FEE $	10.00
TCP $	0
SIF $	292.00

PLANNING CLEARANCE

(Single Family Residential and Accessory Structures)

Community Development Department

BLDG PERMIT NO. 82470

Your Bridge to a Better Community

BLDG ADDRESS 3005 Sunlight Dr.

TAX SCHEDULE NO. 2943-042-67-004

SUBDIVISION Faircloud

FILING 3 BLK 2 LOT 4

(1) OWNER Grand Ridge Properties

(1) ADDRESS 3032 I-70 Bus. Loop

(1) TELEPHONE 434-4616

(2) APPLICANT Great Services

(2) ADDRESS 3032 I-70 Bus. Loop

(2) TELEPHONE 434-4616

SQ. FT. OF PROPOSED BLDGS/ADDITION 1448

SQ. FT. OF EXISTING BLDGS Ø

TOTAL SQ. FT. OF EXISTING & PROPOSED 1448

DATE

NO. OF DWELLING UNITS:
Before: Ø After: 1 this Construction

NO. OF BUILDINGS ON PARCEL
Before: Ø After: 1 this Construction

TB

USE OF EXISTING BUILDINGS N/A

DESCRIPTION OF WORK & INTENDED USE Single Family Residence

TYPE OF HOME PROPOSED:
X Site Built ____ Manufactured Home (UBC)
____ Manufactured Home (HUD)
____ Other (please specify) ____

REQUIRED: One plot plan, on 8 ½" x 11" paper, showing all existing & proposed structure location(s), parking, setbacks to all property lines, ingress/egress to the property, driveway location & width & all easements & rights-of-way which abut the parcel.

☞ THIS SECTION TO BE COMPLETED BY COMMUNITY DEVELOPMENT DEPARTMENT STAFF ☜

ZONE PD

SETBACKS: Front 23' from property line (PL)
or ____ from center of ROW, whichever is greater

Side 5' from PL, Rear 25' from PL

Maximum Height 32'

Maximum coverage of lot by structures 35%

Permanent Foundation Required: YES X NO ____

Parking Req'mt 2

Special Conditions ____

CENSUS 11 TRAFFIC 46 ANNX# ____

Modifications to this Planning Clearance must be approved, in writing, by the Community Development Department. The structure authorized by this application cannot be occupied until a final inspection has been completed and a Certificate of Occupancy has been issued, if applicable, by the Building Department (Section 305, Uniform Building Code).

I hereby acknowledge that I have read this application and the information is correct; I agree to comply with any and all codes, ordinances, laws, regulations or restrictions which apply to the project. I understand that failure to comply shall result in legal action, which may include but not necessarily be limited to non-use of the building(s).

Applicant Signature Jeff Arch Cmswlt Date 11/21/01

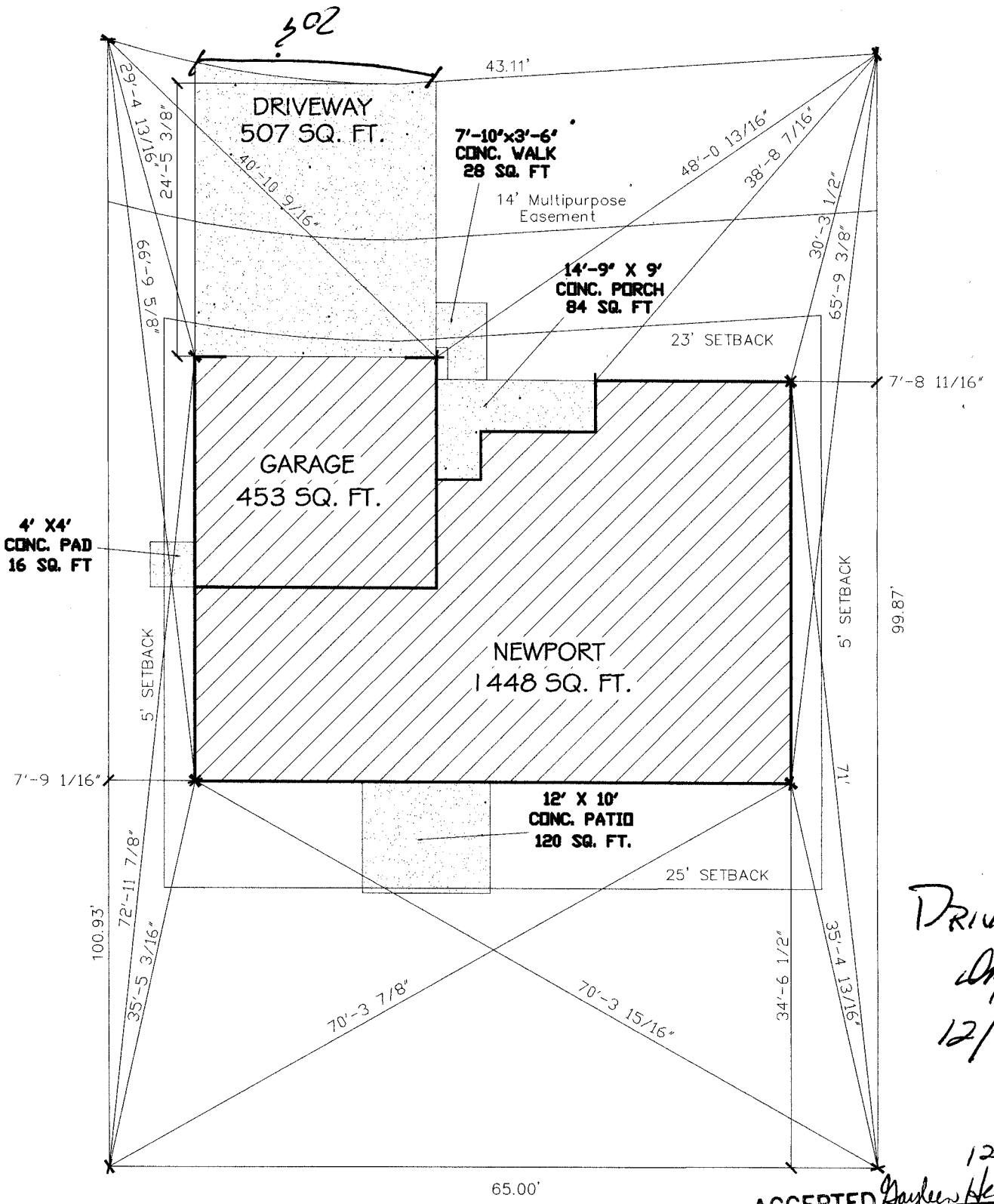
Department Approval Kathleen Henderson Date 12-14-01

Additional water and/or sewer tap fee(s) are required:	YES ✓	NO	W/O No. 13274
Utility Accounting C. Bensley		Date	12/14/01

VALID FOR SIX MONTHS FROM DATE OF ISSUANCE (Section 9-3-2C Grand Junction Zoning & Development Code)

(White: Planning) ***(Yellow: Customer)*** ***(Pink: Building Department)*** ***(Goldenrod: Utility Accounting)***

SUNLIGHT DRIVE



DRIVE OR
DRP
12/14/07

12-14-01
ACCEPTED: Gaylen Henderson
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.

LOT 4 BLOCK 2
3005 Sunlight Drive
Newport, RT

GRAND JUNCTION
LINCOLN DeVORE, Inc.
GEOTECHNICAL ENGINEERS – GEOLOGISTS

1441 Motor St.
Grand Junction, CO 81505

TEL: (970) 242-8968
FAX: (970) 242-1561

December 11, 2001

Great New Homes
3032 I-70 Business Loop
Grand Junction, CO 81504

Re: Open Excavation Observation
3005 Sunlight, Grand Junction, CO

As requested, Grand Junction Lincoln DeVore personnel have completed a foundation excavation evaluation at the above referenced site on 12-4-01. The purpose of this observation and evaluation was to determine the type and condition of the soils on the site and to relate their engineering characteristics to foundation reactions of the proposed structure. This letter contains general recommendations for construction of a residential foundation, but is not a foundation design and may not be used as such. Our conclusions and recommendations for this site are presented below.

Soil Classification: The surface soils on this site consist of a series of silty clay and sandy clay soils which are a product of mud flow/debris flow features which originate on the south-facing slopes of the Bookcliffs. These mud flow/debris flow features are a small part of a very extensive mud flow/debris flow complex along the base of the Bookcliffs and extending to the Colorado River. Utilizing recent events and standard evaluation techniques, this tract is not considered to be within with an active debris flow hazard area.

The surface soils are an erosional product of the upper Mancos Shale and the Mount Garfield Formations which are exposed on the slopes of the Bookcliffs. The soils contained within these mud flow/debris flow features normally exhibit a metastable condition which can range from very slight to severe. Metastable soil is subject to internal collapse and is very sensitive to changes in the soil moisture content. Based on the field and laboratory testing of the soils on this site, the severity of the metastable soils can be described as slight.

The soils at foundation level on this site visually classified as clayey sand and very low plastic silty sand of moderate compressive properties. These soils are similar to the surface soils described in the Western Colorado Testing Inc., Report of Geotechnical Investigation for this subdivision, Job # 207597, 9-19-97. This upper soil is believed to be in excess of 15 feet thick below the excavation and overlies the Mancos Shale Formation of low expansive properties. The allowable bearing capacities of the upper soils on this site, after wetting and compaction, are 1500 psf maximum and 200 psf minimum.

In-place soil density tests were taken within the building excavation on 12-4-01. These 4 in-place soil density tests indicate the wetted, reworked soils have a dry density ranging from 114 to 125 pounds per cubic foot. Densities of this magnitude indicate these reworked soils, in near proximity to the footings, do not possess moderate compressible or possible collapsible properties. No soft areas were indicated by the final density tests taken on 12-4-01 nor were soft areas observed by personnel of Grand Junction Lincoln DeVore on that date.

Unless specifically noted, this site observation, any associated testing and the reworking/compaction of the soils at foundation level, addresses only the soils within 1 to 2 feet below the bottom of the building foundation excavation. It is possible that soil conditions which may affect the performance of this foundation system are present below the depth of soil compaction by the contractor and the testing performed by Grand Junction Lincoln DeVore. The grading and drainage recommendations are considered very important for the long term stability of this foundation system and the structure.

Man-made Fill: The soils on this site appear to be of a man-made fill origin. Grand Junction Lincoln DeVore no records regarding the placement of this fill. In-place density testing of the reworked soils within the foundation excavation has been accomplished. The results of this in-place density testing indicates the fill will be suitable for use as a bearing material. It is believed the man-made fill on this site is less than 2 feet thick.

Soil Moisture Conditions: The soils at foundation level within the original excavation were believed to be dry to damp, based upon site conditions and our experience in this area. No free water was noted in the excavation. Some moisture was added to the soils in the excavation by the contractor in order to obtain proper compaction.

Foundation Type Recommended: A limited review (minimal calculations performed) of the contractor supplied building plans indicate that large building loads, either distributed or concentrated, are not planned. A foundation system built in accordance to the Minimum House Foundation Standards of Mesa County and the City of Grand Junction would be appropriate for this site. The thickened edge, structural slab (monolithic type) foundation system may be utilized on this site. Monolithic slabs which include exterior patio or entry ways should ensure these exterior slab surfaces slopes away from the building area (recommended 1/4" per foot). The relevant tables of wall reactions, foundation walls, footings and piers must be used to size the foundation elements.

If a foundation system for this structure has been designed by a Structural Engineer, the system must be constructed in strict compliance with these plans and specifications with no alterations or deviations allowed unless proper approval is first obtained by the Design Engineer.

Voids Beneath Foundation Walls: Voids are not required for this foundation design.

Reinforcing: The foundation shall be reinforced as shown on the foundation design. No changes shall be made to this placement of reinforcing without written approval of the design engineer or architect.

If a site specific foundation design has not been accomplished for this site, it may be appropriate to use the reinforcing schedule, from the relevant table(s) of the Minimum House Foundation Standards of Mesa County and the City of Grand Junction.

In the walls retaining soil in excess of 4 feet in height, vertical reinforcing may be necessary to resist the lateral pressures (restrained case) of the soils along the wall exterior. To aid in designing such vertical reinforcing, an equivalent fluid pressure (E.F.P) on the order of 35 pcf would be appropriate for the native soils.

Floor Slabs: Non-Structural floor slabs on grade, if any, should be positively separated from all structural portions of this building and allowed to float freely. Frequent scoring (control joints) of the slabs should be provided to allow for possible shrinkage cracking of the slab. These control joints should be placed to provide maximum slab areas of approximately 200 to 360 square feet. Any man-made fill placed below floor slabs on grade should be compacted to a minimum of 90% of its maximum Modified Proctor dry density, ASTM D-1557. These soils should be placed at a moisture content conducive to the required compaction (usually Proctor optimum moisture content ±2%).

Drainage and Grading: Adequate site drainage should be provided in the foundation area both during and after construction to prevent the ponding of water and the wetting or saturation of the subsurface soils. We recommend that the ground surface around the structure be graded so that surface water will be carried quickly away from the building. The minimum gradient within 10 feet of the building will depend on surface landscaping. We recommend that paved areas maintain a minimum gradient of 2%, and that landscaped areas maintain a minimum gradient of 8%. It is further

recommended that roof drain downspouts be carried at least 5 feet beyond all backfilled areas and discharged a minimum 10 feet away from the structure. **Proper discharge of roof drain downspouts may require the use of subsurface piping in some areas.** Under no circumstances should a 'dry well discharge' be used on this site, unless specifically sited by a Geotechnical Engineer. Planters, if any, should be so constructed that moisture is not allowed to seep into foundation areas or beneath slabs or pavements.

The existing drainage on the site must either be maintained carefully or improved. We recommend that water be drained away from structures as rapidly as possible and not be allowed to stand or pond within 15 feet of the building or foundation. We recommend that water removed from one building not be directed onto the backfill areas of adjacent buildings.

Should an automatic lawn irrigation system be used on this site, we recommend that the sprinkler heads, irrigation piping and valves be installed no less than 5 feet from the building. In addition, these heads should be adjusted so that spray from the system does not fall onto the walls of the building and that such water does not excessively wet the backfill soils.

It is recommended that lawn and landscaping irrigation be reasonably limited, so as to prevent undesirable saturation of subsurface soils or backfilled areas. Several methods of irrigation water control are possible, to include, but not limited to:

* Metering the Irrigation water.
* Sizing the irrigation distribution service piping to limit on-site water usage.
* Encourage efficient landscaping practices.
* Enforcing reasonable limits on the size of high water usage landscaping within 5 feet of the building or foundation.
* Incorporating 'xeriscaping' landscaping and irrigation techniques.

A plastic membrane placed on any Crawlspace ground surfaces may retain/trap excessive amounts of water beneath the membrane. If future moisture problems develop or are anticipated, the Foundation Design Engineer or the Geotechnical Engineer may require that the membrane be partially or completely removed from the crawlspace area.

Provided all recommendations found herein pertaining to site surface drainage, grading and soil compaction are closely followed, a perimeter foundation drain would not be required. For fully finished basements, however, the use of a perimeter foundation drain would significantly reduce potential moisture related problems which can arise from subsequent area development.

Backfill: To reduce settlement and aid in keeping water from reaching beneath this building, all backfill around this building should be mechanically compacted to a minimum of 90% of its maximum Modified Proctor dry density ASTM D-1557. The only exception to this would be the components of the perimeter foundation drain, if any. All backfill should be composed of the native soils and should not be placed by soaking, jetting or puddling. All backfill placed in utility trenches around this structure or below foundation walls should be mechanically compacted to a minimum of 90% of its maximum Modified Proctor dry density ASTM D-1557. These soils should be placed at a moisture content conducive to the required compaction (usually Proctor optimum content $\pm$2%).

Cement Type: Type II, Type I-II or Type II-V cement is recommended for all concrete which is in contact with the soils on this site. Calcium chloride should not be added to a Type II, Type I-II or Type II-V cement under any circumstances.

Remarks: We recommend that the bottom of all foundation components rest a minimum of 1-1/2 feet below finished grade or as required by the local building codes. Foundation components must not be placed on frozen soils.

Structural slab-on-grade (Monolithic) foundation systems typically have an effective soil cover of less than 12 inches. Under normal use, the building and foundation system radiates sufficient heat that frost heave from the underlying soils is not normally a problem. However, additional protection can be provided by applying an insulation board to the exterior of the foundation and extending this board to approximately 18 inches below the final ground surface grade. This board may be applied either prior to or after the concrete is cast and it is very important that all areas of soil backfill be compacted. Local building officials should be consulted for regulatory frost protection depths.

Senate Bill 13 (CRS 6-6.5-101) Discussion: This particular residence is being constructed on foundation soils which do not possess a "significant potential for expansion". We recommend that the owner receive a copy of this summary report of our soil analysis and site recommendations.

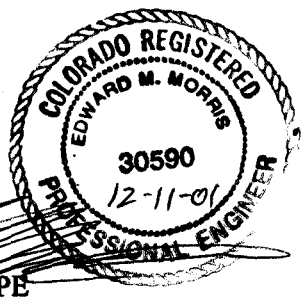
Limitations: This report is issued with the understanding that it is the responsibility of the owner, or his representative to ensure that the information and recommendations contained herein are brought to the attention of the architect and engineer for the project, and are incorporated into the plans. In addition, it is his responsibility that the necessary steps are taken to see that the contractor and his subcontractors carry out these recommendations during construction. The findings of this report are valid as of the present date. However, changes in the conditions of a property can occur with the passage of time, whether they be due to natural processes or the works of man on this or adjacent properties. In addition, changes in acceptable or appropriate standards may occur or may result from legislation or the broadening of engineering knowledge. Accordingly, the findings of this report may be invalid, wholly or partially, by changes outside our control. Therefore, this report is subject to review and should not be relied upon after a period of 3 years.

The recommendations of this report pertain only to the site investigated and are based on the assumption that the soil conditions do not deviate from those described in this report. If any variations or undesirable conditions are encountered during construction or the proposed construction will differ from that planned on the day of this report, Grand Junction Lincoln DeVore should be notified so that supplemental recommendations can be provided, if appropriate.

Grand Junction Lincoln DeVore makes no warranty, either expressed or implied, as to the findings, recommendations, specifications or professional advice, except that they were prepared in accordance with generally accepted professional engineering practice in the field of geotechnical engineering.

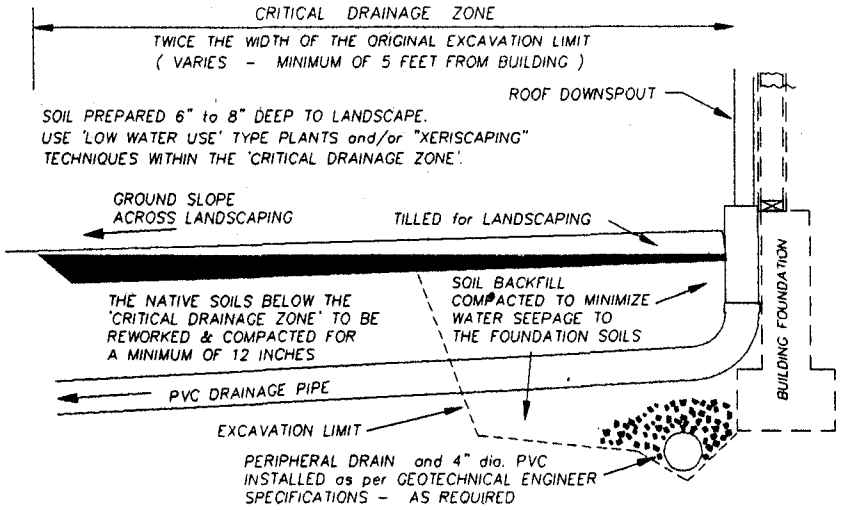
Respectfully submitted,

GRAND JUNCTION
LINCOLN-DeVORE, INC.

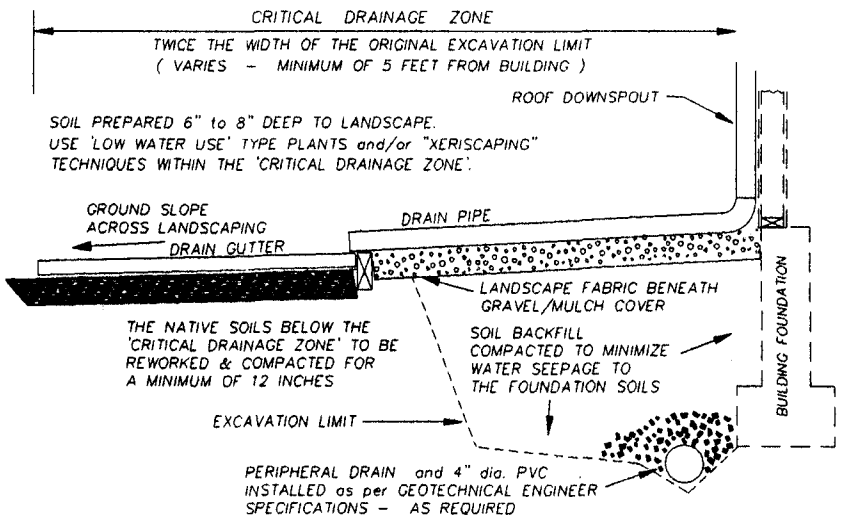


By: Edward M. Morris PE
Principal Engineer

GJLD Job # 89054-GJ



DRAINAGE / LANDSCAPING CONCEPT
'LOW WATER' & PERIMETER DRAIN



DRAINAGE / LANDSCAPING CONCEPT
'NO WATER ZONE' & PERIMETER DRAIN

GRAND JUNCTION
LINCOLN-DeVORE, Inc.
GEOTECHNICAL ENGINEERS-GEOLOGISTS

EXTERIOR DRAINAGE / LANDSCAPING CONCEPT		
		DATE: 8-18-98
SCALE: NONE		File # D-DRAIN1