

NOTE: Storm waters that enter Lang Avenue will be intercepted and conveyed via existing storm drain in Lang Ave. and Jefferson St.

PROJECT BENCH MARK
N. BONNET BOLT ON FIRE
HYDRANT. ELEV = 5141.13

LANG AVENUE N.E.

INSTALL NEW CONC. RUNDOWN
SEE DETAIL THIS SHEET.
INSTALL NEW 24" SIDEWALK
CULVERT PER C.O.A. STD.
DETAIL #2236

PROPOSED THREE STORY
OFFICE BUILDING
F.F. ELEV. = 5142.50

ROOF DRAINS
THRU SIDEWALK

ENTRY

INSTALL NEW
GARDEN/RETAINING
WALL

BUILD NEW 30' PRIVATE
ENTRANCE. SEE C.O.A.
STD. DETAIL #2426
MATCH EXISTING FLOWLINE.
MAINTAIN REQ'D 0.9'
WATERBLOCK AT END OF
RETURN. FIELD VERIFY
ELEVATIONS SHOWN.

RETAINING WALL CONSTRUCTION
IN BUILDING SYSTEM. TOP OF
WALL TO BE AT ELEV. 45.00.

DRAINAGE PLAN

THE SUBJECT PROPERTY IS JUST SOUTH OF PASEO DEL NORTE IN THE JOURNAL CENTER BUSINESS PARK. THIS PARCEL WAS JUST RECENTLY PART OF A MINOR SUBDIVISION. AS SHOWN ON PANEL 137 OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY "FIRM" MAP, THIS SITE IS NOT WITHIN NOR ADJACENT TO A DESIGNATED FLOOD HAZARD AREA.

THE PROPOSED IMPROVEMENTS INCLUDE THE CONSTRUCTION OF A THREE STORY OFFICE COMPLEX WITH RELATED PARKING, SIDEWALK AND LANDSCAPING.

THE EXISTING TOPOGRAPHY WAS PREPARED FROM A FIELD SURVEY PERFORMED IN JULY 1998. A SUBSEQUENT REVIEW OF THE SITE BY THIS OFFICE REVEALED THAT ALL THE INFORMATION SHOWN HEREON IS CONSISTENT WITH THE ACTUAL CONDITIONS THAT EXIST IN THE FIELD.

CALCULATIONS

THE FOLLOWING CALCULATIONS WERE DEVELOPED USING THE CITY OF ALBUQUERQUE DPM SECTION 22.2

SITE CHARACTERISTICS:
SITE LOCATION: ZONE 2
PRECIPITATION: P = 2.35 inches

LAND TREATMENT:
UNCOMPACTED SOIL - TREATMENT A
LANDSCAPE - TREATMENT B
COMPACTED SOIL - TREATMENT C
BUILDINGS & PAVING - TREATMENT D

EXCESS PRECIPITATION:
TREATMENT A E = 0.53 inches
TREATMENT B E = 0.78 inches
TREATMENT C E = 1.13 inches
TREATMENT D E = 2.12 inches

PEAK DISCHARGE:
TREATMENT A = 1.56 cfs/acre
TREATMENT B = 2.28 cfs/acre
TREATMENT C = 3.14 cfs/acre
TREATMENT D = 4.70 cfs/acre

TOTAL AREA	EXISTING	PROPOSED
TREATMENT A = 1.60 AC.		
TREATMENT B = 0.00 AC. = 0.0%	0.00 AC. = 0.0%	
TREATMENT C = 0.00 AC. = 0.0%	0.33 AC. = 20.6%	
TREATMENT D = 1.58 AC. = 98.7%	0.00 AC. = 0.0%	
TREATMENT D = 0.02 AC. = 1.3%	1.27 AC. = 79.4%	

ONSITE - EXCESS PRECIPITATION & VOLUMETRIC RUNOFF:

EXISTING RUNOFF:
WEIGHTED E = $[(0.53)(0.00) + (0.78)(0.00) + (1.13)(1.58) + (2.12)(0.02)] / 1.60$
= 1.14 inches
V100-6hr = $(1.14)(1.60) / 12 = 0.1523$ acre ft = 6,630 cf

DEVELOPED RUNOFF:
WEIGHTED E = $[(0.53)(0.00) + (0.78)(0.33) + (1.13)(0.00) + (2.12)(1.27)] / 1.60$
= 1.84 inches
V100-6hr = $(1.84)(1.60) / 12 = 0.2453$ acre ft = 10,690 cf

ONSITE - PEAK DISCHARGE:

EXISTING DISCHARGE:
Q100 = $(1.56)(0.00) + (2.28)(0.00) + (3.14)(1.58) + (4.70)(0.02) = 5.05$ cfs
DEVELOPED DISCHARGE:
Q100 = $(1.56)(0.00) + (2.28)(0.33) + (3.14)(0.00) + (4.70)(1.27) = 6.72$ cfs

RESULTS:

10,690 - 6,630 = 4,060 cf INCREASE IN VOLUMETRIC RUNOFF
6.72 - 5.05 = 1.67 cfs INCREASE IN PEAK DISCHARGE

BENCH MARK

A.C.S. BENCH MARK, STATION "11-D18"
A BRASS CAP LOCATED @ THE S.E.
QUAD. INTX. OF PASEO DEL NORTE
AND SAN PEDRO DR.
ELEVATION = 5235.67

LEGAL DESCRIPTION

TRACT 1A-4-A JOURNAL CENTER

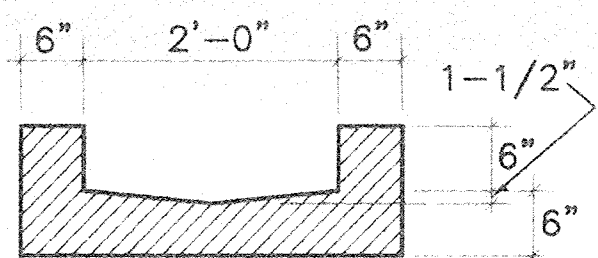
GENERAL NOTES

- PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SOON AS POSSIBLE TO RESOLVE THE CONFLICT WITH A MINIMUM AMOUNT OF DELAY.
- ALL WORK ON THIS PLAN SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE LOCATION ONLY, AND LINES MAY EXIST WHERE NONE ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE UTILITY OWNER OR FROM EXISTING PLANS, AND THIS INFORMATION MAY BE INCOMPLETE, OR OBSOLETE AT THE TIME OF CONSTRUCTION. THE ENGINEER HAS NOT UNDERTAKEN ANY FIELD VERIFICATION OF THESE LOCATIONS, LINE SIZES OR MATERIAL TYPE, MAKES NO REPRESENTATION THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE OR UNDERGROUND INSTALLATION IN OR NEAR THE AREA IN ADVANCE OF AND DURING ANY EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES AND UNDERGROUND FACILITIES. IN PLANNING AND CONDUCTING EXCAVATIONS, THE CONTRACTOR SHALL COMPLY WITH ALL STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
- THE CONTRACTOR SHALL INSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHTS-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AND BY WETTING THE SOIL TO KEEP IT FROM BLOWING.
- THE CONTRACTOR SHALL OBTAIN ANY AND ALL PERMITS REQUIRED BY BERNALILLO COUNTY FOR THE COMPLETION OF THE WORK PRIOR TO BEGINNING CONSTRUCTION.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AND ALL CURRENT UPDATES.
- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR PERMIT.
- TWO WORKING DAYS PRIOR TO AN EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE A 260-1990 FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- BACKFILL COMPACTION SHALL BE ACCORDING TO ARTERIAL STREET USE.
- MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.

NAME	DATE
HYDROLOGY	
INSPECTOR	
A.C.E./FIELD	

GENERAL LEGEND

EXISTING CONTOUR	91
PROPOSED CONTOUR	91
PROPOSED SPOT ELEVATION	56.4
FLOWLINE	
FLOW DIRECTION ARROW	
PROPOSED CONCRETE	
TOP OF CURB ELEVATION	TC
TOP OF SIDEWALK ELEVATION	TSW
FLOWLINE ELEVATION	FL
TOP OF ASPHALT	TA
EXISTING SPOT ELEVATION	x 73.07



CONCRETE RUNDOWN DETAIL
NOT TO SCALE

DEPTH	RUNDOWN CAPACITIES Q(cfs)
0.1	0.7
0.2	2.0
0.3	3.7
0.4	5.6
0.5	7.8

N

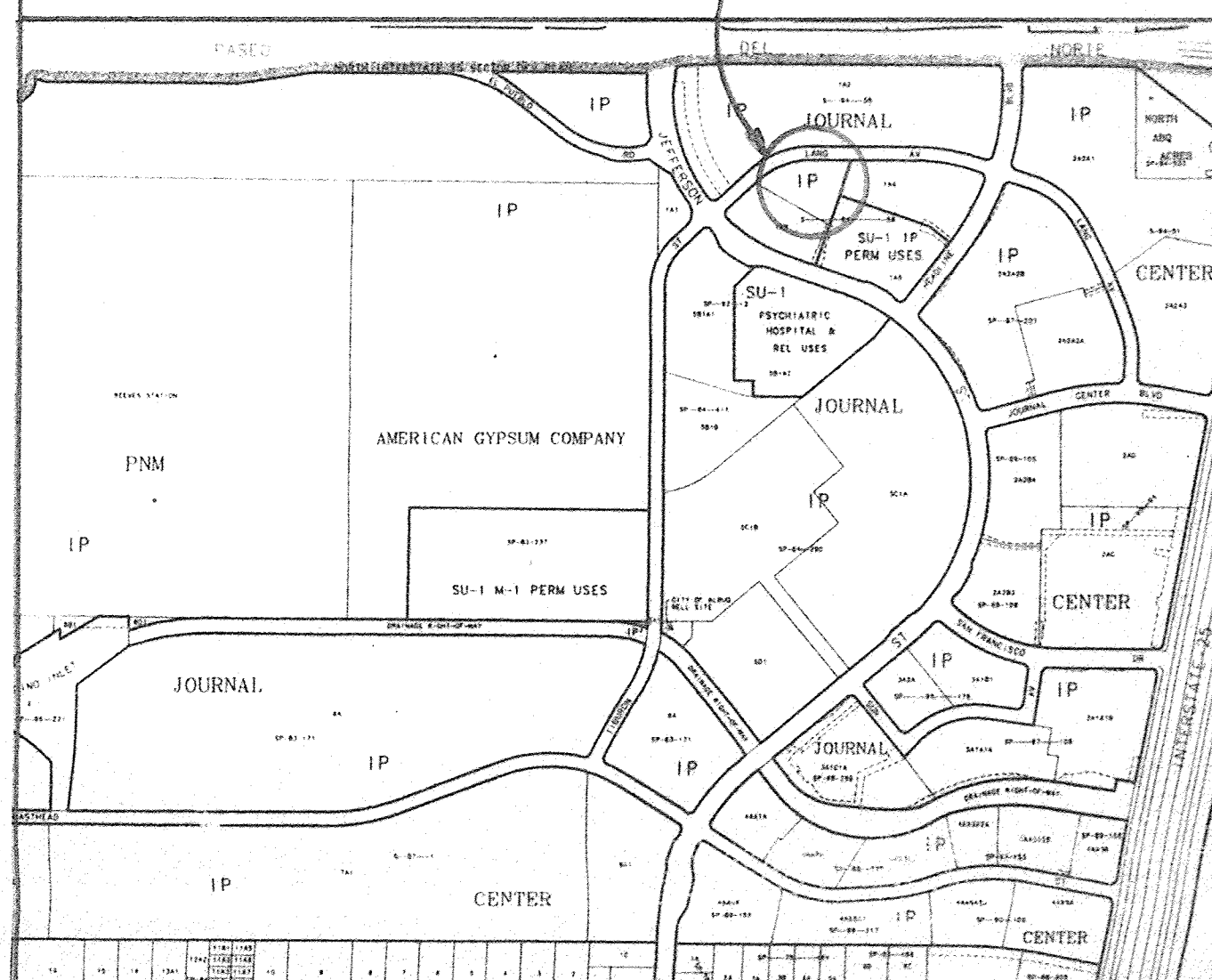
SCALE: 1" = 30'

ONE FOOT CONTOUR INTERVAL
ADD 5100' TO ELEVATIONS SHOWN



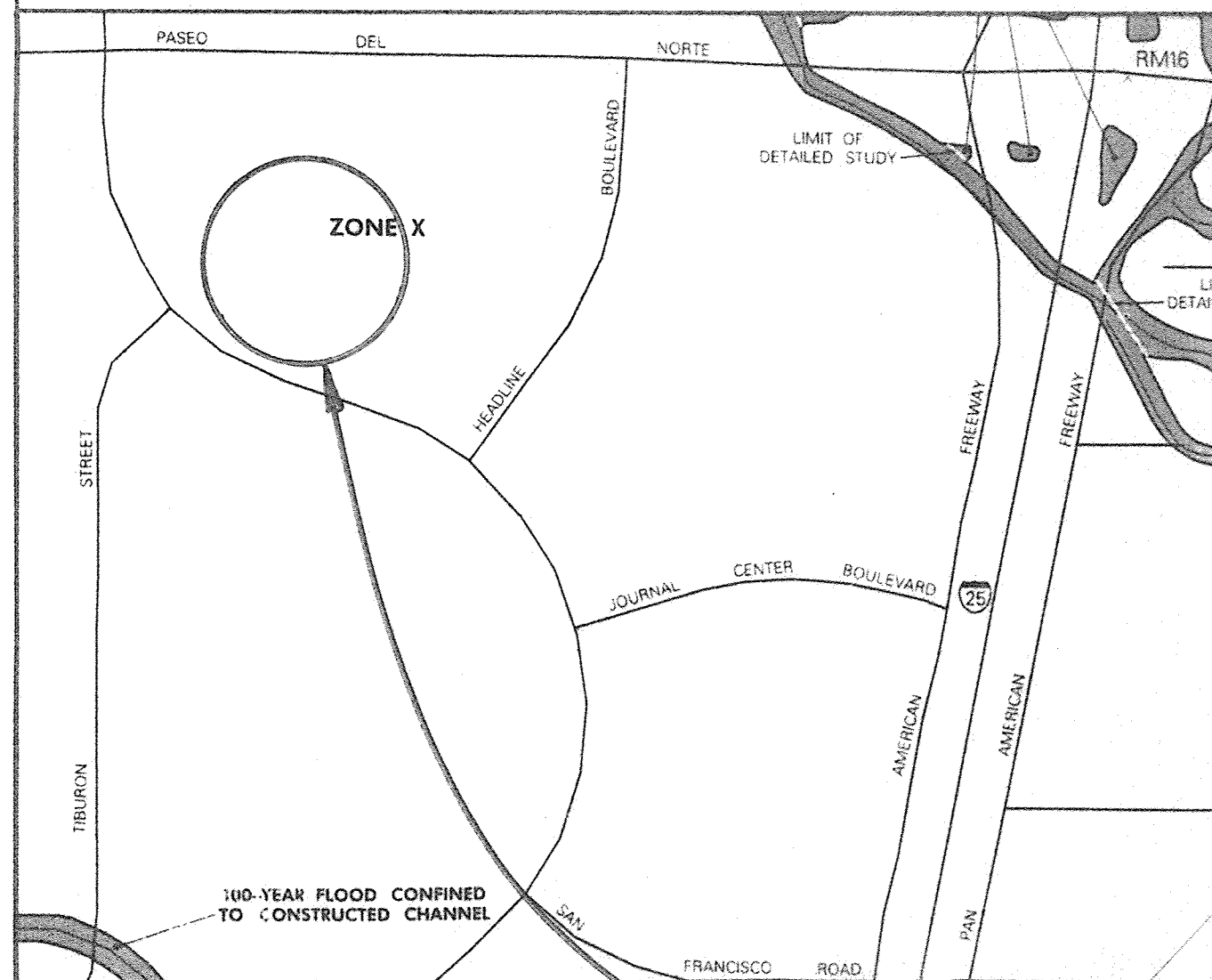
LOCATION MAP

PROJECT LOCATION



ZONE MAP

D-17



FLOOD BOUNDARY MAP

PROJECT LOCATION

FIRST STATE BANK OFFICE
GRADING AND DRAINAGE PLAN

KEMPER-VAUGHAN
CONSULTING ENGINEERS

3700 COORS RD. N.W. • ALBUQUERQUE, NEW MEXICO 87120 • (505) 831-4520

Designed KRK Drawn KRK Checked KRK Sheet of

File JLS/FSB G&D Date JULY 1998

**Office Building for:
 Journal Center
 Office Group
 L.L.C.**

SITE GRADING PLAN

REVISIONS

ARCHITECT ENGINEER

DATE
 February 26, 1999

SHEET

C-4 of 4

PROJECT BENCH MARK
 N. BONNET BOLT ON FIRE
 HYDRANT. ELEV = 5141.13

INSTALL NEW 24" SIDEWALK
 CULVERT PER C.O.A. STD.
 DETAIL #2236

INSTALL NEW CONC. RUNDOWN
 SEE DETAIL THIS SHEET.
 RUNDOWN FORMED BUT
 NOT POURED 9-9-99

F.F. ELEV.=5142.50 ✓

ROOF DRAINS
 THRU SIDEWALK (TYP.)

INSTALL NEW
 GARDEN/RETAINING
 WALL

BUILD NEW 30' PRIVATE
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 STD. DETAIL #2426
 MATCH EXISTING FLOWLINE.
 MAINTAIN REQ'D 0.9'
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RETAINING WALL CONSTRUCTION
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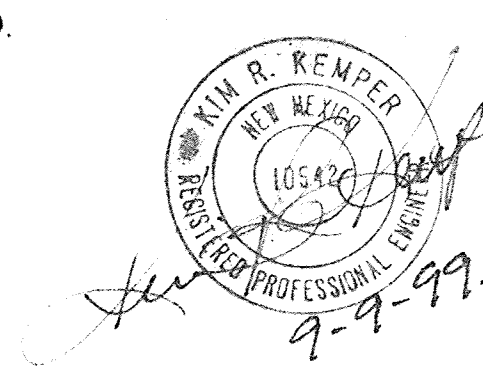
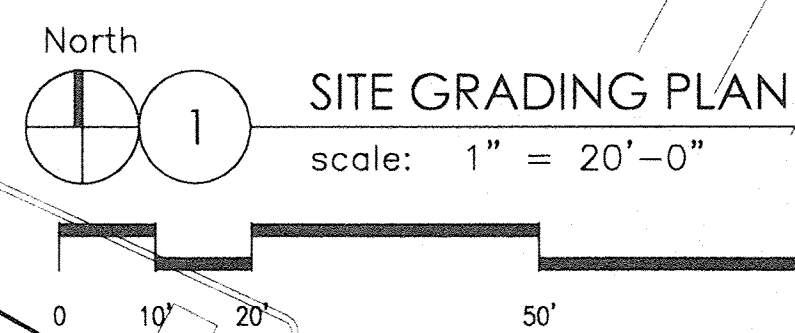
GRADE BREAK AT
 LOCATION OF
 EXISTING ASPHALT.

NEW 6" CURB

THIS SITE IS IN SUBSTANTIAL COMPLIANCE WITH THE
 APPROVED GRADING AND DRAINAGE PLAN WITH
 ENGINEERS SEAL DATED 8-11-98 (WITH THE REVISIONS
 AS REFLECTED IN THE RECORD DRAWING ELEVATIONS
 SHOWN HEREON). THE SITE DRAINAGE WILL FUNCTION
 AS ORIGINALLY PROPOSED.

LIMITS OF ASPHALT
 REMOVAL.

REMOVE EXISTING CURBING
 NEW ASPHALT TO MATCH
 EXISTING.



D17-0341

h/r