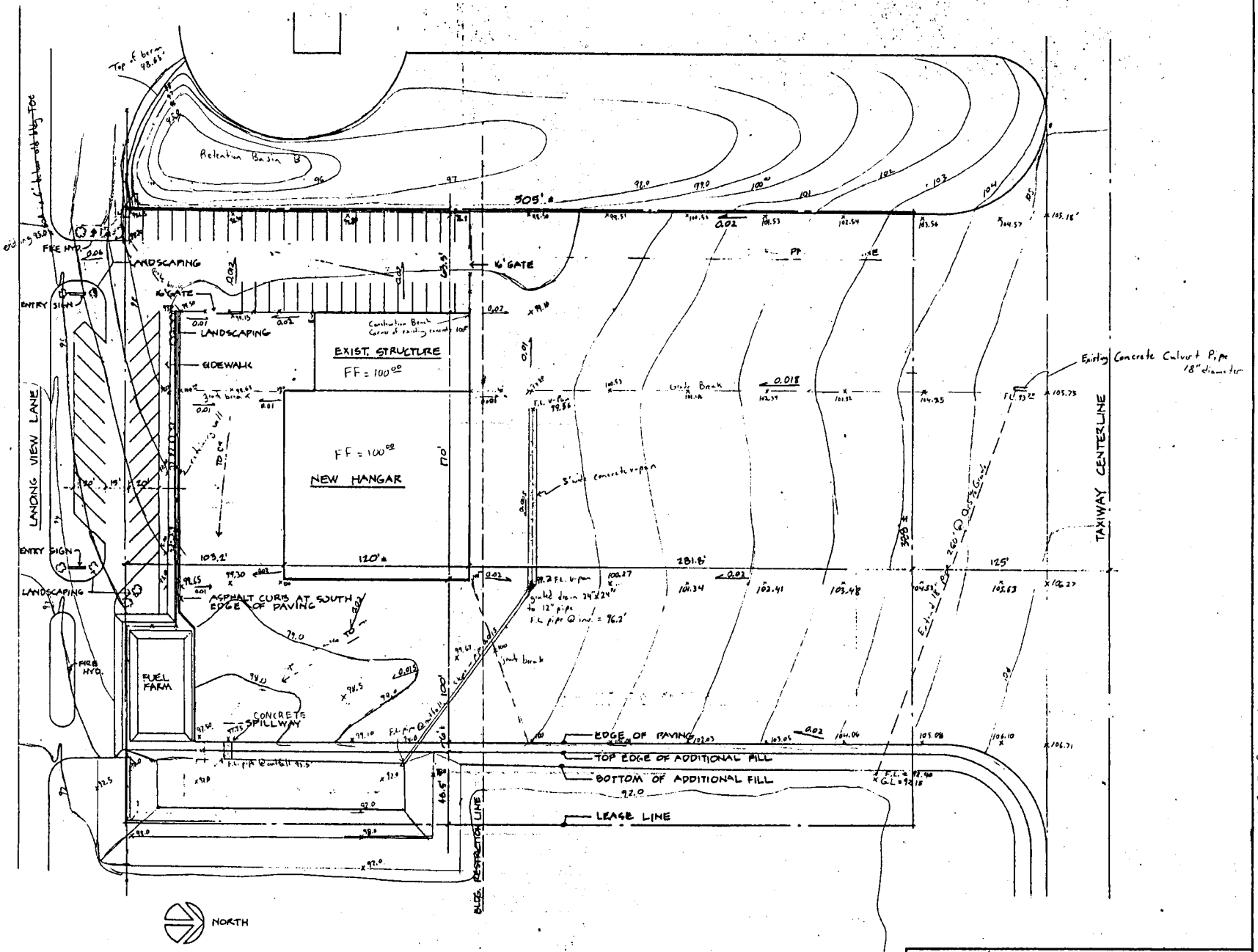
ANY CHANGE OF SETBACKS MUST BE APPROVED BY THE CITY PLANNING DEPT. IT IS THE APPLICANT'S RESPONSIBILITY TO PROPERLY LOCATE AND IDENTIFY EASEMENTS AND PROPERTY LINES.

RECEIVED GRAND JUNCTION PLANNING DEPARTMENT JUL 12 1996

TIMBERLINE GROUND SERVICES, L.L.C.

SITE PLAN

SPR-1996-161



Proposed Grading and Drainage Plan

TIMBERLINE GROUND SERVICES, L.L.C.

SCALE: 1" = 40'-0" | APPROVED BY | DRAWN BY

DATE: | REVISED

SITE PLAN

DRAWING NUMBER

1.

SPR-1996-161