HYDROLOGY

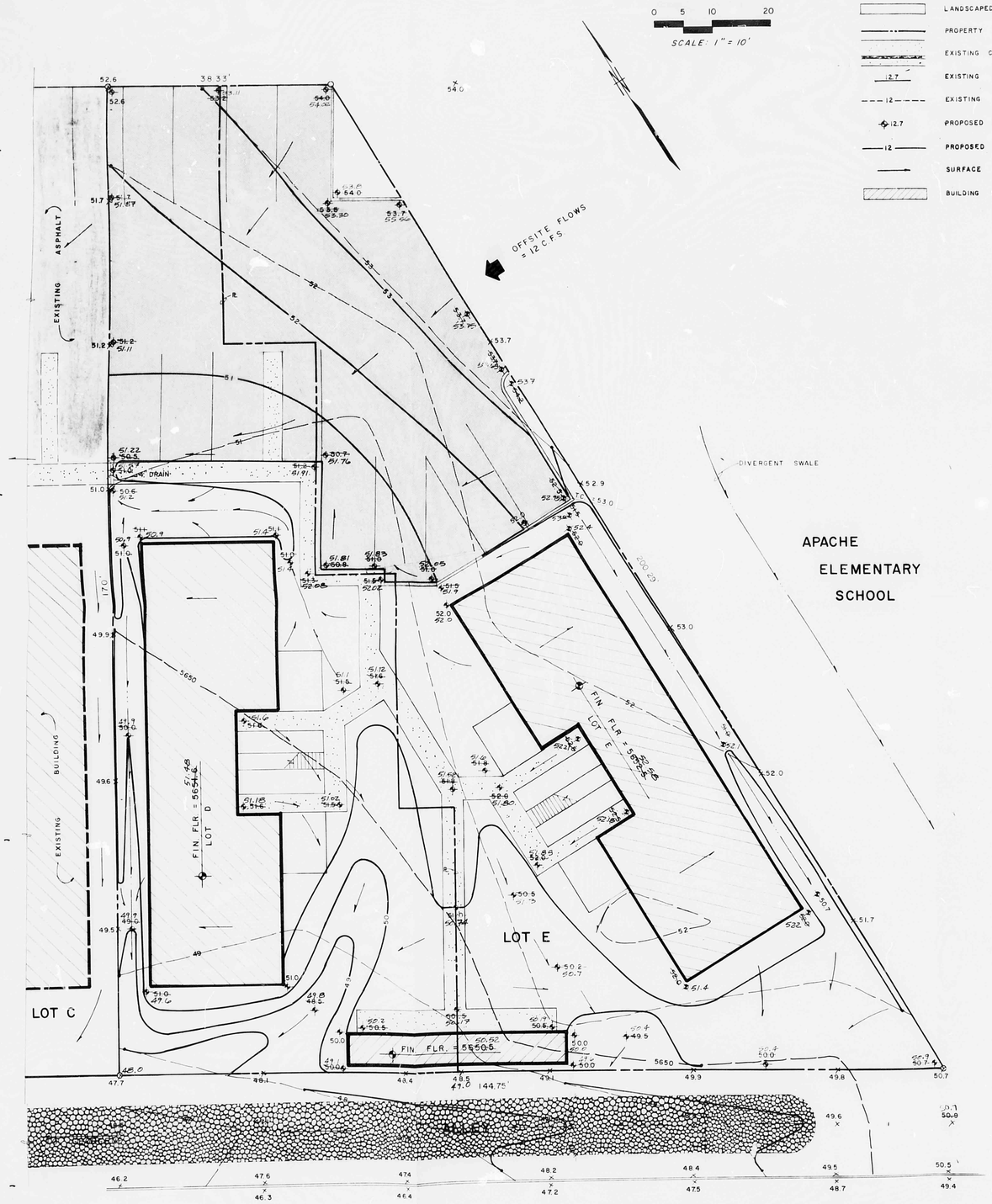
K22/D29

K22/D29

GEORGENE
4-PLEXES

2 PLANS

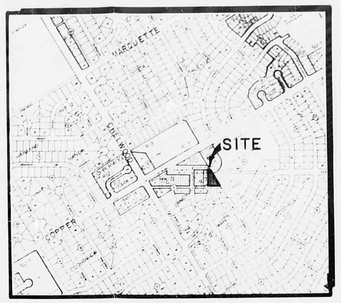
K22/D29



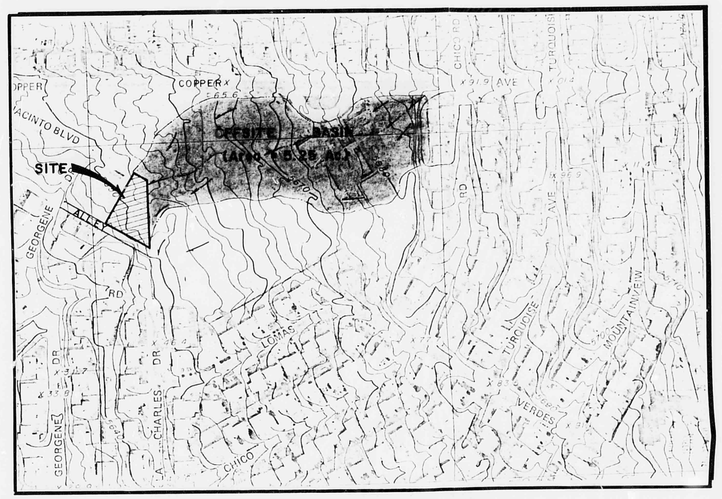
NOTE DEVELOPER TO REGRADE ALLEY, THIS AREA TO PROVIDE SWALE IN CENTER OF ALLEY. PLACE 3/4" DIA. GRAVEL IN SWALE AREA AS SHOWN TO GEORGENE ST. TYPICAL GRAVEL DEPTH = 3"

LEGEND

- ASPHALT PAVING
- LANDSCAPED AREA
- PROPERTY LINE
- EXISTING CURB & GUTTER W/SIDEWALK
- 12.7 EXISTING SPOT ELEVATION
- 12 EXISTING CONTOUR
- 12.7 PROPOSED SPOT ELEVATION
- 12 PROPOSED FINISHED CONTOUR
- SURFACE FLOW DIRECTION
- BUILDING STRUCTURE



VICINITY MAP - K-22



OFFSITE DRAINAGE AREA MAP

AS-BUILT DRAWING SUBMITTED 12-20-84 C.L. Williams

DRAINAGE AND GRADING PLAN NOTES

1. Legal Description: Lots D&E of Block 3, Panorama Addition.
2. Benchmark: City of Albuquerque Benchmark 14-K22, elevation 5637.90.
3. Flood Hazard Area: Zone C, Panel 350002-0031 of the Flood Insurance Rate Maps dated September 15, 1983.
4. Soil Group: The soil survey of Bernalillo County prepared by the Department of Agriculture and SCS define this soil to be gravelly fine sandy loam of Hydrologic Soil Group B.
5. Off-Site Flows: As indicated on the off-basin map there is 5.25 acres draining through this site. The following is the quantifications of these flows:

   Area = 5.25 acres

   Length of watershed = 850 lin. ft.

   $$\text{Slope} = \frac{34}{890} = 0.04 \text{ ft./ft.}$$

   $$\text{Time of conc.} = 0.0078 \frac{L^{0.77}}{S^{0.385}} = 5 \text{ minutes} - \text{use 10 minutes}$$

   $P_{100\text{-}6\ hour}$ = 2.5" (plate 22.2D1)

   % impervious = 1.2/5.25 = 22%

   C = 0.44

   I = (2.11)(2.5) = 5.3 inches/hour

   Q_{100} = CIA = (0.44)(5.3)(5.25) = 12 c.f.s.

   Q_{10} = (6.57)(12) = 7.9 c.f.s.
6. Undeveloped Drainage Conditions: The two lots drain to the southwest into an alley which has been graded to drain to Georgene Street. The ultimate outfall is to Chelwood Park Boulevard which has a 54' diameter storm sewer outfalling to the I-40 channel. The 54' diameter RCP has a capacity of 218 c.f.s. for the A.M.D.S. Analysis point 1801 Volume III of the A.M.D.S. specify a flow rate of 308 c.f.s. with 74 c.f.s. overland.

   The undeveloped flow rate is determined as follows:

   C = 0.34 plate 22.2C-1

   I = 5.3 inches/hour plate 22.2D2

   A = 0.36 acres

   Q_{100} = CIA = (0.34)(5.3)(0.36) = 0.7 c.f.s.

   Q_{10} = (0.657)(.7) = 0.5 c.f.s.
7. Developed Drainage Management Plan: The developed flow from the sites is quantified as follows:

   Area = 0.36 acres

   I = 5.3 inches/hour

   $$\text{\% impervious} = \frac{0.20 \text{ acres}}{0.36 \text{ acres}} = 56$$

   C using plate 22.2C1 = 0.61

   Q_{100} = (0.61)(5.3)(0.36) = 1.2 c.f.s.

   Q_{10} = 0.657(1.2) = 0.7 c.f.s.

   The sites will allow the off-site flows to be routed through the site. to an existing asphalt parking area which will drain to Georgene St. The remainder of the site will drain following the existing patterns to the alley, then to Georgene St.

RECEIVED DEC 21 1984 DESIGN HYDROLOGY SECTION

K22/D29

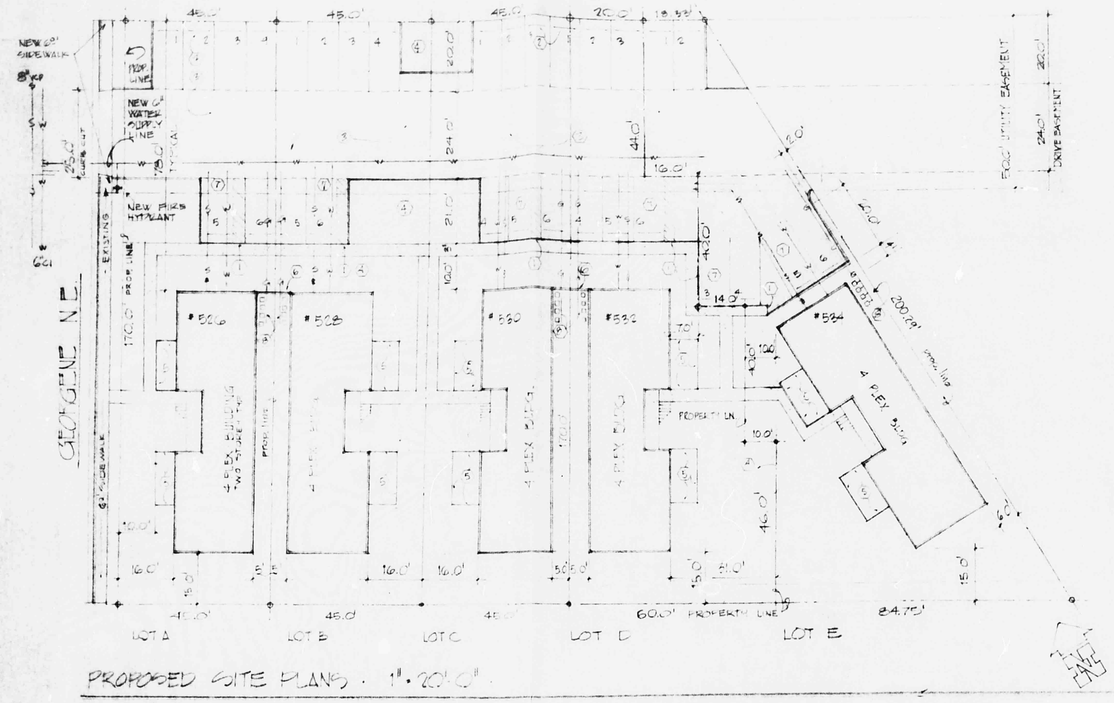
C.T.S. INC. ENGINEERING
1100 ALVARADO N.E. SUITE A
ALBUQUERQUE, NEW MEXICO 87110
(505) 266-3444

REVISIONS	DATE

DESIGNED
DRAWN
CHECKED

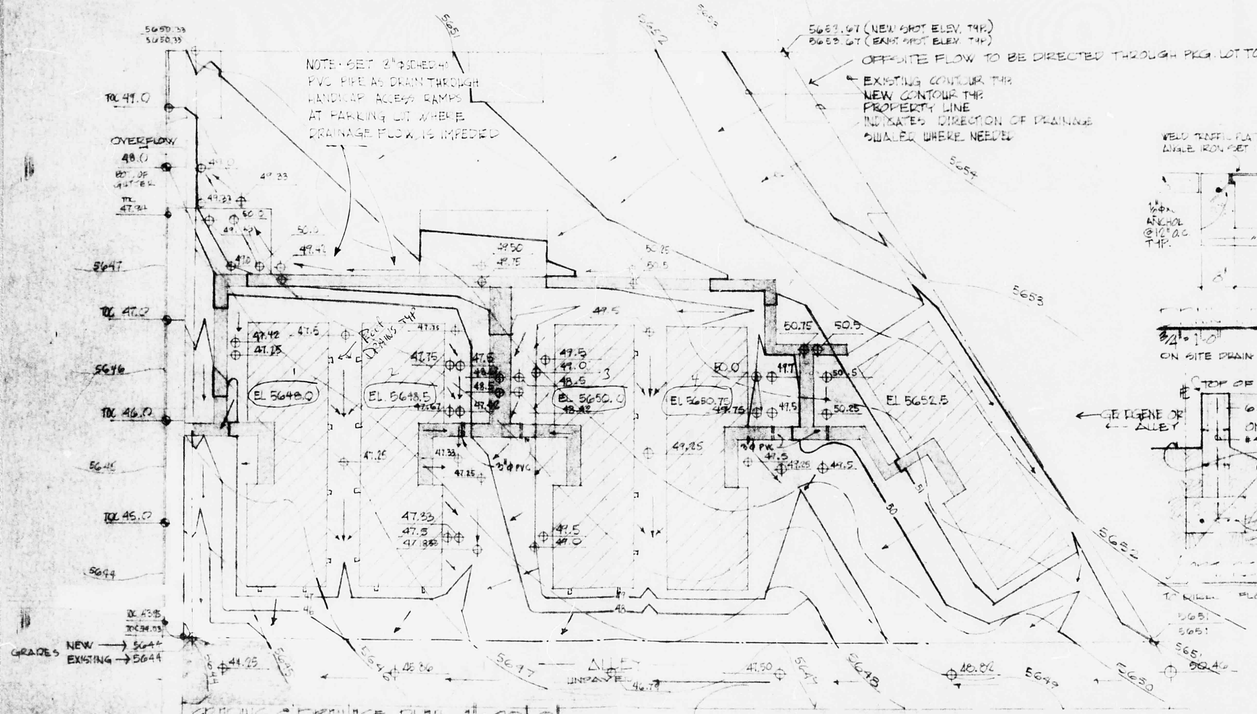
DRAINAGE / GRADING PLAN
GEORGENE DR. FOURPLEXES
532 & 534 GEORGENE N.E.

SHEET ___ OF ___



PROPOSED SITE PLANS · 1" = 20'-0"

LEGAL DESCRIPTION: PANORAMA ADDITION · BLOCK 3 LOTS A, B, C, D & E

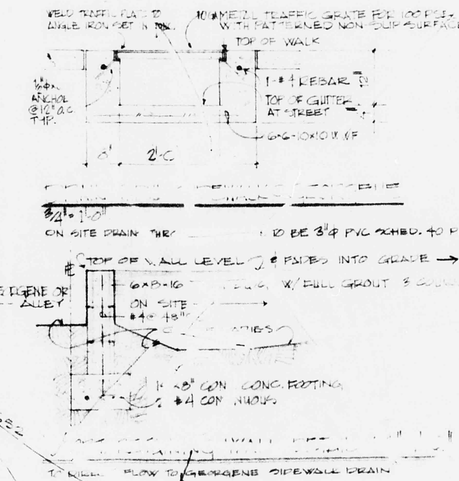


GRADING & DRAINAGE PLAN 1" = 20'-0"

REVISED 2-8-81 DRC

NOTE: LANDSCAPING TO BE PER ZONE NO PLANTING LEF ON R.O.W. PER DON SCHUMACHER

PROPOSED ALLEY GRADES BY CITY OF ALBUQUERQUE PUBLIC WORKS DEPT
ALL SITE WORK TO ALIGN WITH PROPOSED GRADES · DRWG. #26-4-76
ALLEY SURFACE TO BE COMPACTED AND DRAIN TO STREET



APPROVED FOR DRAINAGE
2-10-81
SEWER DRAINAGE DISCUSSION
WITH GRADING SYSTEM
(revised)

SITE PLAN NOTES

1. RAMP LEVEL WITH PARKING LOT
2. CONC. PARKING BUMPER 7'10" EA. SPACE
3. PAVE AND APPROPRIATELY MARK THE LOCATION OF SPACES PER CITY STANDARDS
4. AREA NOT USED FOR BUILDING, WALKS, OR PARKING TO BE LANDSCAPED AND TO BE PROVIDED IRRIGATION BY HOSE BIBBS
5. 6'-0" FENCE GRAPESTAKE W/ 2x4 UPRIGHT 8'-0" @ 2x4 TOP & BOTTOM RAIL
6. 6'-0" WALL · SAME CONSTRUCTION AS BUILDING
7. 12'x20' HANDICAP DESIGNATED PARKING SPACE · 1 FOR EACH 4-PLEX TYPICAL
8. GAS LINE & METER
9. WATER LINE & METER TO EXISTING IN GEORGENE N.E.
10. SEWER LINE TO EXISTING IN GEORGENE N.E.

DENSITY CALCULATIONS

BUILDING AREA: 3256 SF MIN. 12% LOT SIZE REQUIRED: 2612 SF MINIMUM

LOT	LOT AREA	DRIVE EASEMENT	NET ALLOWABLE AREA
LOT A	7050 SF	900 SF	6750 SF
LOT B	7050 SF	900 SF	6750 SF
LOT C	7050 SF	900 SF	6750 SF
LOT D	7110 SF	930 SF	6180 SF
LOT E	8481 SF	920 SF	7561 SF

GENERAL NOTES

ZONED	R-1
FIRE ZONE	[illegible]
SEISMIC ZONE	[illegible]
TYPE OF CONSTRUCTION	V-N
OCCUPANT LOAD	[illegible]
OCCUPANCY	R-1
SOIL BEARING CAPACITY	2500 PSF
MINIMUM CONCRETE STRENGTH @ 28 DAYS	[illegible] PSI
WIND LOAD	20 PSF
FLOOR LOAD (L.L.)	40 PSF
ROOF LOAD (D.L.+L.L.)	44 PSF
BALCONY & STAIR LOAD (L.L.)	100 PSF
HEATED FLOOR AREA 4 · APTS TOTAL	3256 SF
COVERED PORCH AREA UPPER & LOWER	162 SF
STORAGE AREA · EA. APT	280 SF
FINISHES TO COMPLY WITH	U.B.C. CH. 42

ALL GLAZING TO COMPLY WITH FED. STD. 84 C.P.S.C. SAFETY STANDARD (42 FR 14426; 16 CFR PART 1201) COMPLIANCE NOT REQUIRED FOR GLAZING WITH SILL HEIGHT 24½" ABOVE HIGHEST ADJACENT WALKING SURFACE

1-2A10BC FIRE EXTINGUISHER PROVIDED FOR EACH APARTMENT

LEGAL DESCRIPTION

PANORAMA ADDITION · BLOCK 2 · LOTS A THRU E

ZONING INDEX GRID # K-22

ENERGY CONSERVATION ANALYSIS

ENVELOPE AREAS:

DOORS: 84 WINDOWS: 394 EXTERIOR WALL AREA: 3924 SF
ROOF 3256 SF FLOOR 3256 SF OPAQUE WALL: 3424 SF

EXTERIOR WALL	R=13.55 U_w=.074
EXT. AIR FILM	R= 0.17
EXT. FINISH	R= 0.2
WALL SHEATHING	R= 1.15
2x4 WOOD STUD (9%)	R= } 10.4
WALL INSULATION (91%)	R= }
SHEETROCK	R= .6
INTERIOR AIR FILM	R= .68
TOTAL	R=13.55

WEIGHTED AVERAGE

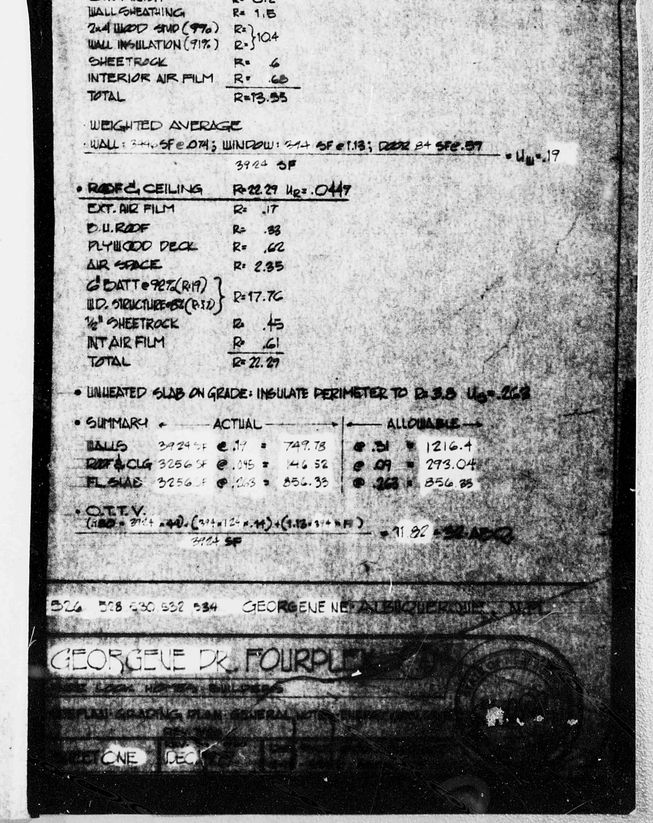
WALL: 3424 SF @ .074; WINDOW: 394 SF @ 1.13; DOOR 84 SF @ .57 / 3924 SF = U_w=.19

• ROOF & CEILING	R=22.27 U_o=.0449
EXT. AIR FILM	R= .17
B.U. ROOF	R= .33
PLYWOOD DECK	R= .62
AIR SPACE	R= 2.35
6" BATT @ 92% (R19) }	R=17.76
W.D. STRUCTURE @ 8% (R1.2) }	
½" SHEETROCK	R= .45
INT AIR FILM	R= .61
TOTAL	R=22.27

• UNHEATED SLAB ON GRADE: INSULATE PERIMETER TO D=3.8 U_o=.263

• SUMMARY	ACTUAL		ALLOWABLE
WALLS	3924 SF @ .19 =	749.78	@ .31 = 1216.4
ROOF & CLG	3256 SF @ .045 =	146.52	@ .09 = 293.04
FL. SLAB	3256 LF @ .263 =	856.33	@ .263 = 856.33

• O.T.T.V. (1.88) = 3924 × 80 · (394 × 1.20 × .11) + (3.13 × 3 × 84 × .68) / 3924 SF = 91.86 < 92.80



CITY OF ALBUQUERQUE
THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT