DEVELOPMENT CONCEPT REPORT

MEADOW CREEK

MONEE TOWNSHIP

WILL COUNTY, ILLINOIS

TECH 3 CONSULTING GROUP, INC.
ENGINEERS SURVEYORS PLANNERS
CRETE, IL (312) 672-4004 NAPERVILLE, IL (312) 983-1500

DEVELOPMENT CONCEPT REPORT
MEADOW CREEK
MONEE TOWNSHIP
WILL COUNTY, ILLINOIS

PREPARED FOR:

MEADOW CREEK CORPORATION

JOB NO. 87028
6-6-87

TABLE OF CONTENTS

SECTION

SECTION 1 CONCEPT

Meadow Creek is a special development designed around the concept of the ownership of private aircraft. The development has 150 single family lots connected to a 3400 foot long private runway by roads-taxiways and taxiway easements. The intent is to allow lot owners to store and provide shelter for their aircraft on their premises. An area designated for commercial use is reserved along Monee-Manhattan Road.

SECTION 2 LOCATION

The site includes approximately 213.003 acres located at the northeast corner of Monee-Manhattan Road and Harlem Avenue, in Monee Township, Will County, Illinois.

The legal description for the parcel is as follows:

> The South Half of the Northwest Quarter of Section 18 and the Southwest Quarter of Section 18 (excepting therefrom the Southeast Quarter of said Southwest Quarter of Section 18) all in Township 34 North, Range 13 East of the Third Principal Meridian, in Will County, Illinois.

Approximately 171.604 acres are designated for single family use, 26.288 acres are for commercial use and 15.111 acres are allotted for runway use.

SECTION 3 DRAINAGE

This site is tributary to Forked Creek and Forked Creek Tributary. A part of Forked Creek Tributary passes through the southern part of the site. Storm water management will be provided for all developed areas of the site in accordance with the Will County ordinance.

Proposed drainage will be provided through the use of roadway swales, culverts, storm sewers and inlets. Detention facilities will be provided throughout the site as required.

SECTION 4 SEWER AND WATER FACILITIES

Sanitary sewer and water will be provided to each lot of the development. These utilities shall be ultimately owned and maintained by Consumers Illinois Water Company.

SECTION 5

SOILS

A report from the Will-South Cook Soil and Water Conservation District has been prepared dated October 13, 1983 and a copy is included in this report. See Section 8.

In addition a supplemental soils investigation was prepared by Soil and Material Consultants, Inc. dated February 15, 1984. A copy of the summary of this report is included in Section 8.

SECTION 6

PLANNED UNIT DEVELOPMENT CONCEPT

In this case the Planned Unit Development Concept is requested to allow the use and storage of private aircraft throughout the development.

(a) Architectural Plans

This development is single family and each lot owner will develop plans for their residence. All residences within the development must conform to the proposed covenants and all Will County Building Codes.

(b) School Impact Analysis

The following tables indicate projected enrollment to the School District 201U for any given year assuming 100% occupancy throughout the school year. There also is a possibility of a 10%-20% reduction due to some children attending parochial schools.

Based on the house distribution of:

85% @ 4 bedrooms	=	128	DU
10% @ 3 bedrooms	=	15	DU
5% @ 5 bedrooms	=	7	DU
		150	DU

The child count is as follows:

	K-5/	6-8/	K-8/	9-12/	// K-12
4 Bd. w/128	@.531=68	@.311=40	@.892=114	@.417=53	@1.311=168
3 Bd. w/15	@.435= 7	@.193=15	@.629= 9	@.315= 5	@ .944= 14
5 Bd. w/7	@.780= 5	@.556= 4	@1.336= 9	@.568= 4	@1.904= 13
	80	59	132	62	195

(c) Tax Impact Analysis

The following is the estimated yearly tax revenue for the development in 1987 dollars for the following taxing bodies based on the following:

150 s.f. Res. @$2400.00 = $360,000.00

150,000 s.f. Commercial @$1.25 = $187,500.00

Tax Body	$
Forest Preserve	7,373
Will County Bldg. Comm.	12,773
Monee Township Gen. Tax	18,963
Monee Township Rd. & Br.	25,030
Monee Township Gen. Assist.	683
Monee Equip. & Bldg.	2,655
Monee Co. Aid Bridge Fd.	3,793
Monee Fire Dist.	26,214
School Dist. 201U	383,027
Comm. College Dist. 515	20,859
County Funds	46,130
	547,500

(d) Traffic Analysis

Traffic from the single family areas is expected to produce an average daily traffic (ADT) of 1520 vehicles with a peak hour volume of 137 vehicles.

Traffic from the commercial site is projected at a peak hour volume of 500 vehicles and will be tributary to Monee-Manhattan Road at various possible entrances/exits.

These values would be accumulative over a five year period of time, that of construction and occupation.

Commercial peak hours of traffic will have an approximately 2 hour lag time to that of the residential traffic.

(e) Need

A marketing report was prepared by Norcom International Corporation dated Jan-Feb 1987 for the proposed project. A copy of the summary is included in Section 8.

(f) Objectives

The objectives of this planned development is to provide a single family environment which would include the special amenity of a private runway for use by lot owners.

(g) Character

The Planned Unit Development is requested due to the uniqueness of the concept introducing private aircraft into a single family environment. Because of the low density and somewhat exclusive covenants this development promises to be something special.

(h) Ownership

The parcel is presently owned by South Holland Bank and Trust Company and is held in a land trust.

(i) Notices/Names

All owners of the land immediately adjoining the subject property were sent notices of the hearing as per a previously submitted verification.

(j) Schedule

This project is scheduled to begin construction as soon as possible and shall continue in an orderly fashion to completion. It is the developers intent to construct all single family lots and the runway in one phase.

(k) Covenants

A copy of the proposed covenants, for the single family residences, has been attached. This is subject to change as final review is completed. See Section 8.

(l) Density

As per the site plan, the residential portion would include the following:

Gross Acreage - 213.0028 ac

Commercial Area - 26.2882 ac

Runway - 15.1105 ac

Residential Acreage - 171.6043 ac

No. of Dwelling Units - 150

Minimum Lot Area - 30,000 sf

Density - 0.8741

Type of Building - Detached S.F. Res.

No. of Bedrooms - 593 (3.95 Ave.)

The following is a distribution of residential lot sizes and percentages:

Lot Area	No. of Lots	%
30,000 - 34,999	38	25.3
35,000 - 39,999	53	35.3
40,000 and over	59	39.3
	150	100.0

SECTION 7 SUMMARY

As required by the Zoning Ordinances, we are listing the deviations from the proposed R2-A Zoning.

(a) We are requesting the use of 15.1105 acres for a runway.

(b) We are requesting that the interior roads-taxiways be retained by the Homeowners Association and remain private.

(c) We are requesting that private aircraft may be stored on individual lots. Also that structures may be erected to store such aircraft.

(d) We are requesting that no sidewalks be installed along the private roads-taxiways.

We are pleased to transmit this proposed Planned Unit Development of Meadow Creek. We have prepared this report to help define and explain our proposal and our intentions for the project. This report together with the preliminary plans should convey to you the pride we feel regarding this unique project.

COVENANTS

DECLARATION OF PROTECTIVE COVENANTS, CONDITIONS, RESTRICTIONS, RESERVATIONS, AND EASEMENTS
FOR
MEADOW CREEK

THIS DECLARATION, made this ____ day of _____, 1987, by SOUTH HOLLAND TRUST & SAVINGS BANK, a corporation of Illinois, as Trustee under Trust Agreement dated _____, _____, and known as Trust No. _____ (hereinafter referred to as "Trustee"):

W I T N E S S E T H :

WHEREAS, the Trustee is the Legal Titleholder of the following described real estate, to-wit:

> The South half of the NW 1/4 of Section 18 and the SW 1/4 of Section 18 (excepting therefrom the SE 1/4 of said SW 1/4 of Section 18) all in Township 34 North, Range 13 East of the Third Principal Meridian, in Will County, Illinois.

(hereinafter referred to as Meadow Creek); which is more specifically delineated on Plat of Subdivision recorded in Will County, Illinois:

WHEREAS, the Trustee is desirous of subjecting Meadow Creek to the conditions, covenants, restrictions, reservations and easements hereinafter set forth, each of which is, and all of which are, for the benefit of Meadow Creek, as herein set forth, and which shall inure to the benefit of and pass with

said Meadow Creek as hereinafter set forth, and each and every lot thereof:

NOW THEREFORE, the Trustee hereby declares that the said Meadow Creek, as hereinafter described is, and shall be, held, transferred, sold, conveyed, and occupied subject to the conditions, covenants, restrictions, reservations and easements (sometimes hereinafter collectively referred to as "covenants") hereinafter set forth.

ARTICLE I

General Purposes of this Declaration

Meadow Creek hereinabove described is subjected to the covenants hereby declared to insure proper use and appropriate development and improvement of every part thereof; to protect the owners of property in Meadow Creek against such improper use as may depreciate the value of their property; to guard against the erection thereon of buildings built of improper or unsuitable materials; to insure adequate and reasonable development of said Meadow Creek; to encourage the erection of attractive improvements thereon; to prevent haphazard and inharmonious improvement; to secure and maintain proper setbacks from streets and adequate free spaces between structures; to insure desired high standards of maintenance for the benefit and convenience of all owners of lots in Meadow Creek; and in general, to provide adequately for a residential subdivision of the highest quality and character.

ARTICLE II

Definitions

ASSOCIATION. Meadow Creek Community Association, an Illincis non-profit corporation, its successors and assigns.

BUILDING. Any structure having a roof, supported by columns or by walls and intended for the shelter, housing or enclosure of any person, animal or chattel.

BUILDING HEIGHT. The vertical distance measured from the established ground level to the highest point of the underside of the ceiling beams, in the case of a flat roof; to the deck line of a mansard roof; and to the mean level of the underside of rafters between the eaves and the ridge of a gable, hip or gambrel roof. Chimneys and ornamental architectural projections shall not be included in calculating the height.

DECLARANT. South Holland Trust & Savings Bank, not individually but as Trustee under Trust Agreement dated _____, and known as Trust No. _____.

DWELLING. A building or portion thereof designed or used exclusively for residential uses, including single-family dwellings, but not including mobile homes or other trailers, or lodging rooms in hotels, motels or lodging houses.

DWELLING, DETACHED. A dwelling which is surrounded on all sides by open spaces on the same lot.

DWELLING, SINGLE-FAMILY. A dwelling containing one dwelling unit only.

DWELLING UNIT. One or more rooms which are arranged, designed, or used as living quarters for one family only. Individual bathrooms and complete single kitchen facilities, permanently installed to serve the entire family, shall always be included within each dwelling unit.

FAMILY. One or more persons each related to the other by blood, marriage, or legal adoption, or a group of not more than three persons not all so related, together with his or their domestic servants, maintaining a common household in a dwelling.

FRONT BUILDING LINE. A line on a lot as delineated in the recorded plat of subdivision which denotes the required depth of a front yard.

LOT. A parcel of land, under common fee ownership, occupied by or intended for the occupancy by one dwelling and having frontage upon a private or public street or road.

LOT AREA. The area of a horizontal plane, bounded by the vertical planes through front, side and rear lot lines.

LOT LINE, FRONT. That boundary line of a lot which is along an existing or dedicated street line as shown on the recorded plat. On corner lots, the owner may select either street lot line as the front lot line.

LOT LINE, REAR. That boundary line of a lot which is most distant from and is, or is approximately, parallel to the front lot line. If the rear lot line is less than 10 feet in length, or if the lot line forms a point at the rear, the rear lot line shall be deemed to be a line 10 feet in length

within the lot, parallel to and at the maximum distance from the front lot line.

LOT LINE, SIDE. Any boundary of a lot which is not a front or a rear lot line.

STORY. That portion of a building included between the surface of a floor and the surface of the floor next above; or if there is no floor above, the space between the floor and the ceiling next above. A basement or cellar shall not be counted as a story.

STORY, HALF. A space under a sloping roof which has the line of intersection of roof decking and wall not more than three feet above the top floor level, and in which space not more than 60 percent of the floor area is completed for principal or accessory use.

STRUCTURE. Anything erected or constructed, the use of which requires more or less permanent location on or in the ground, or attached to something having a permanent location on or in the ground. A mailbox or other such device, detached or projecting, shall be construed to be a separate structure.

ARTICLE III

General Restrictions as to Meadow Creek

1. Land Use and Building Type. All lots in Meadow Creek, except those designated for other uses, shall be used for private residence purposes only, and no building shall be erected, re-erected or maintained thereon except Single-

Family Dwellings.

2. Building Height. No dwelling shall be more than two and one-half stories or 30 feet in height, whichever is the lesser.

3. Dwelling Size. The ground floor living area per dwelling unit, exclusive of attached garages, carports, hangars for planes, open terraces and breezeways, shall be:

(a) For one-story dwellings - not less than 2,000 square feet.

(b) For dwellings of more than one story - not less than 1,500 square feet.

(c) If a hangar and/or garage is to be constructed on any lot, it shall be attached and no larger than a total of 3,000 square feet in area or 48,000 cubic feet in volume. No hangar, garage, tent, trailer, barn or any such living or storage facility may be built or used as temporary living or storage quarters prior to the building of a residence. No commercial operations of any kind will be allowed on homesites.

4. Location on Lot.

Front Yards. No building shall be located on a lot nearer to a paved street than the front building line shown on the recorded plat of subdivision of Meadow Creek or 40 feet, whichever is greater.

Side Yards. There shall be provided on every lot two side yards, each of which shall be ten percent (10%) of the lot width or 15 feet, whichever is the lesser. On a corner lot, the side yard, abutting a street or road, shall be not less than 40 feet. Where easements for taxiway and

drainage are shown on the recorded plat of subdivision of Meadow Creek, and such easements are located along the side lot lines, side yards shall be not less than the size of said taxiway and drainage easements, or the minimum depth hereinabove in this paragraph described, whichever is greater.

Rear Yards. There shall be provided on every lot a rear yard not less than 40 feet in depth. Where easements for taxiway and drainage are shown on the recorded plat of subdivision of Meadow Creek and such easements are located along the rear lot lines, rear yards shall be not less than the size of said taxiway and drainage easements, or 40 feet, whichever is greater. Lots 93 through 107 and Lot 33 shall have a rear yard not less than 50 feet in depth.

5. Home Occupations, Nuisances and Livestock. No home occupation or profession shall be conducted in any dwelling located in Meadow Creek. No noxious or offensive activity shall be carried on, in or upon any premises, nor shall anything be done thereon which may be, or may become, an annoyance or nuisance to the owners or occupants of one or more neighboring lots. No animals, livestock, poultry, bees or other insects except domestic dogs, cats, and household pets, in reasonable numbers, shall be kept or maintained on any lot. The use of any garage, carport, hangar, driveway, or parking area which may be in front of or adjacent to or part of any lot as an habitual parking place for commercial vehicles is prohibited. No part of any lot shall be used for parking of

private or commercial vehicles or boats, campers, or trailers. The term "commercial vehicles" shall include all automobiles, station wagons, trucks and vehicular equipment which shall bear signs or have printed on the side of same reference to any commercial undertaking or enterprise. Parking of any vehicle at anytime on the street is prohibited. Garage doors visible from the street shall be kept closed at all times when not being used for vehicle ingress and egress. No plants or seeds, or other things or conditions harboring or breeding infectious plant diseases or noxious insects shall be introduced or maintained upon any part of a lot. "For Sale" signs are prohibited.

All taxiway easements designated on the Plat of Subdivision of Meadow Creek shall at all times be kept free and clear of dogs, cats, household pets, machines of every nature and description, baby carriages, bicycles, carts and any and all other items which might or could serve as obstructions or hazards or which might or could interfere with the use of the taxiways for airplane traffic.

The habitual violation of the regulations set forth in this paragraph shall be deemed a nuisance and violation of paragraph 5 of this Article III.

6. Nameplates, Television or Radio Antennae and Towers, Laundry Drying Facilities or Flag Poles. There shall be not more than one nameplate on each lot. A nameplate shall not be more than 48 square inches in area, and contain the name of the occupant and/or the address of the dwelling. It

may be located on the door of the dwelling or the wall adjacent thereto, or free-standing in the front or side yard, provided that the height of the nameplate is not more than 12 inches above the adjoining ground grade. No television or radio antennae, or tower, or laundry-drying equipment shall be erected or used outdoors, whether attached to a building or structure or otherwise, unless approved in writing by the Association. Flag poles are permitted, provided the pole is not more than 25 feet in height, unless otherwise approved by the Association.

7. Temporary Structures. No trailer, basement of an uncompleted building, tent, shack, garage, barn, and no temporary building or structure of any kind shall be used at any time for a residence either temporary or permanent. Trailers, temporary buildings or structures may be located in Meadow Creek and used during construction, but shall be removed upon the termination of construction. Lot owners may maintain temporary tie down facilities for one airplane for a period of two years from the date of this declaration. Thereafter, tie downs on vacant lots are prohibited.

8. Architectural Controls. It is understood and agreed that the purpose of architectural controls is to secure an attractive, harmonious residential development having continuing appeal. No building, fence, wall or other structure, or landscaping, shall be commenced, erected or maintained, nor shall any addition to or change or alteration therein be made, except interior alterations, nor shall any exterior

color changes be made, until the construction plans and specifications, showing the nature, kind, shape, height and materials, color scheme, location on lot and approximate cost of such building or other structure, and the grading plan and landscape plan of the lot and the proposed color change shall have been submitted to and approved in writing by the Association. The Association shall have the right to refuse to approve any such construction plans or specifications, grading plan, color change, or landscape plan, which are not suitable or desirable, in the opinion of the Association for aesthetic or other reasons; and in so passing upon such construction plans and specification, grading plan, color change, or landscape plan, the Association shall have the right to take into consideration the suitability of the proposed building or other structure with the surroundings, the effect of the building, other structure, landscaping or color change on the outlook from adjacent or neighboring properties.

All plans, specifications and other material shall be filed in the office of the Association for approval or disapproval by the Association. A report in writing setting forth the decision or decisions of the Association and the reasons therefor shall thereafter be transmitted to the applicant by the Association within 30 days after the date of filing the plans, specifications and other materials by the applicant. In the event: (a) the Association fails to approve or disapprove the final plans, specifications and other material within 30 days, as required in this Declaration; or (b)

no suit to enjoin construction has been filed within 90 days after commencement of such construction, approval shall not be required, and the requirements of this Declaration shall be deemed to have been complied with.

9. Underground Wiring. No lines or wires for communication or the transmission of electric current or power shall be constructed, placed or permitted to be placed anywhere in Meadow Creek other than within buildings or structures or attached to their walls, unless the same shall be contained in conduits or approved cables constructed, placed and maintained underground.

10. Approval of Sales and Leases. The Trustee hereby grants and gives to the Association, its successors or assigns, the authority to approve or disapprove any and all changes in occupancy or owners of lots in Meadow Creek and the sale, transfer, conveyance, lease or sublease of such lots. The owner or owners of such lots shall give the Association notice in writing of any proposed bona fide sale, transfer, conveyance, lease or sublease, together with an application on a form prescribed by the Association and completed by the proposed grantee, transferee or lessee. The Association shall have 30 days after receipt of such notice and application to approve or disapprove the same and within such 30 day period the Association shall have an assignable option to purchase, lease or sublease said lots, as the case may be, on the same terms and conditions as those upon which the owner of said lots proposes to sell, lease, sublease or convey. Said option shall be exercisable, if at all, by a written notice from the

Association mailed or delivered to said owner within said 30 day period wherein the Association agrees to purchase the lots on said terms and conditions. Should the Association neither approve nor disapprove the proposed sale, transfer, lease or sublease within the said 30 day period, the same shall be deemed to be approved. In the event the Association shall disapprove such proposed sale, transfer, conveyance, lease or sublease, but shall fail to exercise the option herein granted within said 30 day period, the proposed sale, transfer, conveyance, lease or sublease shall be valid only upon compliance with the following provision: No sale, transfer, conveyance, lease or sublease shall be effective unless and until it shall be filed in the office of the Recorder of Deeds of Will County, Illinois, and shall have incorporated in the instrument of sale, transfer, conveyance, lease or sublease, by reference, one of the following instruments:

(a) The written approval by the Association, of such sale, transfer, conveyance, lease or sublease; or

(b) The affidavit of the owner of the lot that the required notice had been given in accordance with this paragraph 10, and that the Association has failed to approve or disapprove the proposed transaction within the 30 day period after receipt of such notice; or

(c) The written approval of the proposed transaction executed by the owners of record of at least one-half of the lots in Meadow Creek.

Each of which instruments described in paragraphs (a), (b) and (c) shall contain an accurate legal description of the lot or

lots which are the subject of such sale, transfer, conveyance, lease or sublease.

The aforementioned option shall terminate 21 years after the date on which this Declaration is recorded, unless sooner terminated.

11. Easement for Maintenance. The Trustee hereby reserves and grants to the Association, its agents and employees the right and easement to enter upon any lot in Meadow Creek at any reasonable time and from time to time in order to provide exterior maintenance, repairs and lawn and landscaping care.

12. Air Rights. Each lot in Meadow Creek is hereby subjected to a permanent easement appurtenant to each adjoining lot to permit the construction, existence, maintenance and repair of structures located on such adjoining lot, including roof structures which overhang and encroach upon the servient lot, provided that the construction of such structures is permitted and approved as elsewhere herein provided.

ARTICLE IV

Easements

Taxiway Easement. The plat of Meadow Creek recorded as Document No. _____ hereinabove more fully described, designates certain areas as taxiway easements. The Trustee hereby declares that an easement does exist for use as a taxiway, as designated on the aforesaid plat of subdivision of Meadow Creek.

ARTICLE V

Meadow Creek Community Association

1. Creation and Purposes. There shall be formed an Illinois not-for-profit corporation to be known as the Meadow Creek Community Association (herein referred to as the "Association"), whose purposes shall be to insure high standards of maintenance and operation of all property in Meadow Creek or dedicated by the Trustee for the common use of all residents and owners of property therein, and to insure the provision of services and facilities of common benefit, and in general to maintain and promote the desired character of Meadow Creek.

2. Membership.

(a) Meadow Creek. Every person or entity, including the Trustee, its successors and assigns, who is a record owner of a fee or an undivided fee interest in any lot in Meadow Creek shall become and be a member of the Association. Membership shall be appurtenant to and may not be separated from ownership of any lot. Ownership of such lot shall be the sole qualification for membership.

(b) Meadow Creek Future Additions. Trustee reserves the right to add additional property to said Meadow Creek and to subdivide said property by the recording of separate plats of subdivision covering said additional property. If any additional property is added to said Meadow Creek, said additional property shall become subject to these covenants as if said property were originally platted as part of Meadow Creek.

3. Voting Rights. The Association shall have three classes of voting membership.

Class A. Class A Members shall be all of those owners in Meadow Creek defined in paragraph 2(a) of this

Article V except the Trustee, its successors and assigns. Class A Members shall be entitled to one vote for each lot in which they hold the interest required for membership as defined in said paragraph 2 provided that, where title to a lot is in more than one person, such co-owners acting jointly shall be entitled to but one vote.

Class B. Class B Members shall be all of those owners in Meadow Creek Future Additions defined in paragraph 2 (b) of this Article V except the Trustee, its successors and assigns. The number of votes to which Class B Members shall be entitled shall be as determined by the Trustee at the time Meadow Creek Future Additions is subdivided.

Class C. Class C Members are those members who are aircraft owners who keep their plane at Meadow Creek.

4. Powers of the Association. The Association shall have the following powers and obligations:

(a) To own or lease such real estate as may be reasonably necessary in order to carry out the purposes of the Association and to be taxed on such real estate as may be owned by it.

(b) To exercise the architectural controls vested in it under Article III, paragraph 8 of this Declaration.

(c) To delegate the exercise of its powers to Committees appointed in accordance with its by-laws.

5. Method of Providing General Funds.

(a) For the purpose of providing a general fund to enable the Association to exercise the powers, make and maintain the improvements and to render the services and facilities herein provided for, the Board of Directors of

the Association shall determine each year the total amount required for such year and may levy an annual assessment, payable monthly or at any other regular interval as may be fixed by the Board of Directors, uniformly against each lot in Meadow Creek in such amount or amounts as shall be approved by the affirmative vote of two-thirds (2/3) of the members present at a meeting of the Association duly called and held in accordance with the By-Laws of the Association. No annual assessment or increase in the amount thereof may be made for more than one year at a time. The general fund may include a reasonable reserve for items of expense which do not recur annually. For calendar year 1988, this fee is set at $20 per month.

(b) Assessments for the maintenance of the runway and the taxiway shall be separately levied on Class C Members as follows:

Airplane Owners shall pay the full monthly assessment and shall be entitled to all the privileges of such membership. For calendar year 1988, this fee is set at $20 per month.

Associate Members applies to all other lot owners, and they shall pay a monthly fee equal to 50% of the fee paid by Airplane Owners. For calendar year 1988, this fee is set at $10 per month.

(c) Payment of assessments or installments thereof shall be due within 30 days after receipt of notice therefor and thereafter shall become delinquent and shall bear interest at the rate of FNB Chicago Prime plus 4% per annum from the due date thereof to the date of payment and the Association shall have a lien on each lot against which such assessment is levied to secure payment thereof, plus interest. When delinquent, payment of both principal and interest may thereafter be enforced

against the owner personally or as a lien on said lot. It shall be the duty of the Association to bring suit to enforce said liens before expiration thereof. The Association may at its discretion file certificates of non-payment of assessments in the office of recorder of deeds whenever any such assessments are delinquent.

(d) The liens herein provided shall be subject and subordinate to the lien of any mortgage or trust deed in the nature of a mortgage now existing or which may hereafter be placed on the lots prior to the effective date of such liens. In the event of the issuance of a deed pursuant to the foreclosure of such mortgage or trust deed in the nature of a mortgage, or in lieu of such foreclosure, the grantee of such deed shall take title free and clear of any lien herein provided which accrued prior to the recording of such deed. Such liens shall continue for a period of five (5) years from the date of delinquency and no longer, unless within such time suit shall be filed for the collection of such assessment, in which case the lien shall continue until the termination of the suit and until the sale of the property under execution of the judgment on such suit.

6. Maintenance of Lots. If the owner of a lot in Meadow Creek shall fail to maintain the same and the improvements thereon in a manner satisfactory to the Board of Directors of the Association, the Association, through its agents and employees is hereby granted the right to enter upon such lot and make such reasonable repairs, maintenance, rehabilitation, or restoration of the premises as may be necessary, and the costs therefor shall be charged against the owner of said lot by invoice in the

manner hereinabove set forth in paragraph 5 (c) hereof and the Association shall have a lien upon such lot enforceable in the manner and to the extent set forth in paragraph 5 hereof.

7. Expenditures Limited to Assessment for Current Year. The Association shall not expend more money within any one year than the total amount of the assessment for that particular year, plus any surplus which it may have on hand from previous assessments; nor shall said Association enter into any contract whatever binding the assessment of any future year, except for contracts for utilities, and no such contract shall be valid or enforceable against the Association.

8. Procedure for Amendments. This Article V may be amended at any time by the written consent of the members of the Association who own, legally or beneficially, two-thirds (2/3) of the lots in Meadow Creek. The agreement or agreements to amend shall be duly executed and acknowledged by such members and recorded in the office of the recorder of deeds, Will County, Illinois, except that no amendment shall be valid, the effect of which would be (a) to permit dwellings to be erected and maintained on Community Grounds; or (b) to relieve the Association of its responsibility to maintain the Community Grounds, the entrance median strips, the landscaped center areas on the cul-de-sacs,

the private lighting on all dedicated rights-of-way, and to properly maintain all taxiways.

9. Until such time as the Association is formed as aforesaid, the Trustee shall have all of the powers of the Association specified in this Article V.

ARTICLE VI

General Provisions

1. All easements described in this Declaration and/or contained in the plat of subdivision of Meadow Creek, recorded as Document No. _____, are easements appurtenant, running with the land. They shall at all times inure to the benefit of and be binding on the respective owners of lots in Meadow Creek; mortgagees, from time to time, of any Dwelling Units constructed on lots; and their respective heirs, successors, personal representatives or assigns, perpetually in force and effect.

2. Each of the covenants set forth in this Declaration shall continue and be binding as set forth in paragraph 3 of this Article VI for an initial period of twenty (20) years from the date hereof and thereafter for successive periods of ten (10) years each.

3. The covenants herein set forth shall run with the land and bind the Trustee, its successors, grantees and assigns, and all parties claiming by, through, or under

them, as to Meadow Creek and all future additions as provided by Article V, 2 (b) herein. The Trustee, or its successors or assigns, and each owner or owners of any of the above land from time to time shall have the right jointly and separately to sue for and obtain a prohibitive or mandatory injunction to prevent the breach of, or to enforce the observance of, the Covenants above set forth, or any of them, in addition to the right to bring an ordinary legal action for damages. Whenever there shall have been built on any lot any structure which is and remains in violation of the covenants above set forth, or which shall be contained in the plat or any amendment or supplement to this Declaration, or any one or more of such covenants, for a period of thirty (30) days after actual receipt of written notice of such violation from the Association by the owner of such lot, then the Trustee, its successors or assigns, or the Association shall have, in addition to the foregoing rights, the right to enter upon the property where such violation exists and summarily abate or remove the same at the expense of the owner, and such entry and abatement or removal shall not be deemed a trespass. In no event shall the failure of the Trustee, its successor or assign, or the Association, and such owners to enforce any of the covenants herein set forth as to

a particular violation be deemed to be a waiver of the right to do so as to any subsequent violation.

4. The record owners in fee simple of the residential or commercial lots in Meadow Creek may revoke, modify, amend or supplement in whole or in part any or all of the covenants and conditions contained in this Declaration and may release from any part or all of said covenants all or any part of the real property subject thereto, and only at the following times, in the following manner, and subject to the following limitations:

(a) Any such change or changes may be made effective at any time within ten years from the date or recording of this Declaration if the record owners in fee simple of at least three-fourths (3/4) of said lots in Meadow Creek consent thereto;

(b) Any such change or changes may be made effective at the end of said initial twenty (20) year period or any such successive ten (10) year period if the record owners in fee simple of at least two-thirds (2/3) of said lots in Meadow Creek consent thereto;

(c) Any such consents shall be effective only if expressed in a written instrument or instruments executed and acknowledged by each of the consenting owners (and, if required, by mortgagees of such consenting owners) and recorded in the office of the Recorder of Deeds of Will County, Illinois; provided, however, that Article V hereof may be amended at any time in the manner therein set forth, and provided further, however, that no amendment shall be valid, the effect of which would be

to permit dwellings to be erected and maintained on Community Grounds or relieve the Association of its responsibility to maintain the Community Grounds in accordance with local, state, and federal governmental standards and regulations; to provide for the maintenance of the entrance median strips; to provide for the maintenance of the landscaped center areas on the cul-de-sacs; to provide and maintain private lighting on all dedicated rights-of-way; to properly maintain all taxiways; and to provide for the removal of garbage and debris; and provided further that no amendment shall be valid, the effect of which would be to restrict, limit or nullify the right of the Trustee to make future additions as provided by Article V 2 (b) herein, to prohibit the operation of aircraft to land or depart runway or to use taxiway to gain access to hangars or storage areas of aircraft, or attempt to preclude use of the airstrip for its intended purpose. A recordable certificate by an accredited abstractor or title guaranty company doing business in Will County, Illinois, as to record ownership of said property shall be deemed conclusive evidence thereof with regard to compliance with the provisions of this Paragraph 4. Upon and after the effective date of any such change or changes, it or they shall be binding upon all persons, firms and corporations then owning property in Meadow Creek and shall run with the land and bind all persons claiming by, through or under any one or more of them.

5. All covenants, liens, and other provisions herein set forth shall be subject to and subordinate to all mortgages or deeds of trust in the nature of a mortgage now or hereafter executed, encumbering any of the real property in Meadow Creek and none of said covenants,

liens or other provisions shall supersede or in any way reduce the security or affect the validity of any such mortgage or deed of trust in the nature of a mortgage. However, if any such property is acquired in lieu of foreclosure, or if sold under foreclosure of any mortgage or under the provisions of any deed of trust in the nature of a mortgage, or under any judicial sale, any purchaser at such sale, his or its grantees, heirs, personal representatives, successors or assigns shall hold any and all such property so purchased or acquired subject to all covenents, liens and other provisions of this Declaration, except as hereinabove set forth in paragraph 5 (d) of Article V hereof.

6. If a court of competent jurisdiction shall hold invalid or unenforceable any part of any covenant or provision contained in this Declaration, such holding shall not impair, invalidate or otherwise affect the remainder of this Declaration which shall remain in full force and effect.

7. The Trustee hereby reserves the right to vest the Association or any other not-for-profit corporation with all or any of the rights, privileges, easements, powers and duties herein retained or reserved by the Trustee, its successors or assigns, by written instrument or instruments in the nature of an assignment which shall be effective when recorded in the office of

the recorder of deeds of Will County, Illinois, and Trustee or its successors or assigns, shall thereupon be relieved and discharged from every duty so vested in the Association or in such other non-for-profit corporation.

8. Each owner of a lot in Meadow Creek shall file the correct mailing address of such owner with the Association and shall notify the Association promptly in writing of any subsequent change of address. The Association shall maintain a file of such address. A written or printed notice deposited in the United States Post Office, postage prepaid, and addressed to any owner at the last address filed by such owner with the Association shall be sufficient and proper notice to such owner wherever notices are required in this Declaration.

9. Any side drive constructed may not extend closer than two feet to the side lot line.

10. Each owner of any platted lot hereinabove described shall undertake to grade the front and rear yards of each lot, in accordance with established and recognized engineering practices in order that proper drainage for surface water shall be provided. In the event any grade is disturbed or changed by any purchaser or occupant, the DECLARANT is herewith held harmless from any and all consequences to adjacent lots and such owner or occupant disturbing or changing any grade shall be considered as having violated this Declaration as provided. In the event that dirt is removed as a result of constructing a

driveway and/or garage, the dirt must be removed from the lot or used as terracing immediately adjacent to the house foundation only.

11. (a) Only the fee simple title owners (or beneficiaries of a land trust if title is so held) of Meadow Creek, and their guests shall have the right to use the landing field and such owner or owners use shall be limited to two civil aircraft either owned or leased by such owner or owners. Meadow Creek Association shall have the right to grant permission to such owner or owners for additional aircraft and to such other persons as it may in its sole discretion elect, to use the landing field;

(b) Meadow Creek Association shall have the right to deny the use of the landing field to any user:

(1) Who is in default of the payment of any use fee as hereinafter set forth;

(2) Who uses said runway and landing field or his aircraft in a negligent manner;

(3) Who fails to maintain the required insurance coverage as hereinafter set forth in these declarations; or

(4) Who in general violated published field rules applicable to all users of said landing field.

(c) Cancellation of any user's privileges by the Association pursuant to subparagraph (b) above shall not affect the user's privileges of any other or subsequent owner.

(d) Each owner or user prior to using the landing field shall deposit with Meadow Creek Association a certificate of insurance certifying that such person has in force aircraft personal injury and property damage for the operation of civil aircraft owned by such person in the minimum amount of $100,000 for one person, $300,000 for one accident involving public liability and $100,000 property damage; such insurance minimums are subject to periodic review by Meadow Creek Association Board of Directors. In addition, proof of aircraft ownership must be on record with the Association.

(e) Each owner or user of the landing field, by the action of using the same with such person's civil aircraft, agrees forthwith to indemnify and hold Meadow Creek Association harmless from and against all liability for injuries to persons or damage to property caused by such person's negligence in the use of the landing field provided, however, that such persons shall not be liable for any injury or damage caused by the negligence of Meadow Creek Association, its agents or employees.

(f) The housing and storage of civil aircraft shall be only on the premises of such owner and no unhangared derelict airplanes shall be permitted.

(g) Meadow Creek Association has retained and shall continue to have the right to adopt and enforce reasonable rules and regulations with respect to the use of the landing field, provided that such rules and regulations shall be consistent with safety and with the

rules and regulations and ordinances of the Federal Aviation Administration with respect to civil aircraft operations in landing fields, and provided further that such rules and regulations shall not be inconsistent with any ordinances, rules and regulations as may be promulgated under the Illinois Aeronautics Act.

ARTICLE VII

Future Meadow Creek Additions

It is covenanted and agreed that the Trustee shall have the right [illegible], and may, at its sole option, resubdivide, construct such improvements on, and do with and make such use or uses of future land acquisitions as shall be permitted by federal, state and local laws and regulations; and the owners of lots in Meadow Creek (either singly or in concert) shall have no right or rights of action of any kind or nature, to enjoin, prohibit, or seek or sue for damages arising out of such resubdivision, construction of improvements, or use or uses by the Trustee.

ARTICLE VIII

Successors and Assigns of Trustee

It is hereby covenanted and agreed that, except as to conveyances to purchasers of lots in Meadow Creek

Subdivision (hereinabove in this Declaration more fully described), wherever reference is made to SOUTH HOLLAND TRUST & SAVINGS BANK, as Trustee as aforesaid, such reference shall be construed to include successors and assigns of the said Trustee; and all rights, privileges and obligations of, and reservations by, the said Trustee shall inure to and be and become rights, privileges, obligations and reservations of successors and assigns of the Trustee, except as to purchasers of lots in said Meadow Creek, it being the intent of this Article VIII to clearly affirm the right of the Trustee to convey, sell, pledge or encumber the rights, privileges, obligations and reservations of the Trustee hereunder free and clear of any right, claim or interest of, and without interference from, any purchaser or purchasers of any lot or lots in said Meadow Creek.

IN WITNESS WHEREOF, South Holland Trust & Savings Bank, not personally, but as Trustee as aforesaid, has caused these presents to be signed by its _____ Vice President and its corporate seal to be hereunto affixed and attested by its _____ Secretary, this _____ day of _____, 1987.

SOUTH HOLLAND TRUST & SAVINGS BANK
a Corporation of Illinois, as
Trustee under Trust Agreement
dated _____ and
known as Trust No. _____
and not personally.

By _____
Vice President

Attest _____
Secretary

MARKETING REPORT

TABLE OF CONTENTS

MEADOW CREEK DEVELOPMENT CORPORATION
OPINION & PREFERENCE SURVEY OF LIGHT PISTON AIRCRAFT OWNERS/USERS
METROPOLITAN CHICAGO, JANUARY - FEBRUARY, 1987

NORCOM International Corporation
431 South Dearborn, 12th Floor
Chicago, Illinois 60605

PHONE: 312/435-0078
TELEX: 728 386 HQ LOOP CGO
TELEFAX: 312/236-1587

Nino Noriega, President
Thomas H. Wetzel, VP Sr. Partner
Merry G. Stuart, VP Sr. Partner

NARRATIVE SUMMARY OF SURVEY RESULTS

(February 17, 1987)

BACKGROUND

This survey was commissioned by Meadow Creek Development Corporation as Phase One of its marketing plans for the Meadow Creek aviation community which it intends to develop four miles south of Rt. 30 on I-57 in the far southern part of Metropolitan Chicago. The survey was conducted by NORCOM International Corporation of Chicago during a three-week period in January-February, 1987. All direct mail survey materials, were mailed out on January 27, 1987. As of Febuary 16, a total of 265 responses had been received. More responses are expected in the following days, but their total should not be large enough to have a significant bearing on the outcome of the survey analysis.

Objectives of the survey were to:

- Verify that a market exists for the Meadow Creek development.
- Identify and generate potential sales.
- Provide direction for future marketing efforts.

NORCOM was charged with conducting the survey, analyzing data, and providing Meadow Creek management with a narrative summary, a tabulation of results, marketing recommendations, a list of favorable respondents with names, addresses and phone numbers, and a copy of the actual response sheets received from those participating in the survey. All these requests are fulfilled with this submission and materials, as requested, have been made a part of this report.

CONTINUED...

METHODOLOGY

A number of mailing houses maintain lists of light piston aircraft owners and users, both private and corporate, to which NORCOM has access. The universes (numbers) of such owner/users available from such lists varies as follows, depending on which house you purchase from:

National:	213,000 to 217,000
Illinois:	7,363 to 7,922
Chicagoland:	2,576 to 3,200

From available lists, NORCOM compiled 2,500 names and addresses, including 2,000 individuals and 500 corporations. While names were drawn from all of the Chicagoland area, special emphasis was given to zip codes in the South-Southwestern half of the Metropolitan area.

DIRECT MAIL LETTER: A general salutation was used in the direct mail letter. Address labels, however, bore the individuals' names. In the case of corporations, the label was addressed to the "Chief Pilot." A copy of the letter is contained in this document. The letter was printed on NORCOM stationery and signed by President Nino Noriega to give the survey as much impartiality as possible. A postage paid return envelope was enclosed for the respondents' convenience.

QUESTIONNAIRE: The questionaire was developed in conjunction with cadre of Meadow Creek Development Corporation. In order to best meet the objectives of the survey, it was divided into three sections:

-- General respondent profile.
-- Opinion and preference re private airport facilities.
-- Opinion and preference re an aviation community.

The survey was structured so as to elicit the Opinion and Preferences of the respondent in a manner that would help identify those who would be prone to become involved in either the airport facility and/or the aviation community as investors/users/buyers. The respondents' opinion and degree of preference were gauged by questions that gave multiple choices and/or presented numerical levels of opinion which the individual could express about a particular situation.

The individual was also encouraged to make additional comments and/or observations pertinent to the survey. Many did and their comments are recorded in subsequent pages of this report.

GENERAL INFORMATION ON RESPONSES

The survey was mailed out on January 27, 1987 and most of the responses arrived early in the second week following that date. As of February 17, a total of 265 responses equal to 10.6% of the mailing had been received, which is an unusually high number (most surveys reap a 2-5% response). A total of 185 saw a need for an aviation community and a private airport; 70 saw a need for only a new private airport, and ten made responses which were not valid. A few more responses were expected to arrive in the days following this report, but they should not be of sufficient number to impact upon the survey results.

A POTENTIAL MARKET EXISTS

The high level of response and the high degree of opinion and preference for a private airport and/or an aviation community indeed indicate that a market exists for same. No responses were received that disagreed with the need for a new airport and/or a new airport and an aviation community. From a marketing standpoint, this is a strong indicator that a good number of respondents either would buy and/or feel others would because of the demand that they perceive for these things. While their reactions do not guarantee they would buy, they do indicate an intense interest.

PROFILE OF RESPONDENTS WHO SEE A NEED FOR A COMMUNITY AND AIRPORT

The majority of respondents are over 51 years of age (105), are married (153), own their own homes (168) and own their own aircraft (148). Most of the respondents were male (181).

The respondents income ranged from $5,000 for a temporary female worker and $13,000 for a retired male who drives a school bus, to $300,000 for a printer, and numberous people in the $100,000 to $200,000 income bracket in such professions as farmers, contractors, business owners, salesmen, doctors, lawyers, mortgage bankers, pilots and auto dealers. The average income , based on 112 respondents who gave their annual salary figures, was $72,250.

Most respondents are long-time residents of the Chicago area, with 106 saying they had been here 36-50 years, and 46 saying they had been here 21-35 years. They also have had a longterm interest in flying with 78 saying they have been interested for 21-35 years and 58 interested 36-50 years. However, the number of actual years that they had been pilots and aircraft owners were somewhat less with 62 saying they had been pilots for 11-20 years and 57 saying 21-35 years. Ownership was for an even lesser period with 78 saying they were aircraft owners for 5-10 years and 68 saying 11-20 years.

ABILITY AND/OR INCLINATION TO BUY

There are elements within the respondent profile that could make him a buyer, the strongest being that they feel a new community is needed, that airport facilities are needed, and that they have a high average income. Because they are mostly over 50, we could presume their children are grown, which as indicated in other responses to be analyzed later, will have a bearing on the nature of the community, its amentities, etc.

PROFILE OF RESPONDENTS WHO SEE NEED FOR PVT AIRPORT BUT NO COMMUNITY

The profile of this group was very similar to those who said "yes" to the need for a new aviation community: Most were 51 years or older (43); owned their own homes (63); owned their own aircraft (65); were married (58); and, most were males (68).

The largest difference was that this group's income averaged $33,840 (based on 91 respondents who gave salary figures) vs the $72,250 average income of the group who saids "yes" to a community. The highest income given was a physician who listed $250,000, and the lowest were a retired person ($13,000) and a student member of the Air National Guard ($15,000).

Most of these respondents were long time resicents with 45 saying they had been in the area 36-50 years. Their interest in flying was pretty even in three categories: 11-20 years (20), 21-35 years (22) and 36-50 years (27). Concerning the number of years they have been pilots, 28 said 11-20 years, 19 said 21-35 years, and 15 said 36-50 years. Aircraft ownership was in greater in two catetories: 5-10 years (21) and 11-20 years (34).

ABILITY AND/OR INCLINATION TO BUY

Because they do not see a need for an aviation community, these respondents are not a good market for homes. However, they could be a market for airport facilities and perhaps storage. Since most of these are homeowners with comparatively lower incomes to those of the "Yes" group, one can assume that they are not candidates for relocating into a new aviation community. They are either content with their present homes and/or could not afford a move.

PLACES LISTED BY ALL RESPONDENTS AS PARKING LOCATIONS

A total of 48 locations were given but presumably some of the same as others, since we did not know the entire names of each and were at the mercy of the legibility of the respondents' handwriting. the locations ranged from private and farm strips to popular airports. See list.

TYPES OF AIRCRAFT OWNED BY ALL RESPONDENTS

A total of 52 different types of aircraft were listed, although some of them may be duplicates. See tabulation section for list.

TYPES OF OCCUPATIONS GIVEN BY RESPONDENTS

Aircraft owners obviously are a varied group with 76 different types of occupations listed. However, most of these were in the skilled, technical and professional categories. Sales people and management people were the highest percentage. See tabulation section for listing.

OPINION & PREFERENCE RE AIRPORT FACILITIES

All participating respondents felt there was a need for new private airport facilities, and, the vast majority (164) felt the need was severe; while a small amount (15) felt the need was not very severe. Most respondents felt jet traffic at Midway Airport was moderate: 144 gave the traffic a 2 rating on a scale of four, while only 23 gave it a 4 (most severe). The situation at O'Hare, however, was very different with 232 saying the jet traffic was very severe, giving it a 4 rating, and only 7 giving it a 1 (lowest rating).

Most respondents felt the danger to small aircraft by jets and vice verse was about even with 111 giving the danger to small aircraft a 2 rating and 101 giving the danger posed to jets by small aircraft a 2.

The question on severity of need for an airport was asked twice. On the second time the vast majority (162) re-verified their conviction that a new private airport is needed.

Respondents felt the press did a poor job of covering near-misses, with 118 giving the press a 1 (lowest) and only 53 giving it a 4 (highest).

The most important needs for a private airport were listed as indicated by the number of respondents (in brackets) that gave the item a 4 (top) rating were as follows: Hangars (142); Tie-downs (166); On-site Fuel Pumps (191); and on-site maintenance and repair facilities (140). You will note in the "Comments" section that many of those who said they preferred tie-downs did so only because of cost.

Private individual hangars also were popular with 97 giving the need a 4 (top) rating and 71 giving it a 3 rating. Respondents had a middle-of-the-road feeling about condo hangars with 79 giving the issue a 2 and 63 giving it a 3.

A large majority of respondents (139) said private aircraft ownership is decreasing.

The ideal distance from the Loop for a new airport would be either 30 miles (122 respondents) or 40 miles (63), and the ideal runway would be either 4,000 feet (126) or 5,000 feet (80).

The Hangar question was asked in a second form and a large majority (179) said they felt hangars were the most important item, while 76 said tie-downs were most important. When asked how they felt "others" felt about the hangars and tie-downs, a convincing 187 said hangars were needed and 68 said tie-downs.

MARKETING SIGNIFICANCE OF OPINION & PREFERENCE RE AIRPORT

There is obviously a need or a perceived need for a new private airport in the Chicago area, and while respondents say price would be a factor, they feel that hangars, including private ones, are desirable over tie-downs. The marketing intelligence obtained in this section should steer management in deciding which items should be made a part of the new airport, and, it will help marketing people in preparing promotional materials, targeting-in on the desires of the potential buyers.

OPINION & PREFERENCE OF RESPONDENTS RE AVIATION COMMUNITY:

Responses on the ideal size of a lot ranged from 1/8 acre to 2 acres, but the most popular sizes were 1 acre (83 respondents) and 1/2 acre (77).

Most respondents (102) felt the ideal size home should have 3,000 square feet, with the range of recommendations going from 2,500 square feet up to 5,000 square feet.

The most popular price for a home was $150,000 (64 respondents), followed by $200,000 (44). Some respondents went as low as $80,000 and as high as $500,000.

The price of an improved lot was in the $40,000 (98) to $50,000 (47) range, but 16 said they would like a $60,000 lot and those who indicated "other" preferences, gave choices ranging from $15,000 to $100,000.

In the area of amentities (1 being the lowest preference, 4 being the highest), the most desireable features were the nearness to job sites (70 ranked this at 4 and 65 at 3) and the nearness to hospital and medical facilities (70 ranked this need 3 and 57 ranked it 4). This is understandable since most respondents were senior people (51 or older) with good jobs.

Distance to the Loop was not considered very important since 72 gave it a 2 and only 30 gave it a 4. Respondents felt so-so about nearness to malls with 57 giving it a 2, 52 giving it a 2 and 48 giving it a 3.

Availability of public transportation was not considered very important with 87 giving it a 1 and only 25 giving it a 4.

The need for on site recreational and social facilities were not deemed very important with 76 giving it a 1, 64 a 2, and only 15 giving it a 4. The same held for off-site rec/social facilities with only 12 giving it a 4, while 76 gave it a 1 and 64 gave it a 2.

The attractions which were considered the least necessary and/or desirable were tennis facilities and bridle paths and stables. A convincing 127 respondents gave a 1 to bridle paths and stables, compared to 8 who gave this a 4. And, 103 gave tennis a 1 vs 10 who gave it a 4.

MARKETING SIGNIFICANCE OF OPINION & PREFERENCE RE AVIATION COMMUNITY

The intelligence obtained in this section says one very strong thing about aviation people: They concentrate most of their opinions and preferences on things to do with aviation and home: lot size, home size, price, etc. They want to fly, not play tennis or go horseback riding. And, because most are 51 years and older and relatively affluent, they do not feel public transportation is that important but do feel that nearness to job and hospital/medical facilities are vital.

This section is an important tool for management in deciding the various aspects of the new community. While there is little desire for such things as on-site social-recreational facilities, tennis, bridle paths, etc., these still could well be attractions that would help sell, since some respondents did list them as desirable, but the point is that they are not necessary to exploit this market. The important things are the actual homes themselves and the amentities of the airport. It would therefore be advisable to concentrate on those things in development of the community and airport.

Other attractions would be secondary. And, the regular community type of amentities, such as sewers, paved streets, fire plugs, sidewalks, are inherently important as a sales strength.

SOILS REPORT

OUR SOIL ★ OUR STRENGTH

Will County
Soil and Water Conservation District

100 Manhattan Road · Joliet, Illinois 60433 · Phone 815-723-5078

October 13, 1983

Subject: Kenneth Freitag & Wm. Pradelski = Zone Change
213 Acres - Section 18 - Monee Township
Will County - Illinois

NATURAL RESOURCE INFORMATION REPORT NUMBER 1542

To:

Mr. Gerald Cunico, Secretary
Will County Zoning Board of Appeals
230 E. 8th Street
Lockport, Illinois 60441

cc: H.J. Boesch, Jr. of Boesch Consulting Engineers

and

Will County Development Department

SUMMARY: Forked Creek inundated 9% of the site to a height of about 756 and 761 feet above sea level at the west and east edges of the site during the 1957 flood.

Frankfort (320A, B, B2, C2), Rantoul (238), Chatsworth (241D3), Bryce (235) & Mokena (295B) soils have a low potential rating for the functioning of septic filter fields. These soils acccount for 98% of the site.

Chatsworth, Frankfort and Mokena & Nappanee (228C2, C3) soils account for 15% of the site and have severe limitations for buildings with or without basements due to seasonal high water table.

Rantoul (238) & Bryce (235) soils account for 30% of the site have very severe limitations for buildings with or without basements due to seasonal high water table and high shrink-swell.

Proctor (148), Bryce (235) & Mokena (295B) soils are considered to be prime agricultural soils. These soils account for approximately 30% of the site.

BOARD'S OPINION

The following limitations should be given careful consideration for the proposed zone change site:

1. Forked Creek inundated approximately 9% of the site to a height of about 756 and 761 feet above sea level at the west and east edges of the site, respectively during the 1957 flood. Building on or filling in of these areas should not be done.

2. Frankfort (320A, B, C2, B2); Rantoul (238); Chatsworth (241D3), Bryce (235) & Mokena (295B) soils have a low potential rating of the functioning of septic filter fields. These soils account for approximately 98% of the site.

3. Nappanee soil (228C2, C3) which accounts for approximately 1% of the site has a very low potential rating for the functioning of septic filter fields.

4. Chatsworth soil (241D3), Frankfort (320B, B2, C2 & A), Mokena (295B) & Nappanee (228C2, C3) soil types which account for approximately 15% of the site have severe limitations for buildings with or without basements. These soils should not be built upon unless the seasonal high water table is alleviated.

5. Rantoul (238) and Bryce (235) soil types which account for approximately 30% of the site have very severe limitations of buildings with or without basements. These soils should not be built upon unless the seasonal high water table and high shrink-swell are alleviated.

6. Proctor (148), Bryce (235)and Mokena (295B) soil types are considered to be prime agricultural soils. The soils account for approximately 30% of the site.

The above is our opinion as required by Section 22.02a of the Illinois Soil and Water Conservation District Law.

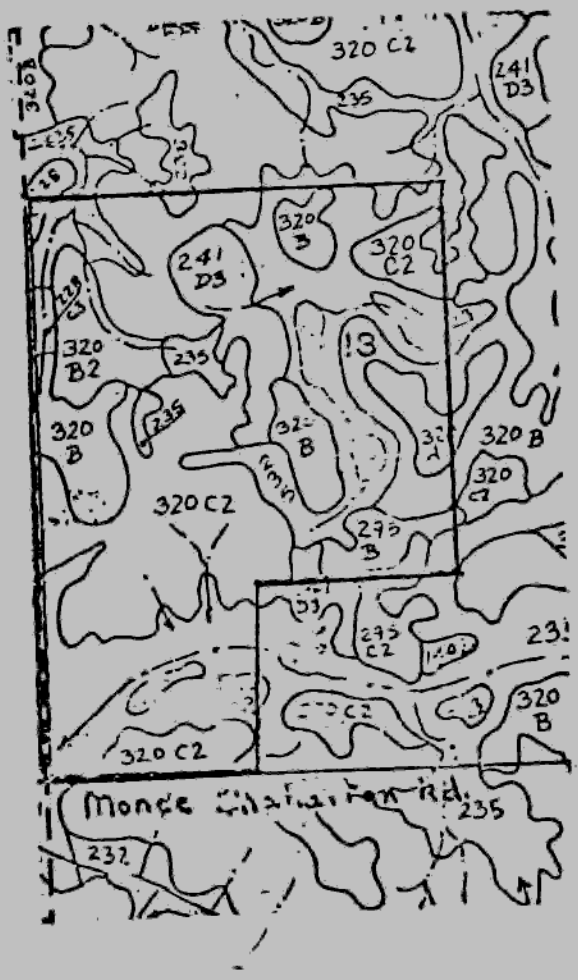
James Schillinger
Chairman

The proposed zone change site is located:

Part of the West Half of Section 18, in Township 34 North, Range 13 East of the Third Principal Meridian, in Monee Township, Will County, Illinois.

The site is presently used for agricultural purposes. The proposed zone change for the site is for R-2A & C1 with central sewer. The surrounding land use is residential and agricultural.

THE SITE SOIL MAP



N

T34N, R13E
Sec. 18
Scale 4in.=1mi.
•——=Intermittant stream

Based on USDA Soil Conservation Service Soil Survey.

SOIL INFORMATION

320A, B, B2, C2 Frankfort silt loam, slope A, 0-2%; B, 2-5%;B2, 2-5%, eroded; C2 5-10%, eroded

A moderately dark, somewhat poorly drained soil with a grayish, brown, mottled, silty clay subsoil. Formed in less than 24 inches of silty material over silty, clay till. Depth to carbonates is greater than 24 inches. Permeability is slow to very slow. Available moisture holding capacity is moderate.

238 Rantoul silty clay

A dark colored, very poorly drained soil with a predominantly gray, silty clay subsoil. Formed in heavy sediments over heavy till. Depth to carbonates is greater than 24 inches. Permeability is very slow. Available moisture holding capacity is moderate.

235 Bryce silty clay

A dark colored, very poorly drained soil with a predominantly gray, silty clay subsoil. Formed in heavy sediments, 20 to 40 inches deep, over silty, clay till. Depth to carbonates is greater than 24 inches. Permeability is slow. Available moisture holding capacity is moderate.

295B Mokena silty loam, slope 2-5%

A dark colored, somewhat poorly drained soil with a grayish, brown, mottled, clay loam over silty clay subsoil. Formed in 24 to 55 inches of loamy material over silty, clay till or lakebed sediments. Permeability is moderately slow. Available moisture holding capacity is high.

228C2, C3 Nappanee silt loam, slope C2, 5-10%, eroded; C3, 5-10%, severely eroded

A light colored, somewhat poorly drained soil with a grayish, brown, mottled, silty clay subsoil. Formed in less than 20 inches of silty material over silty clay till. Permeability is slow to very slow. Available moisture holding capacity is moderate.

241D3 Chatsworth soils, slope 5-12%, severely eroded

A light colored, well drained soil with a brown, clay subsoil. Formed in very thin, silty material over clayey till or lakebed sediments. Less than 6 inches to carbonates. Permeability is very slow. Available moisture holding capacity is low.

148B Proctor silt loam, slope 2-5%

A dark colored, well drained soil with a brown, silty clay loam subsoil. Formed in less than 40 inches of silty material over stratified sands and silts. Greater than 40 inches to carbonates. Permeability is moderate. Available moisture holding capacity is high.

ESTIMATED SOIL LIMITATIONS FOR COMMUNITY DEVELOPMENT

Soil Series and Map Symbols	Buildings Without Basements	Buildings With Basements	Septic Tank Filter Fields
FRANKFORT 320A, B, B2, C2	Severe - seasonal water saturation 1-3'; moderate high shrink swell; CH unified, highly plastic	Severe-somewhat poorly drained; seasonal water saturation 1-3'; moderate high shrink-swell; highly plastic	Low Potential*(Treatment Pkgs # 5, 12, 13)
RANTOUL 238	Very severe - poorly drained; seasonal water saturation; high shrink-swell; CH unified group, highly plastic	Very severe - poorly drained; seasonal water saturation; high shrink-swell; CH unified group, highly plastic	Low Potential* (Treatment Pkgs # 5, 12)
BRYCE 235	Very severe - poorly drained; seasonal water saturation; high shrink-swell; CH unified group; highly plastic	Very severe - poorly drained; seasonal water saturation; high shrink-swell; CH unified group, highly plastic	Low Potential* (Treatment Pkgs # 5, 12)
MOKENA 295B	Severe - seasonal water saturation 1-3; highly plastic underlying material	Severe - somewhat poorly drained; seasonal water saturation 1-3'; highly plastic underlying material	Low Potential* (Treatment Pkgs # 5)
NAPPANEE 228C2, C3	Severe - seasonal water saturation 1-3'; over 15% slopes; moderate high shrink-swell; CH unified group; highly plastic	Severe - seasonal water saturation 1-3'; over 15% slopes; mod-high shrink-swell; CH unified group, highly plastic	Very Low Potential** (Treatment Pkgs #5, 13)

ESTIMATED SOIL LIMITATIONS FOR COMMUNITY DEVELOPMENT

Soil Series and Map Symbols	Buildings Without Basements	Buildings With Basements	Septic Tank Filter Fields
CHATSWORTH 241D3	Severe - mod-high shrink-swell; more than 15% slopes; CH unified group, highly plastic	Severe - mod-high shrink-swell; more than 15% slopes; CH unified group, highly plastic	Low Potential * (Treatment Pkgs # 6, 13)
PROCTOR 148B	Moderate - moderate shrink-swell in subsoil; less than 15% slopes	Slight - 0-7% slopes Moderate - 7-15% slopes	Medium Potential*** (Treatment Pkgs #7)

Low Potential - Performance is significantly below defined standards; there are severe soil limitations for which economically feasible measures are unavailable; soil limitations continuing after treatment measures are installed seriously detract from environmental quality.

*Very Low Potential - Performance is much below defined standards; there are severe soil limitations for which economically feasible measures are unavailable; soil limitations continuing after treatment measures are installed seriously detract from environmental quality.

**Medium Potential - Performance is somewhat below defined standards; cost of measures for overcoming soil limitations are high; soil limitations continuning after treatment measures are installed detract appreciably from environmental quality.

EATMENT PACKAGE INFORMATION FOUND IN SCS PUBLICATION, "SOIL POTENTIAL RATINGS FOR SEPTIC TANK SORPTION FIELDS".

PRIME AGRICULTURE

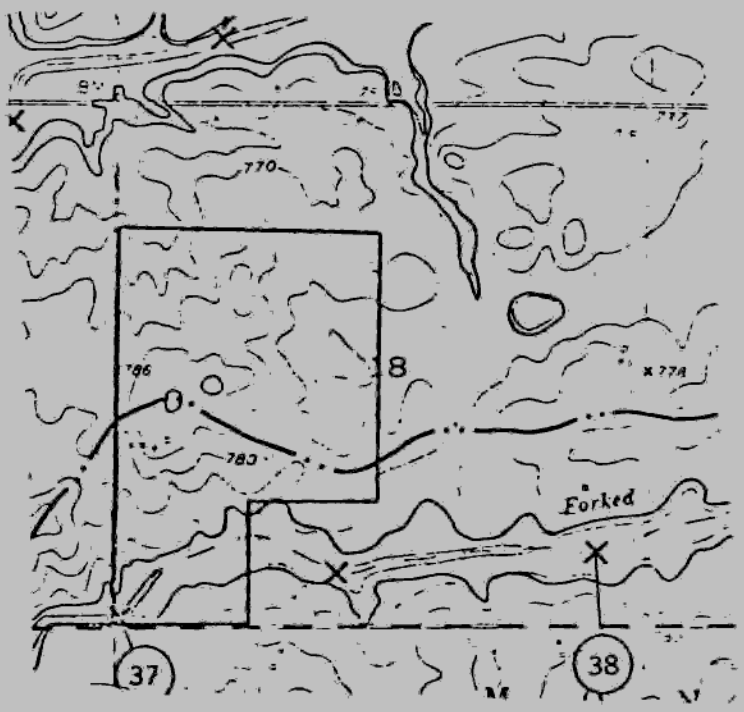
The following soils are considered to be prime agricultural soil:

Soil Type	Corn Bu/Acre	Beans Bu/Acre[1]
148B	144	44
235	120	43
295B	126	41

1 Based on USDA Soil Conservation Service Soil Survey.

WATER DRAINAGE

The proposed zone change site is part of the Forked Creek watershed. Forked Creek inundated approximately 9% of the site to a height of 756 feet and 761 feet above sea level at the west and east edges of the site, respectively during the 1957 flood.[1]



T34N, R13E
Sec. 18
Scale 1:24,000
Contour Interval 10'
1957 Flood= ☐

1 Mycyk, Roman T. 1967. Floods in Frankfort Quadrangle, Northeastern Illinois. U.S. Geological Survey. Hydrologic Investigations Atlas HA-231.

EROSION AND SEDIMENTATION

One of the highest rates of erosion and sedimentation occur during construction. Sediment once lost from the site creates problems downstream (kills fish, silts in reservoirs and pollutes the water).

All of the site (slope equal to or greater than 2 percent) is susceptible toerosion and sedimentation problems during construction. Erosion and sedimentation problems can be reduced by doing the following:

1. Complete the final grading, seeding and sodding as soon as possible.
2. Protect stock piles of soil and rough graded areas by applying mulch.
3. If stock piles of soil and rough graded areas are to remain exposed for a protracted period of time, the soil should be planted with cover species.
4. Sediment basins should be located on the site during construction.

SOIL AND MATERIAL CONSULTANTS, INC.
8 WEST COLLEGE DRIVE • ARLINGTON HEIGHTS, ILLINOIS 60004 • 312-870-0544

February 15, 1984
File No. 7243

Boesch Consulting Engineers, Inc.
213 Tomahawk Court
Bolingbrook, IL 60439

Attn: Mr. Henry J. Boesch, P.E.
President

Re: Geotechnical Investigation
Meadow Creek Development
Monee, Illinois

Gentlemen:

We are submitting our report of the geotechnical investigation for the proposed residential subdivision referenced above in Monee, Illinois.

I. SCOPE OF INVESTIGATION

It is proposed to construct a 3,400 foot long private aircraft runway and associated taxiways, and a single-family dwelling subdivision. Improvements exterior to the buildings include pavement areas, sidewalks and related underground improvements.

The investigation was to provide a survey of the general site subsoil conditions, feasible foundation systems, allowable soil bearings, and anticipated construction problems.

II. SITE CONDITIONS

The project site consists of rolling farm land, with a tributary to Forked Creek in the southwest quadrant, with large, undrained depressions located in the east and southeast central area of the site. A farmstead lays on the west side, south of the east-west property centerline. Two east-west pipeline right-of-ways are found in the north one-half of the site.

File No. 7243
Re: Geotechnical Investigation
Meadow Creek Development
Monee, Illinois

III. SITE GEOLOGY, SUBSOIL CONDITIONS AND SUBSOIL CHARACTERISTICS

A. Site Geology

The project site lays on the surface of the Wheaton Moraine of the Valparaiso Morainic System, a constructional glacial feature deposited during the latter stages of the Wisconsinan glaciation. Recent sediments classfied as the Cahokia Alluvium are found on the surface of the moraine, in the flood plain of the tributary to Forked Creek.

The Wheaton Moraine typically consists of a gray silty clay till, while the Cahokia Alluvium consists of silt, sand and clay flood plain sediments of recent origin. Locally, organic deposits consisting of the Grayslake peat are occasionally encountered.

B. Subsoil Conditions and Subsoil Characteristics

A general characterization of the site subsoils will require two separate profiles which will represent the two major soil areas encountered on the project site. The largest zone, designated as Soil Area I, will consist of the Wheaton Till and the fairly well desiccated recent sedimentary deposits encountered on the perimeter of the deeper Cahokia Alluvial deposits. The second profile would be representative of Soil Area II, generally related to fairly shallow, undrained surface depressions and the recent Cahokia Alluvium deposits and the flood plain of the tributary to Forked Creek. Borings 1, 9 and 19 would be fairly representative of the Soil Area I profiles. Soil Area II profiles would be typically represented by test borings 3, 6A and 17. (See Part IV, A. for further definition of Soil Areas I and II.)

IV. CONCLUSIONS AND RECOMMENDATIONS

A. FOUNDATIONS

Based on the results of this investigation two major foundation soil areas have been defined within the confines of the current project boundaries. Soil Area I is that soil area generally permitting use of minimum depth standard footing and pier foundations for the proposed structures. Soil Area II is that soil area requiring generally basement depth footing and pier foundations or one of the various deep foundation systems in support of the proposed site improvements.

File No. 7243
Re: Geotechnical Investigation
Meadow Creek Development
Monee, Illinois

The soil areas, as plotted on the accompanying location diagram, are only approximations based on the data obtained at the individual boring locations. All soil boundaries are drawn by interpolation between borings and may not represent actual subsoil conditions between borings.

1. SOIL AREA I

This zone covers an area estimated to be in excess of 70 percent of the present site. The subsoil conditions in this zone permits utilization of minimum depth spread footing and pier foundations. The suggested foundations for this area must bear on the preconsolidated glacial clays and desiccated sedimentary clay soils, below all topsoil, peat, weak soils, uncontrolled fills or other unsuitable soil conditions.

The following table summarizes the estimated depths below existing grade at which suitable bearing soils were encountered at the boring locations and other information.

SOIL AREA I

Boring Number	Depth Below Existing Ground Surface (feet)	Recommended Maximum Allowable Soil Bearing (lbs./sq. ft.)	Highest Recorded Water Level (feet)
1	3.0	4,000	Surface Water
2	1.0	4,000	Dry
4	3.5	4,000	Dry
5	3.5	4,000	Dry
8	4.0	4,000	Dry
9	3.5	4,000	Dry
11	2.5	4,000	Dry
12	3.5	3,000	Dry
13	2.5	4,000	Dry
14	3.5	4,000	Dry
15	3.5	4,000	5.0
18	3.5	4,000	Dry
19	3.5	4,000	Dry

2. SOIL AREA II

This soil zone consists of fairly shallow deposits of weak, compressible semi-organic and inorganic sediments, underlain by moderate to high strength glacial or sedimentary soils. Basement depth footing and pier foundations appear feasible in the discontinuous soil zones that constitute Area II soils.

All of the soils encountered at the suggested foundation depths are associated with undrained depressional zones or are in the flood plain of the stream crossing the southwest quadrant of the site.

The recommended allowable soil bearings are for the shallowest soils considered suitable for support of single-family dwellings. These shallowest foundations in the Soil Area II would generally bear on weak, shrinkage susceptible sediments that have the potential for loss of volume should further desiccation occur. Such loss of the pore water would result in some vertical movement of structures founded on these soils. The magnitude of such movement would be dependent on total deposit thickness and the amount of additional natural moisture lost. Area practice is to utilize soils having such limitations provided the proposed structure can accommodate such settlements as might occur.

The potential for shrinkage settlement can be minimized by dropping the foundation to the more highly desiccated soils found at depths in the soil area, as at borings 3, 6A, 6B, 7, 10A, 10B and 10D.

SOIL AREA II

Boring Number	Depth Below Existing Ground Surface (feet)	Recommended Maximum Allowable Soil Bearing (lbs./sq. ft.)	Highest Recorded Water Level (feet)
3	5.0	2,500	8.0
3	8.5	4,000	
6	4.0	4,000	7.0
6A	6.5	4,000	Dry
6B	9.0	2,500	Dry
6C	3.5	4,000	Dry

7	6.0	4,000	Dry
10	3.0	2,000	Dry
10A	3.5	4,000	Dry
10B	4.0	4,000	Dry
10C	3.5	3,000	Dry
10D	6.0	4,000	13.0
16	4.0	2,000	6.0
17	4.5	2,000	9.0

The above allowable soil bearings are presented with a factor of safety of at least 3.0 unless otherwise stated. Increased allowable soil bearings are generally obtainable, but would be predicated on a review of foundation details, elevations and the subsoil data. All foundations exposed to freezing conditions should extend at least 3.5 inches below the final exposed surface elevation.

B. FOUNDATION ALTERNATES

1. STRUCTURAL FILL

Consideration may be given to the removal of unsuitable fills, organic soils or weaker soils to the depths indicated in the above table and replacement with properly compacted fill. Some variation in the necessary depth of excavation could occur due to naturally changing soil conditions. Preparation of the subgrade and placement of the fill should be carried out as detailed under part IV.C. This option has particular relevance for Soil Area II.

The removal of unsuitable soils and/or fills should be completed under all piers and slabs to be supported on grade. The foundation soil removal should extend beyond footings a distance at least equal to one-half the depth of fill beneath the foundation at each location.

2. CAISSON AND PILE FOUNDATIONS

Drilled pier or caisson foundations or one of the various pile foundation systems will permit loads to be transmitted to suitable soil at deeper elevations. Should structure loads require increased allowable soil bearings, consideration may be given to use of one of the various drilled pier or mandril-driven, treated timber, auger cast, steel pipe, or other

fill variable length pile systems. Such systems may be of particular use in Soil Area II.

Caisson shafts should extend a sufficient depth into the cohesive soils to permit belling without collapse of the bell roof. Granular soils or organic soils will typically collare or squeeze or "neck in" thus narrowing the caisson shaft. In addition, ground water is expected to be present during excavation. It is suggested that a temporary casing be utilized in the caisson shaft in order to maintain design shaft size. The concrete should be placed immdiately upon completion of excavation. As concrete fills the shaft the construction casing may be withdrawn. At no time should the casing be withdrawn above the level of concrete placed in the shaft when in unstable soil conditions. It is suggested that consideration be given to placing a permanent line to prevent caving or necking in of the organic or granular soils. Should deep foundations be required, we would be pleased to review the data to prepare more specific recommendations.

C. FLOOR SLABS AND PAVEMENTS

With the above proposed foundation systems, floor slabs may generally be considered for support on grade in Soil Area I. This is feasible when the soils/fills supporting the slab are prepared in accordance with the following recommendations for subgrade preparation.

The shallow unsuitable soil conditions in Soil Area II and in some of Soil Area I will not provide proper support for slabs constructed on grade. With the suggested foundation type(s) it will be necessary to utilize a structural slab, designed to be supported by the chosen foundation system(s).

Beneath load bearing structures and pavement areas, subgrade preparation should include the removal of all unsuitable soils including soft clays, high organic topsoil, root matter, peat, debris and other deleterious materials. In cut areas the exposed subgrade should be compacted to a minimum 95% of maximum dry density per ASTM D-1557 specification or equivalent, within building areas and beneath exterior improvements.

If fill is required, the exposed subgrade should be prepared as indicated above. Thereafter, fill should be placed in lifts not to exceed 8.0 inches in a loose state. Each lift should be compacted to the following densities prior to placement of additional lifts of fill:

Cohesive Fills: to a minimum 95% of maximum dry density, per ASTM D-1557.

Granular Fills: to a minimum 75% of relative density, per ASTM D-2049.

The compaction requirements also apply to backfill placement around foundations and within trench excavations where pavements or floor slabs are to be supported.

D. FILL

The onsite inorganic soils are generally considered suitable for use as fill. Offsite fills may also be used provided they are approved by your geotechnical engineer. The soil moisture content of fill soils should be within approximately 3.0% of optimum moisture content, preferably below, as determined by the above referenced moisture-density tests to enable the fill densities to meet or exceed minimum compaction requirements.

All cohesive structural fills should be placed in layers (8.0" maximum loose thickness) compacted to a minimum 95% of maximum dry density per ASTM D-1557 or equivalent: all granular structural fills should be placed at a minimum 75% of relative density per ASTM D-2049 or equivalent. Structural fills supporting footings should extend at least one-half the fill depth beyond all edges of the footings. Settlements of lightly loaded structures on properly compacted fills should normally not exceed 0.5 percent of total fill thickness.

E. GROUND WATER

The boring logs indicate the depth at which ground water was encountered during drilling operations and immediately after drilling.

It should be anticipated that fluctuations in the ground water level may occur due to variations in rainfall, temperature, soil permeability, and other factors not evident at the time of the field measurements. More definitive data could be determined from a long-term hydrogeologic study.

Excavations may require dewatering due to ground water seepage and/or surface precipitation. This water can normally be removed by standard sump and pump operations. If the soils at the foundation or slab elevation are permitted to become saturated, loss of bearing and instability may occur requiring additional excavation immediately prior to foundation construction.

File No. 7243
Re: Geotechnical Investigation
Meadow Creek Development
Monee, Illinois

It should be noted that non-cohesive soils will be quite unstable when saturated and exposed in open excavation. These soils will tend to run when submerged or disturbed as slope stability is quite low as confining pressures are removed. Proper drainage within the excavation is particularly necessary when excavations extend below static water levels and into the saturated non-cohesive soils.

Excavations extending through significant saturated soil layers or which terminate in predominantly sand and gravel soils in a saturated condition may require greater then normal dewatering efforts in order to facilitate construction. The areas of borings 3, 6B and 7 may require such additional efforts.

Permanent dewatering of basement, crawl space and other below grade areas is necessary and should include provisions for peripheral drain tile around the foundation and below floor slabs. Drainage may be either by gravity, if feasible, or by sump and pump. Other designs for removal of water or water proofing may be considered.

V. FIELD AND LABORATORY INVESTIGATION

The field investigation included layout of 26 borings at the approximate locations indicated on the enclosed sketch.

The soils at each location were auger drilled and samples obtained using a split spoon sampler per (ASTM D-1586) specifications. Soil profiles were logged in the field and soil samples returned to the laboratory for additional testing.

The laboratory testing of the soil samples included determination of moisture content, dry unit weight and unconfined compressive strength. All samples will be retained for a period of 30 dayys unless otherwise directed.

VI. DESIGN REVIEW AND CONSTRUCTION QUALITY CONTROL

Once final plans have been prepared it is recommended that they be reviewed by our office with respect to compatibility with the report recommendations. During the site stripping and foundation phases of the project your geotechnical engineer should inspect the exposed soils to verify their physical characteristics are similar to those soils encountered at the boring locations.

File No. 7243
Re: Geotechnical Investigation
Meadow Creek Development
Monee, Illinois

Thank you for the opportunity to be of service. If we may be of further service during the design or construction phase, or should you have any questions regarding this report, please let us know.

Respectfully submitted,

SOIL AND MATERIAL CONSULTANTS, INC.

Glenn R. Mann
Project Geologist

Gerald J. Kissner, P.E.
President

GRM/GJK:kl
Report (9)
Site Environs (1)
Logs (26)
Location Diagram (1)
Soil Test Data Summary (6)

MONEE TOWNSHIP
FOUNDED 1859

Township of Monee

P.O. Box 74
Monee, Illinois 60449

Supervisor 534-6020
Assessor 534-6023
Highway Commissioner 534-8166

October 11, 1989

Lyman C. Tieman
167 N. Chicago Street
Joliet, Il. 60431

Re: Meadow Creek/ Phase II

Dear Sir:

I have no problem with the zoning change from A-1 to R-3 single family residential for the 40.3302 acres known as PIN 14-18-400-001.

I do, however, have some things pertaining to Phase I of Meadow Creek Airpark that I think should be resolved prior to my approval of a Phase II Plat of Subdivision:

1. Maintenance of streets and taxiways, including snow removal. At this time because of lack of homes there is not an active homeowners association.

2. Detention ponds are not serving their purpose.

3. There appears to be 4" of asphalt on streets and taxiways. I assume there should be 8". Will this be completed?

4. Maintenance of detention ponds.

5. Lack of Letter of Credit on Bonding.

Sincerely,

Wayne C. Stassen

Wayne C. Stassen
Monee Township Highway Commissioner

CC: J. Gibbons

Bolan
(312) 233-8059
Wm Prodolski
(708) 479 7100
Ed Vasansk,°

TECH 3 CONSULTING GROUP, INC.
1395 C Main Street
CRETE, ILLINOIS 60417

(312) 672-4994

LETTER OF TRANSMITTAL

TO Will County Land Use Dept.

DATE	JOB NO
6-1-89	87028

ATTENTION Roy Allen

RE Meadow Creek

WE ARE SENDING YOU ☐ Attached ☐ Under separate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change order ☐ _____

COPIES	DATE	NO	DESCRIPTION
3			Plat of Subdivision Sheet 1 and 2

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval

☐ For your use ☐ Approved as noted ☐ Submit _____ copies for distribution

☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints

☐ For review and comment ☐ _____

☐ FOR BIDS DUE _____ 19____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS

COPY TO _____ SIGNED: _____

If enclosures are not as noted, kindly notify us at once.

WILL COUNTY LAND USE DEPARTMENT

501 ELLA AVENUE * JOLIET, ILLINOIS 60433

February 1, 1989

Wayne C. Stassen
Monee Township Highway Commissioner
Rt #2, Box 86
Monee, Illinois 60449

Subject: Meadow Creek Subdivision
Monee Township
Construction Surety

Dear Mr. Stassen:

Attached are copies of the following items:

1. Letter from Consumers Illinois Water Company dated December 27, 1988.

2. Contract between Consumers Illinois and Azzarelli Development Corporation.

3. Letter from First Trust Bank dated December 23, 1988.

4. Letter from First American Title Insurance Company.

The Land Use Committee has requested additional information regarding the availability of funds from the First American Title Insurance Company. When that is received we will forward a copy of it to you.

Please feel free to call on us, if you have any questions.

Very truly yours,
Will County Land Use Department

Roy L. Allen, P.E., L.S.
Chief Subdivision Engineer &
Plat Officer

RLA/cc

ROBERT J. ERICKSON
BUILDING SVCS. DIRECTOR
(815) 727-8634

JAMES J. GIBBONS
ZONING AND SUBDIVISION DIRECTOR
(815) 727-8850

PAUL M. GORTE
PLANS AND PROGRAMS DIRECTOR
(815) 727-8430

PATRICIA L. SPRAY
ADMINISTRATION
(815) 727-8631

KEVIN STANDBRIDGE
WASTE SERVICES DIRECTOR
(815) 727-8834

Illinois Department of Transportation
Division of Aeronautics

Airport Certificate

THIS CERTIFICATE, issued pursuant to an order of the Division of Aeronautics, dated January 21, 1988, certifies that the airport described below has been approved as a Residential Airport pursuant to the Laws of the State of Illinois and the Rules and Regulations of the Illinois Department of Transportation, Division of Aeronautics.

Located near Monee, situated in part of the South 1/2 of the Northwest 1/4, Section 18 and the Southwest 1/4 of Section 18 (excepting therefrom the Southeast 1/4 of said Southwest 1/4 of Section 18) all in Township 34 North, Range 13 East of the Third Principal Meridian, Will County, Illinois.

Issued to Meadow Creek Corporation this 1st day of December, 1988.

R Cowlishaw

Director, Division of Aeronautics

This certificate is issued under and subject to the Illinois Aeronautics Act and regulations promulgated by the Division for the administration thereof.

DISPLAY PROMINENTLY AT ALL TIMES

CONSUMERS ILLINOIS WATER COMPANY

Progressive Public Service Since 1886

REPLY TO: KANKAKEE COUNTY OFFICE

December 27, 1988

Will County Planner
501 Ella Avenue
Joliet, IL 60433

Re: Water & Sewer Improvements -
Meadow Creek Development - Monee Township, IL

Gentlemen:

The Consumers Illinois Water Company has petitioned the Illinois Commerce Commission (Docket 88-0060) and received by Order to provide water and sewer service to the Meadow Creek Development.

Since receipt of the Commission Order, we have caused to be prepared the necessary plans and specifications; obtained all required permits and easements; and have awarded a contract to the Azzarelli Development Corporation to construct the facilities. A copy of the contract is attached. The estimated completion of the project is 1 June 1989. Consumers Illinois Water Company will provide material to the contractor and inspection service in addition to those services performed by Azzarelli Development Corporation.

The estimated total project cost is $1,450,000. We have asked the First Trust & Savings Bank of Kankakee to submit to you a certified statement of funds available to Consumers Illinois Water Company to guarantee the completion of the project. The certificate of guarantee will be submitted under separate cover when available.

Yours very truly,

CONSUMERS ILLINOIS WATER COMPANY

Charles H. Smith
President

CHS:jb
Attach.
cc: Lyman Tieman

KANKAKEE COUNTY OFFICE
1000 S Schuyler Avenue
P O Box 152
Kankakee IL 60901
815-935-8803
FAX-815-935-8809

WILL COUNTY OFFICE
25820 S Western Avenue
University Park, IL 60466
312-534-6511

LEE-BOONE COUNTY OFFICE
P O Box 230
Sublette, IL 61367
815-849-5284
FAX-815-849-5435

FIRST TRUST BANK

One Dearborn Square Kankakee, Illinois 60901
Telephone 815-937-7700

December 23, 1988

Will County Supervisor

Re: Consumers Illinois Water Company Investment Advisory
Agency Account

Gentlemen:

We hereby certify that as of December 23, 1988, the balance in the above-mentioned account was $2,000,000.00.

Yours very truly,

Marianne Stevenson

Marianne Stevenson
Trust Officer

MS
cc: Charles Smith

Suite 400
100 North La Salle Street
Chicago, Illinois 60602
312/750-6780
FAX # 312/750-9073

First American Title Insurance Company of the Mid-West®

Meadow Creek Corporation
20180 Governors Drive
Olympia Fields, IL 60461

Re: Meadow Creek Aero Community
Will County, Illinois
Escrow No. 88-01

Gentlemen:

In reference to the above project First American Title Insurance Company of the Mid-West is holding $591,283.34 in a construction Escrow for improvements on the land.

Very truly yours,

Sharon T. Ruane

Sharon T. Ruane
Commercial Escrow Officer

STR/alg

S. G. HAYES
AND COMPANY
CONTRACTORS - ENGINEERS

162nd and WESTERN AVENUE
P. O. Box 130, MARKHAM, ILLINOIS 60426

SUBURBAN 331-3380

CHICAGO 264-6342

November 25, 1988

Will County
Land Use Department
501 Ella Avenue
Joliet, Illinois 60433

ATTENTION: Mr. Roy Allen

RE: Pavement Construction
Meadow Creek Subdivision
Harlem Ave. & Monee-Manhattan Road
Monee Township, Illinois

Dear Sir:

In accordance with our letter of September 27, pertaining to the pavement design and construction on the above referenced project, please find attached, the Marshall Stability Test Results conducted by Flood Testing Laboratories, Inc. on the bituminous base course material used. As verified by these results, our achieved Marshall Stability does in fact exceed that as shown on the Marshall Stability Coefficient Graph (Figure 6-3) which was previously submitted.

We trust that the above meets with your approval and should you have any questions, please contact us for our immediate attention to this matter.

Respectfully,

S. G. HAYES AND COMPANY

Steven E. Brunke
Vice President

CC: Tech 3 Consultants
Chicago Midwest Construction
Meadow Creek Corp.

FLOOD TESTING LABORATORIES, INC.

PHONE (AREA CODE 312) 721-2200

1945 EAST 87TH STREET
CHICAGO, ILLINOIS 60617

REPORT OF TEST OF

BITUMINOUS MIXTURE

LABORATORY NO.

DATE November 22, 1988

SAMPLED BY: Our representative

SAMPLED FROM: your plant - Markham, Illinois

AMOUNT

MANUFACTURED BY

CONTRACTOR: S. G. Hayes and Company
16222 Western Avenue
Markham, Illinois 60426

REMARKS:

PROJECT: Meadow Creek Subdivision

IDENTIFICATION: Marshall stability - ASTM - D 1559
Bituminous Aggregate Mixture

Date:	October 17, 1988		
Sample No.:	1	2	3
Stability, Pounds	3168	3369	3296
Date:	October 26, 1988		
Sample No.:	1	2	3
Stability, Pounds	3450	3729	3570
Date:	November 3, 1988		
Sample No.:	1	2	3
Stability, Pounds	3820	3521	3630

NOTE: (1) Sampled at the plant.
(2) Samples made and tested at our laboratory.
(3) Compacted at 290° - 50 blows/side.

RESPECTFULLY SUBMITTED:

3-
RLS:sc

FLOOD TESTING LABORATORIES, INC.
Russell L. Smith

CHICAGO MIDWEST
CONSTRUCTION COMPANY, INC.

November 9, 1988

TO: Consumers Illinois Water Company, Mr. Dan Oliver
S. G. Hayes and Company, Mr. Steve Brunke
Bruns Sewer Construction, Inc., Mr. Don Bruns

Project: Meadow Creek Aero Community

We have been instructed aqain by Mr. Wayne Stassen that no construction traffic of any kind is allowed on Murphy Court.

All access to your work at jobsite should be through the site from Harlem Avenue.

Thank you for your co-operation in this matter.

Sincerely,

CHICAGO MIDWEST CONSTRUCTION CO., INC.

Ken W. Norton
Vice President

KWN/jod

cc: Wayne Stassen
Bil Pradelski
A. B. Magnus
Roy Allen

29 W. 561 RT. 34 • NAPERVILLE, IL 60540 • (312) 789-2963

DATE 10-20-1988 PROJECT # 87028

TECH III CONSULTING GROUP DETENTION DATA

PROJECT NAME: MEADOW CREEK
COMMENTS: REVISED DISCHARGE PER TOWNSHIP
POND NUMBER: 3

TOTAL CONTIGUOUS AREA = 81.08 ACRES
TOTAL PROJ AREA = 81.08 ACRES
IMPERVIOUS AREA = 17.4 ACRES @ Runoff Coeff. = 0.90
PERVIOUS AREA = 63.7 ACRES @ Runoff Coeff. = 0.20
OTHER IMPERV AREAS = 0 ACRES @ Runoff Coeff. = 0.00
Composite runoff coeff. C' = 0.35
HIGH ELEV = 798
LOW ELEV = 768
DISTANCE = 900 FT.
SLOPE = 0.033 FT/FT

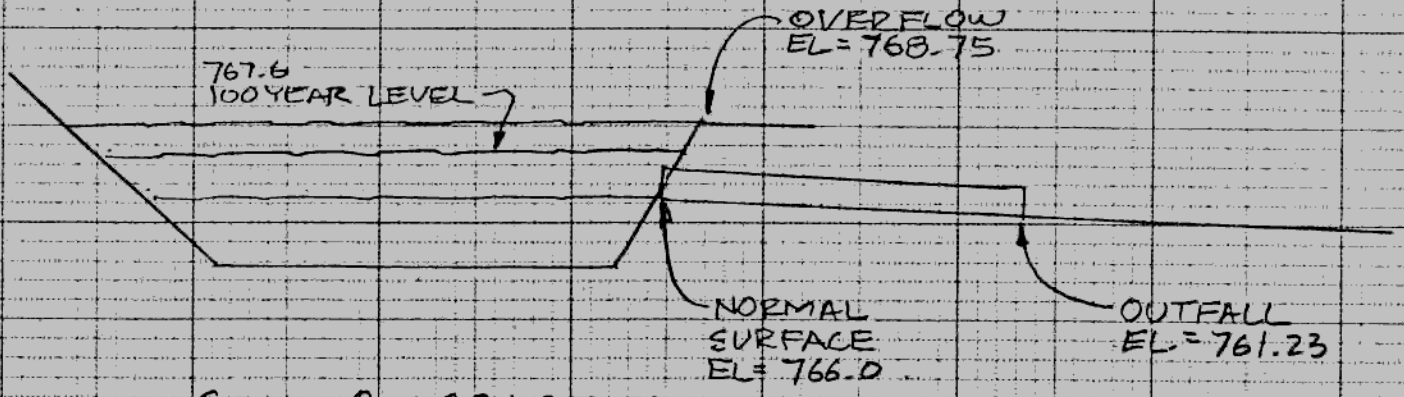
OVERLAND FLOW TIME, EXISTING CONDITIONS = 28.6 min.
INTENSITY OF A 28.6 MIN. 10-yr FREQUENCY STORM = 2.95 in/hr.
RELEASE RATE USED 8.100001 cfs. (0.1 CFS PER AC.)
ALLOWABLE RELEASE RATE 35.77 cfs.

****
DETENTION SUMMARY
****

STORM DURATION	RAINFALL INTENSITY	INFLOW RATE, cfs	STORAGE RATE, cfs	STORAGE REQ'D, ac.ft.	
0.17	7.60	215.67	207.57	2.941	
0.33	5.50	156.08	147.98	4.069	
0.50	4.40	124.86	116.76	4.865	
0.67	3.70	105.00	96.90	5.410	
0.83	3.20	90.81	82.71	5.721	
1.00	2.80	79.46	71.36	5.947	
1.50	2.10	59.59	51.49	6.436	
2.00	1.70	48.24	40.14	6.690	
3.00	1.20	34.05	25.95	6.488	
4.00	**1.00**	**28.38**	**20.28**	**6.760**	**<<MAX**
5.00	0.84	23.84	15.74	6.558	
6.00	0.73	20.72	12.62	6.310	
7.00	0.65	18.45	10.35	6.038	
8.00	0.58	16.46	8.36	5.573	
9.00	0.53	15.04	6.94	5.205	
10.00	0.49	13.91	5.81	4.842	

TECH 3 CONSULTING GROUP, INC
ENGINEERS SURVEYORS PLANNERS
1395 C MAIN STREET
CRETE, ILLINOIS 60417
(312) 672-4094

SHEET _____ OF _____ JOB NO. 8702B
PROJECT MEADOW CREEK
SUBJECT POND 3 MODIFICATION
BY WJS DATE 10-20-83



C = .8 SQUARE EDGE

ΔZ = 767.6 − 761.23 = 6.37 FT.

Q = 8.1 CFS

$$a = \frac{Q}{C\sqrt{2g\Delta Z}}$$

$$a = \frac{8.1}{.8\sqrt{64.4(6.37)}} = 0.4999 \text{ FT}^2$$

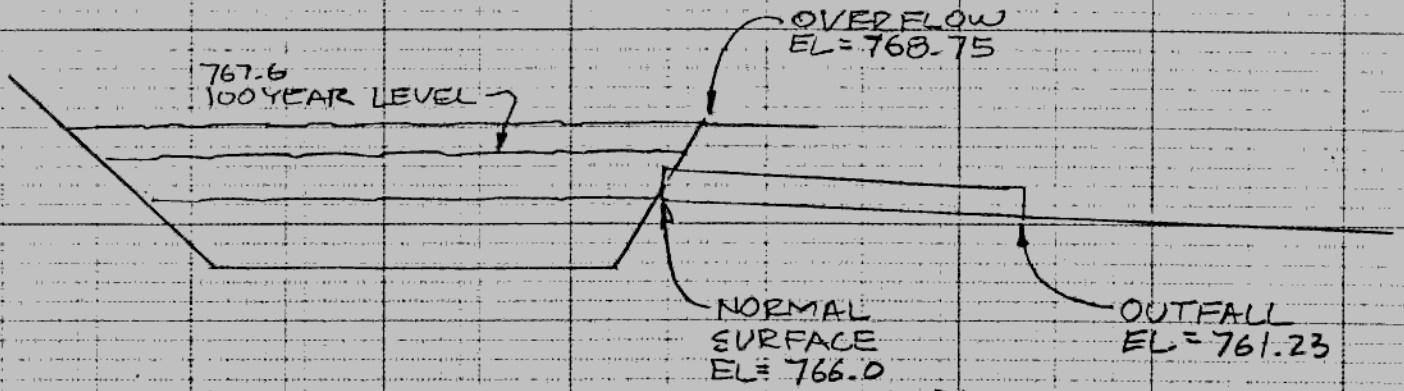
$$r^2 = \frac{a}{\pi}$$

r = 0.3989 FT. OR 0.80 FT. DIA. USE 10" DIAMETER

IT SHOULD BE NOTED THAT REQUIRED DETENTION VOLUME IS 3.865 AC FT. WITH A RELEASE RATE OF 35.77 CFS. WITH THIS MODIFICATION WE WILL HAVE REDUCED THE RELEASE RATE TO 8.1 CFS OR 44%. ALSO THE AVAILABLE DETENTION VOLUME BEFORE OVERFLOW WOULD BE 15.3 AC FT. OR EQUIVALENT TO GREATER THAN BACK TO BACK 100 YEAR STORMS.

TECH 3 CONSULTING GROUP, INC.
ENGINEERS SURVEYORS PLANNERS
1395 C MAIN STREET
CRETE, ILLINOIS 60417
(312) 672-4994

SHEET ____ OF ____ JOB NO. 97028
PROJECT MEADOW CREEK
SUBJECT POND 3 MODIFICATION
BY WJS DATE 10-20-98



C = .6 SQUARE EDGE 0.8

ΔZ = 767.6 − 761.23 = 6.37 FT.

Q = 8.1 CFS

$$a = \frac{Q}{C\sqrt{2g\Delta Z}} \qquad A = \frac{8.1}{.8\sqrt{64.4(6.37)}} \qquad A = 0.4999\ FT^2$$

$$a = \frac{8.1}{.6\sqrt{64.4(6.37)}} = 0.6665\ FT^2$$

$$r^2 = \frac{a}{\pi} \qquad r^2 = \frac{0.4999\ FT^2}{\pi} \qquad r = 0.3989\ FT$$

USE 12" DIA = 0.7978 FT = 9.57 in"

r = 0.4606 FT. OR 0.92 FT. DIA. USE 12" DIAMETER

IT SHOULD BE NOTED THAT REQUIRED DETENTION VOLUME IS 3.865 AC FT. WITH A RELEASE RATE OF 35.77 CFS. WITH THIS MODIFICATION WE WILL HAVE REDUCED THE RELEASE RATE TO 8.1 CFS OR 44%. ALSO THE AVAILABLE DETENTION VOLUME BEFORE OVERFLOW WOULD BE 15.3 AC FT. OR EQUIVALENT TO GREATER THAN BACK TO BACK 100 YEAR STORMS.

DATE 10-20-1988 PROJECT # 87028

TECH 3 CONSULTING GROUP DETENTION DATA

PROJECT NAME: MEADOW CREEK
COMMENTS: REVISED DISCHARGE PER TOWNSHIP
POND NUMBER: 3

TOTAL CONTIGUOUS AREA = 81.08 ACRES
TOTAL PROJ AREA = 81.08 ACRES
IMPERVIOUS AREA = 17.4 ACRES @ Runoff Coeff. = 0.90
PERVIOUS AREA = 63.7 ACRES @ Runoff Coeff. = 0.20
OTHER IMPERV AREAS = 0 ACRES @ Runoff Coeff. = 0.00
Composite runoff coeff. C' = 0.35
HIGH ELEV = 798
LOW ELEV = 768
DISTANCE = 900 FT.
SLOPE = 0.033 FT/FT

OVERLAND FLOW TIME, EXISTING CONDITIONS = 28.6 min.
INTENSITY OF A 28.6 MIN. 10-yr FREQUENCY STORM = 2.95 in/hr.
RELEASE RATE USED 8.100001 cfs. (0.1 CFS PER AC.)
ALLOWABLE RELEASE RATE 35.77 cfs.

****
DETENTION SUMMARY
****

STORM DURATION	RAINFALL INTENSITY	INFLOW RATE, cfs	STORAGE RATE, cfs	STORAGE REQ'D, ac.ft.	
0.17	7.60	215.67	207.57	2.941	
0.33	5.50	156.08	147.98	4.069	
0.50	4.40	124.86	116.76	4.865	
0.67	3.70	105.00	96.90	5.410	
0.83	3.20	90.81	82.71	5.721	
1.00	2.80	79.46	71.36	5.947	
1.50	2.10	59.59	51.49	6.436	
2.00	1.70	48.24	40.14	6.690	
3.00	1.20	34.05	25.95	6.488	
4.00	**1.00**	**28.38**	**20.28**	**6.760**	**<<MAX**
5.00	0.84	23.84	15.74	6.558	
6.00	0.73	20.72	12.62	6.310	
7.00	0.65	18.45	10.35	6.038	
8.00	0.58	16.46	8.36	5.573	
9.00	0.53	15.04	6.94	5.205	
10.00	0.49	13.91	5.81	4.842	

Dick W
(312) 705-4361
Arby Thompson
(312) 939-1144

S. G. HAYES
AND COMPANY
CONTRACTORS - ENGINEERS

162nd and WESTERN AVENUE
P. O. Box 130, MARKHAM, ILLINOIS 60426

SUBURBAN 331-3380 CHICAGO 264-6342

September 27, 1988

Will County
Land Use Dept.
501 Ella Avenue
Joliet, Il. 60433

RE: Pavement Design
Meadow Creek Subdivision
Harlem Ave. &
Monee-Manhattan Rd.
Monee Township, Illinois

ATTN: Mr. Roy Allen

Dear Sir:

In accordance with our telephone conversation of September 23, covering the pavement design on the above referenced project, we hereby agree to the following conditions concerning the full depth bituminous concrete pavement design.

We agree to the condition that the Marshall Stability of the bituminous base course material shall meet or exceed that as shown on the Marshall Stability-Coefficient Graph (figure G-3) which was previously submitted. Verification of this shall be produced by testing of the base course after initial installation by an independent testing laboratory.

We trust that the above meets with your approval & we remain.

Respectfully,

S. G. HAYES AND COMPANY

Steven E. Brunke
Vice-President

SEB:pc

Illinois Department of Transportation
2300 South Dirksen Parkway / Springfield, Illinois/62764

August 31, 1988

"Flexible Pavement Design
for Local Agencies"

COUNTY SUPERINTENDENTS OF HIGHWAYS
CONSULTING ENGINEERS
MUNICIPAL ENGINEERS

#88-27

Enclosed is a copy of "Flexible Pavement Design for Local Agencies" revised August, 1988. This Manual shall be used for future design work in place of the "Manual of Instructions for the Structural Design of Flexible Pavements on Projects Involving MFT, FAS and FAUS Funds" revised January, 1976. The use of the new Manual is still applicable to Motor Fuel Tax, federally funded, and Township Bridge Program projects.

The following is a listing of the more significant revisions to the 1976 Manual:

1. Retitled "Flexible Pavement Design for Local Agencies".
2. Realined the text into seven Sections and added a table of contents.
3. Updated percents used to estimate structural design traffic (No. of PC, SU and MU).
4. Increased the design period for Class I and II roads to 20 years. Design period for Class III and IV roads is between 15 and 20 years.
5. Expanded bituminous overlay to include deflection analysis as a method of estimating the structural value of existing material.
6. Added a new section for emulsified asphalts.
7. Updated the "Minimum Thickness and Material Requirements" (pg. 17) to reflect the current state of the arts.
8. Added a new section for 80,000 pound trucks.

If you have any questions concerning the above revisions, please contact Dick Kraus at Ext. 217-785-5066.

Sincerely,

John W. McCree
Engineer of Local Roads
and Streets

cc-
District Engineers

State of Illinois
DEPARTMENT OF TRANSPORTATION

FLEXIBLE PAVEMENT DESIGN FOR LOCAL AGENCIES

Bureau of Local Roads and Streets
Revised August 1988

FLEXIBLE PAVEMENT DESIGN
FOR LOCAL AGENCIES

SECTION 7 80,0000 POUND TRUCKS

SECTION 1 INTRODUCTION

1-1 DESIGN OF FLEXIBLE PAVEMENTS

The Illinois Department of Transportation has developed a design procedure for the structural design of flexible pavements in Illinois which is based on the findings of the AASHO Road Test Project, data on the behavior of Illinois pavements in regular service, engineering experience with the available soils and materials for highway construction in Illinois and recommendations of the AASHO Committee on Design.

The pavement structural design determined by the method given in the policy is based on (1) the volume and composition of traffic anticipated to be carried by the pavement, (2) the length of time the pavement is to carry this traffic, (3) the subgrade support strength provided by the roadbed soils, (4) the strength of the materials to be used in the pavement structure, and (5) the minimum desired quality of service that the pavement is to provide the traveling public.

The pertinent charts, tables, equations, limitations, and requirements of the policy have been included in this manual, as well as specific instructions to be followed in applying the method of design to flexible pavements for Local Agency projects involving MFT and Federal funds. This manual is not to be used for the design of projects on the State Highway System.

1-2 DESIGN OF BITUMINOUS SURFACE TREATMENTS

A flexible pavement design procedure for bituminous surface treatments, A-2 and A-3, is not included in this Manual. Bituminous surface treatments, A-2 and A-3, may be constructed on roads and streets having estimated average daily traffic volumes, upon completion, of 400 or less, and the minimum thicknesses of base courses for such treatments shall be as follows:

aggregate--8 inches
waterbound macadam--8 inches
Pozzolanic--6 inches
bituminous stabilized--6 inches
cement stabilized--6 inches
Lime stabilized soil mixture--8 inches

These minimum thicknesses for base courses are to be supplemented with subbase courses when necessary to compensate for poor subgrade soil conditions. The requirement for subbase may be determined on the basis of the applicable portions of this manual or some other acceptable method which has proven satisfactory in the past.

A-2 and A-3 bituminous surface treatments may not be placed on roads and streets having estimated average daily traffic volumes of over 400 upon completion, except under "Stage Construction."

SECTION 2 BASIC ELEMENTS

2-1 GENERAL

This method of design enables the designer to determine the type and thickness of the surface course, base course, and subbase required for a flexible pavement to give satisfactory service while carrying a given volume and composition of mixed traffic for a designated period of time. The application of this method of structural design involves the following determinations:

(1) The structural design traffic expressed as average daily passenger car (includes pick-up trucks) traffic (P.C.), average daily single unit traffic (S.U.), and average daily multiple unit traffic (M.U.).
(2) The class of road or street which is based on the structural design traffic.
(3) The design period.
(4) The soil support IBR value of the roadbed.
(5) The traffic factor (T.F.).
(6) The structural number (D_t).
(7) The combination of types and thicknesses of surface course, base course, and subbase representing the most economical design.

2-2 STRUCTURAL DESIGN TRAFFIC

The structural design traffic is the estimated average daily traffic (number of P.C., S. U., and M.U.) for the year representing one-half of the design period; e.g., when the design period is 20 years, the structural design traffic will be an estimate of the average daily traffic projected to ten years after the construction date.

The structural design traffic is estimated from current traffic count data obtained either by visual counts or from traffic maps published by the Illinois Department of Transportation. If single unit and multiple unit counts are not available for Class III and Class IV roads and streets, an estimate of those counts may be made using the following component percentages of the total traffic.

Class of Road or Street	Percentage of Structural Design Traffic		
	P.C.	S.U.	M.U.
Class III	88	7	5
Class IV	88	9	3

2-3 CLASS OF ROAD OR STREET

The class of the road or street for which the pavement structural design is being determined is dependent upon the structural design traffic.

Class I Roads and Streets - four-lane or more facilities, and one-way streets with a structural design traffic greater than 3500 ADT.

Class II Roads and Streets - two or three lane facilities and one-way streets with a structural design traffic greater than 1000 ADT and less than 3500 ADT.

Class III Roads and Streets - roads and streets with structural design traffic between 400 and 1000 ADT.

Class IV Roads and Streets - roads and streets with structural design traffic less than 400 ADT.

2-4 DESIGN PERIOD

The design period is the length of time in years that the pavement is being designed to serve the structural design traffic. For flexible pavements, the normal design period is 20 years for Class I and II roads and streets. Class III and IV roads and streets may have a design period that falls within the range of 15 and 20 years.

2-5 DESIGN LANE

The design lane is the lane carrying the greatest number of single and multiple units. This lane usage is expressed by a percentage which varies for the different lane combinations of roads or streets involved. The computations required have been included in the formulae given for the traffic factor (page 4) and no additional consideration is required. The following paragraph is provided for informational purpose only:

> While the structural design traffic represents an estimate of the projected average daily traffic in both directions that will be carried by the highway facility, the pavement structural design will be based on the lane carrying the greatest number of single and multiple units (design lane). In the case of a two-lane pavement, this represents 50 percent of the structural design traffic. In the case of four-lane pavements, based on traffic placement studies, it is assumed that 45 percent of the total single and multiple units and 32 percent of the total passenger car traffic will be operated in the design lane.

2-6 TRAFFIC FACTOR

The traffic factor is the estimated total number of equivalent 18-kip (18,000 lb.) single axle loadings in millions that will be developed by the structural design traffic during the design period. Thus, the traffic factor is dependent upon the structural design traffic and the design period, (D.P.), and provides a means of reducing the two to a number that can be used in design. The equivalency determination at the 18-kip level has no particular significance. It was selected merely as a convenient denominator in the determination of the Road Test equations.

The traffic factor (T.F.) is determined for the various classes of roads and streets from the following formulae:

Class I Roads and Streets

Four-lane Pavement (Rural & Urban) - $$T.F. = D.P. \frac{(0.047\ P.V. + 47.961\ S.U. + 169.178\ M.U.)}{1{,}000{,}000}$$

Six or more lane Pavement (Rural) - $$T.F. = D.P. \frac{(0.029\ P.V. + 42.632\ S.U. + 150.380\ M.U.)}{1{,}000{,}000}$$

Six or more lane Pavement (Urban) - $$T.F. = D.P. \frac{(0.012\ P.V. + 39.435\ S.U. + 139.102\ M.U.)}{1{,}000{,}000}$$

One-way streets & three-lane Pavement (Rural & Urban) - $$T.F. = D.P. \frac{(0.073\ P.V. + 53.290\ S.U. + 187.975\ M.U.)}{1{,}000{,}000}$$

Class II Roads and Streets

Two or three-lane Pavement - $$T.F. = D.P. \frac{(0.073\ P.V. + 44.530\ S.U. + 156.403\ M.U.)}{1{,}000{,}000}$$

Class III Roads and Streets

Two or three-lane Pavement - $$T.F. = D.P. \frac{(0.073\ P.V. + 44.350\ S.U. + 154.943\ M.U.)}{1{,}000{,}000}$$

Class IV Roads and Streets

Two-lane Pavement - $$T.F. = D.P. \frac{(0.073\ P.V. + 4.928\ S.U. + 39.420\ M.U.)}{1{,}000{,}000}$$

These formulae are based on Statewide average distribution of vehicle types and axle loadings, which are directly applicable to most roads and streets. However, cases will arise in which this table cannot be used, and a special analysis will be necessary. One such case would be a highway adjacent to an industrial site whereby heavy commercial vehicles entering and leaving the site generally travel empty in one direction and fully loaded in the other. Such cases should be referred to the Bureau of Local Roads and Streets for special analysis. It will be necessary for the local agency to furnish the Bureau of Local Roads and Streets with the structural design traffic, the design period, and count data sufficient to determine the distribution of commercial vehicle types and of single and tandem axle loadings within each type.

2-7 SOIL SURVEYS & SOIL SUPPORT VALUES

The IBR value is a critical item in the design procedure. It is probable that for most projects a soils survey will be required in addition to the IBR determination. However, it is anticipated that in some instances, particularly on the lower class roads and streets, only investigation of the support value of the subgrade soils are necessary. Engineering judgment should be applied to decide whether investigations are needed in suspect or unfamiliar areas where subsurface conditions might materially affect the design or indicate the need for replacement or corrections of unstable conditions.

The soil support IBR value selected for use in determining the design should represent a minimum value for the soils to be used. Preferably, laboratory tests should be conducted on samples of the soils to be used in the construction. The samples should be compacted and soaked for four days before testing. However, when actual IBR test data cannot reasonably be obtained, the following values are suggested:

Soil Classification	IBR Value
A-1	20
A-2-4, A-2-5	15
A-2-6, A-2-7	12
A-3	10
A-4, A-5, A-6	3
A-7-5, A-7-6	2

The IBR test is used for design since it is the only soil strength test that was used by the Division of Highways on the Road Test soil. Other soil strength test procedures can be used provided the test results are correlated with those obtained by the IBR test procedure used by the Illinois Department of Transportation.

2-8 STRUCTURAL NUMBER (D_t)

The structural number (D_t) is an index number that is related to the types and strengths of materials being used in the pavement structure. It is determined from Figure 5-2 on page 15 for Class I roads and streets, and from Figure 5-3 on page 16 for Class II, Class III, and Class IV roads and streets.

A straight line passing through the determined value on the traffic factor scale and the determined value on the soil support IBR scale will intersect the structural number scale at the required D_t value.

2-9 PAVEMENT STRUCTURE THICKNESS EQUATION

The following equation reflects the pavement structure thickness in terms of a structural number. The structural number is related to the thickness of the various layers of the pavement structure as follows:

For pavements with aggregate and stabilized base courses,

$$D_t = a_1D_1 + a_2D_2 + a_3D_3$$

where: D_t is the structural number,

a_1, a_2, a_3 are coefficients of relative strength of the surface course, base course, and subbase, respectively.
D_1 = thickness of surface course in inches
D_2 = thickness of base course in inches, and
D_3 = thickness of subbase in inches.

The coefficients a_1, a_2, and a_3 are considered to be a measure of the relative strength, as related to performance, of the surface course, base course, and subbase materials, respectively. It is important to note that the value of a coefficient for a particular layer of the pavement is not constant, but is assumed to vary in accordance with the strength of the material to be used in that layer (See 3-1 on page 7).

3-1 LIMITATIONS AND REQUIREMENTS

The structural design method presented herein enables the designer to determine the structural number (D_t) and, subsequently, the thickness of base, subbase, and surface courses required for a flexible pavement to give satisfactory performance while carrying a given volume of mixed traffic. The limitations and requirements of this policy must be followed strictly so that the determined design will be both practical and adequate for the traffic it is intended to carry.

A flexible pavement consists of a two-layer or a three-layer structure, including a surface course and base course or a surface course, base course, and subbase course. Each layer must have sufficient strength and thickness to sustain the load imposed upon it and to distribute it over a sufficient area so as not to exceed the structural strength of the next succeeding layer. Thus, the composition of the pavement structure must be such that the strength characteristics of the surface material, as measured by its Marshall Stability, are higher than those of the base course or subbase, as measured by their Marshall Stability, IBR, or PSI, and that the strength characteristics of the base course material are higher than those of the subbase. This must be kept in mind in selecting the materials to be used in the pavement structure. In other words, if two aggregate materials having different strength characteristics are selected for use, then the higher strength material must be used as the base course and the lower strength material as the subbase. If only one material is to be used for both the subbase and the base course, then the pavement structure must be considered as a two-layer system consisting only of a surface course and a base course.

It is necessary to consider construction and maintenance problems in the early stages of design to avoid an impractical design. Such considerations usually result in the establishment of minimum thickness and material requirements for each layer of the pavement structure. The minimum requirements recommended for each are presented in Figure 5-4 on page 17.

The actual layer thicknesses are to be determined from the pavement thickness equation, except when the equation thicknesses are less than the minimum policy.

The performance of a flexible pavement is directly related to the physical properties and supporting power of the materials used in the pavement structure and of the roadbed soils. The effect of less satisfactory soils can be reduced by increasing the thickness of the pavement structure, but it may be necessary to take other steps to assure adequate pavement performance. Roadbed soils are subject to permanent deformation, excessive volume changes, excessive deflection and rebound, frost susceptibility, and non-uniform support from wide variations in soil type. These problems are compounded by varying soil conditions and need to be recognized in the design stage, and corrective measures should be included in the plans and specifications. These corrective measures are to be made in addition to the thickness of surface course, base course, and subbase as determined by this policy.

This policy has been developed on the assumption that the material requirements, mixture designs and construction procedures will be in accordance with the current specifications and practices of the Illinois Department of Transportation. To assure satisfactory performance of the pavement, the strengths for pavement structure components used in design must be obtained during construction. They are to be shown on the plans along with the structural design traffic (See 3-5 on page 10).

3-2 STAGE CONSTRUCTION

Planned stage construction is defined as the construction of the pavement structure of roads or streets in two or more stages, meeting eventual pavement structural design requirements and in accordance with a predetermined time schedule. The minumum pavement structural design requirements are to be determined by the procedures described herein. The final stage should be scheduled for construction within a period of three years after completion of the base course unless the interim surface (if any) and base is performing satisfactorily with no signs of structural failure.

Non-Stabilized Bases. This construction may be performed in two or more stages; for example: (1) Subbase and part (or all) of base course; (2) remainder of base course; (3) bituminous surface course. A bituminous surface treatment (A-2 or A-3) should be place to protect the base material after construction of the first or second stage.

Stabilized Bases. This construction may be performed in not more than two stages; for example: (1) subbase (if required) and full design thickness of stabilized base course; (2) bituminous surface course. The portion of the pavement structural number provided by the base shall be equal to, or greater than, the design structural number required for the period between the construction of the base and the final stage. A bituminous surface treatment (A-2 or A-3) or a plant mix bituminous seal coat should be placed on the base course when its composition is such that it will not withstand the abrading and eroding action of traffic.

Any evidence of raveling or other deterioration to the base prior to the termination of the three year period will necessitate construction of the surfacing stage and may necessitate a re-evaluation of the structural design.

3-3 WIDENING EXISTING PAVEMENTS

Where it is desired to widen an existing flexible pavement, a bituminous treated flexible base, an existing portland cement concrete pavement, or a brick pavement, the following shall govern:

(a) If the widening consists of one or more traffic lanes, the subbase and/or base and surface thicknesses shall be determined in accordance with this manual.

(b) If the widening is of less than lane width, the design may either duplicate the existing total pavement structure, or provide a base and bituminous surface of a reasonable equivalent design, provided that in both cases the thickness of the bituminous surface and appropriate base are not less than the minimums established in figure 5-4 on page 17.

(c) If the widening consists of one or more parking lanes on streets where the DHV-20 is over 500, it must be assumed that the parking lanes will be converted to traffic lanes within the design life of the pavement and shall be designed as traffic lanes in accordance with paragraph (a) above. However, if it is substantiated that the parking lanes will not be converted within the design life, the lanes may be designed in accordance with paragraph (b) above. On streets where DHV-20 is 500 or less, parking lanes may be designed in accordance with the policy for less than a full lane width as covered under paragraph (b) above; or may consist of a bituminous surface treatment, A-3, on flexible base meeting the minimum thickness requirements shown in Figure 5-4 on page 17 for aggregate or stabilized base courses.

3-4 BITUMINOUS OVERLAYS

Bituminous Overlays may be used to correct surface and structural deficiencies. Present pavement conditions and estimates of future traffic dictate the thicknesses of these overlays. When it is proposed to place a Class B or Class I bituminous surface on an existing flexible pavement or flexible base, the thickness of the overlay may be determined by one of the following procedures.

1. Evaluating Existing Material

This method can be accomplished within the framework of the procedure outlined in this manual by estimating the structural number value of the existing material and determining the IBR of the subgrade. The surface thickness (and possibly additional base thickness) is then selected to satisfy the design structural number requirement.

The estimate of the structural number value of the existing material requires the determination of the material thickness(es) and the selection of appropriate coefficient(s) based on material type(s) and condition. If the existing pavement or base is not over 2 years old, shows no signs of distress, and has not been contaminated with foreign material, the material coefficient(s) may be taken directly from Figure 6-1 on page 19. Otherwise a lesser coefficient is to be selected taking into account age, degree of contamination, and structural integrity.

2. Deflection Analysis

Deflection is the amount of vertical rebound of a pavement surface that occurs when a load is removed. The magnitude of the pavement deflection is an indicator of the pavement's ability to withstand traffic loading. Research has established correlations between the wheel load, pavement deflections and repetitions of the load.

Bituminous overlays may be designed by deflection analysis in accordance with the following procedure.

a) Take an appropriate number of deflection readings on the existing roadway to be resurfaced. Pavement deflections shall be obtained at the rate of 20 per mile.

b) Convert the deflection readings to Spring deflections using Illinois data

c) Tabulate the deflections and compute a standard deviation.

d) Deflections that fall outside the mean deflection plus two standard deviations shall be set aside for special consideration.

e) Compute a traffic factor for the project.

f) Utilizing the mean deflection plus two standard deviations perform the Asphalt Institutes deflection based asphalt overlay design procedures.

Modifications to the above procedures must be approved by the Central Bureau of Local Roads and Streets.

3-5 REQUIRED STRUCTURAL DESIGN INFORMATION IN PLANS

Sufficient information on the structural design shall be included on the typical cross section sheet of plans to permit checking of the plans and special provisions. Information will be needed on the structural design traffic, the design period, the classification of road or street, the support value of the roadbed soils, the structural number, and the types and coefficient values for the materials to be used in the surface, base, and subbase. It is recommended that the information be shown as follows:

Structural Design Traffic (S.D.T.): Year _____; P.C. _____,
Class _____ Road (or Street) S.U. _____,
M.U. _____

Minimum Soil Support: IBR= _____ (Stas. _____ to _____)
IBR= _____ (Stas. _____ to _____)

Percent of S.D.T. in Design Lane: P= _____, S= _____, M= _____
T.F.= _____; D_t= _____ (Stas. _____ to _____)
D_t= _____ (Stas. _____ to _____)

Pavement Structure Materials: Surface Course Type:_____; a_1=____

Base Course Type:_____(Crushed_____, Uncrushed_____); a_2=____

Subbase Type:_____(Crushed_____, Uncrushed_____); a_3=____

SECTION 4 EMULSIFIED ASPHALT

4-1 GENERAL

Although emulsified asphalt base courses have strength potential similar to the hot-asphalt mixes, they have one significant difference - slower strength gain. Hot-mix materials exhibit their final strength potential as soon as they cool, while properly designed cold-mixes require up to three years of field curing to reach final strength. This basic difference makes emulsified asphalt mixes subject to premature performance losses under early high traffic volume loading conditions. Due to these and other conditions emulsified asphalt mixes have limiting thickness and structural number (D_t) requirements.

4-2 COEFFICIENTS AND DESIGN THICKNESSESS

Emulsified asphalt mixes are limited to pavement designs requiring a structural number that is less than 4.50. The following chart provides other minimum requirements.

Structural Number, D_t	Minimum Thickness Inches 1/	Minimum Design Modified Marshall Stability (lbs.)
1.00 to 1.99	6	1,000
2.00 to 2.49	6	1,000
2.50 to 2.99	7	1,000
3.00 to 3,49	8	1,300
3.49 to 3.99	8	1,900
4.00 to 4.49	8	2,100

1/ When an emulsified asphalt mix with a strength greater than the minimum required above is used, a reduction in the minimum required thickness, up to a maximum of 1 inch, will be allowed.

Coefficents for emulsified asphalt can be determined from Figure 6-5 on page 23.

SECTION 4 EMULSIFIED ASPHALT

4-1 GENERAL

Although emulsified asphalt base courses have strength potential similar to the hot-asphalt mixes, they have one significant difference - slower strength gain. Hot-mix materials exhibit their final strength potential as soon as they cool, while properly designed cold-mixes require up to three years of field curing to reach final strength. This basic difference makes emulsified asphalt mixes subject to premature performance losses under early high traffic volume loading conditions. Due to these and other conditions emulsified asphalt mixes have limiting thickness and structural number (D_t) requirements.

4-2 COEFFICIENTS AND DESIGN THICKNESSESS

Emulsified asphalt mixes are limited to pavement designs requiring a structural number that is less than 4.50. The following chart provides other minimum requirements.

Structural Number, D_t	Minimum Thickness Inches 1/	Minimum Design Modified Marshall Stability (lbs.)
1.00 to 1.99	6	1,000
2.00 to 2.49	6	1,000
2.50 to 2.99	7	1,000
3.00 to 3,49	8	1,300
3.49 to 3.99	8	1,900
4.00 to 4.49	8	2,100

1/ When an emulsified asphalt mix with a strength greater than the minimum required above is used, a reduction in the minimum required thickness, up to a maximum of 1 inch, will be allowed.

Coefficents for emulsified asphalt can be determined from Figure 6-5 on page 23.

SECTION 5 DETERMINATION OF THICKNESS

5-1 CONSOLIDATED PROCEDURES

In calculating the design thicknesses from the pavement structural number equation ($D_t = a_1D_1 + a_2D_2 + a_3D_3$), the thickness minimums listed in Figure 5-4 on page 17 (or greater thicknesses) must be used. For structural numbers exceeding 4.99, a minimum of 4 inches of subbase is always required.

Superior types of surface, base, and subbase, over those shown in Figure 5-4 on page 17, for each group of structural numbers, may be selected, but in no case may an inferior type of surface, base, or subbase be selected. In any case, the minimum thickness requirements of this policy shall not be violated. It should be remembered that increasing the quality of material will tend to reduce the thickness that is required, however, it may not increase the level of performance.

Determine:
1. Average daily passenger car traffic = P.C.
2. Average daily single unit traffic = S.U.
3. Average daily multiple unit traffic = M.U.

Determine: Class of road or street - see Section 2-3 on page 3

Determine: Design period - see Section 2-4 on page 3

Determine: Illinois Bearing Ration (IBR) - see Section 2-7 on page 5

Calculate traffic factor (T.F.) using pertinent formula from Section 2-6 on page 4

Using the IBR and the T.F., find structural number (D_t) from

Figure 5-2 on page 15 for Class I roads and streets, and
Figure 5-3 on page 16 for Classes II, III, or IV roads and streets

Calculate the design thicknesses of surface, base, and subbase by use of the following formulae, and coefficients from Figure 6-1 on page 19

For flexible pavements with aggregate and stabilized base courses.

$D_t = a_1D_1 + a_2D_2 + a_3D_3$

where D_1, D_2 & D_3 = thickness of surface, base and subbase courses, respectively

a_1, a_2 & a_3 = coefficients of relative strength for the surface, base, and subbase courses.

"FIGURE 5-1 EXAMPLE CALCULATIONS"

Example Number	Required Structural Number (D_t)	Structural Components and Types			Coefficients (From Figure 6-1)		
		Surface (D_1)	Base (D_2)	Subbase (D_3)	Surface (a_1)	Base (a_2)	Subbase (a_3)
1	1.90	Road Mix (Class B)	Aggregate, Type A	Type B	0.20	0.13	0.11
2	2.60	Class I	Soil Cement existing soil	None	0.40	0.15	--
3	2.60	Pl Mix Cl B w/Asph Cement	Soil Cement imported soil	Type B	0.30	0.20	0.11
4	3.10	Class I	Bituminous Stabilized-1900 MS	None	0.40	0.33	--
5	3.10	Class I	MC Asphlat Stabilized	None	0.40	0.18	--
6	1.90	Road Mix (Class B)	Waterbound Macadam	Type B	0.20	0.14	0.11

EXAMPLE 1

A. The Problem-to determine the structural thickness needed for a Type A aggregate base with a 4-inch Type B subbase, for a 2-inch road mix Class B surface, under the following conditions:

1. Class IV road,
2. Two-lane pavement,
3. Design period-15 years,
4. Structural design traffic:
   (a) 250 total average daily traffic
       (1) 178 passenger cars
       (2) 70 single units
       (3) 2 multiple units
5. Soil support IBR value = 3,
6. Both crushed and uncrushed are available for use in the pavement structure.

B. The Solution:

1. From Section 2-6 on Page 4, seventh formula, traffic factor (T.F.) = $\frac{15(0.073x178+4.928x70+39.420x2)}{1,000,000} = .00655$

   use .0066

2. From Figure 5-3 on Page 16 using the IBR of 3 and the T.F. of 0.0066 the structural number (D_t)= 1.90

3. Using the structural number equation, determine D_2, the required base thickness, as follows:

   $D_t = a_1D_1 + a_2D_2 + a_3D_3$

   $1.90 = (.20)2 + .13D_2 + (.11)4$

   $D_2 = \frac{1.06}{.13} = 8.2$ inches, use 8 inches

Example 2

Assume minimum 2.5" Class I surface and binder, no subbase. Determine base thickness:

$$D_t = a_1D_1 + a_2D_2$$
$$2.60 = (.40)2.5 + .15D_2$$
$$D_2 = \frac{1.60}{.15} = 10.7 \text{ inches, use 10.5 inches}$$

Example 3

Assume minimum 3" Plant Mix (Class B) Asphalt cement surface and minimum subbase thickness of 4". Determine base thickness:

(a) $D_t = a_1D_1 + a_2D_2\ \ a_3D_3$
$2.60 = (.30)3 + .20D_2 + (.11)4$
$D_2 = \frac{1.26}{.20} = 6.3$ inches, use 6 inches

Assume same surface as (a) and a base thickness of 6". Determine subbase thickness:

(b) $D_t = a_1D_1 + a_2D_2 + a_3D_3$
$2.60 = (.30)3 + (.20)6 + .11D_3$
$D_3 = \frac{0.50}{.11} = 4.6$ inches, use 5 inches

Example 4

Assume minimum 3" Class I surface and binder, no subbase. Determine base thickness:

$$D_t = a_1D_1 + a_2D_2$$
$$3.10 = (.40)3 + (.33)D_2$$
$$D_2 = \frac{1.90}{.33} = 5.8 \text{ inches, use 6 inches--minimum thickness (see page 17)}$$

Example 5

Assume same surface as Example 4, no subbase. Determine thickness of different type base:

(a) $D_t = a_1D_1 + a_2D_2$
$3.10 = (.40)3 = .18D_2$
$D_2 = \frac{1.90}{.18} = 10.6$ inches, use 10.5 inches

Assume same surface as (a) and a thickness of 8" for same. Determine subbase thickness:

(b) $D_t = a_1D_1 + a_2D_2 + a_3D_3$
$3.10 = (.40)3 + (.18)8 + .11D_3$
$D_3 = \frac{.46}{.11} = 4.2$ inches, use 4 inches

Example 6

Assume minimum 2" Road Mix (Class B) surface and 4" subbase. Determine base thickness:

$$D_t = a_1D_1 + a_2D_2 + a_3D_3$$
$$1.90 = (.20)2 + .14D_2 + (.11)4$$
$$D_2 = \frac{1.06}{.14} = 7.6 \text{ inches, use 7.5 inches}$$

* * * * * *

The selection of the combination of thickness and materials to be used for the pavement structure from those determined by trial designs is basically a problem of economics. The design selected generally should be the one that can be built and maintained for the least amount of money. This can be determined by applying current unit prices to the various combinations of materials and thicknesses and to maintenance operations.

FIGURE 5-2 Nomograph for Class I Roads and Streets

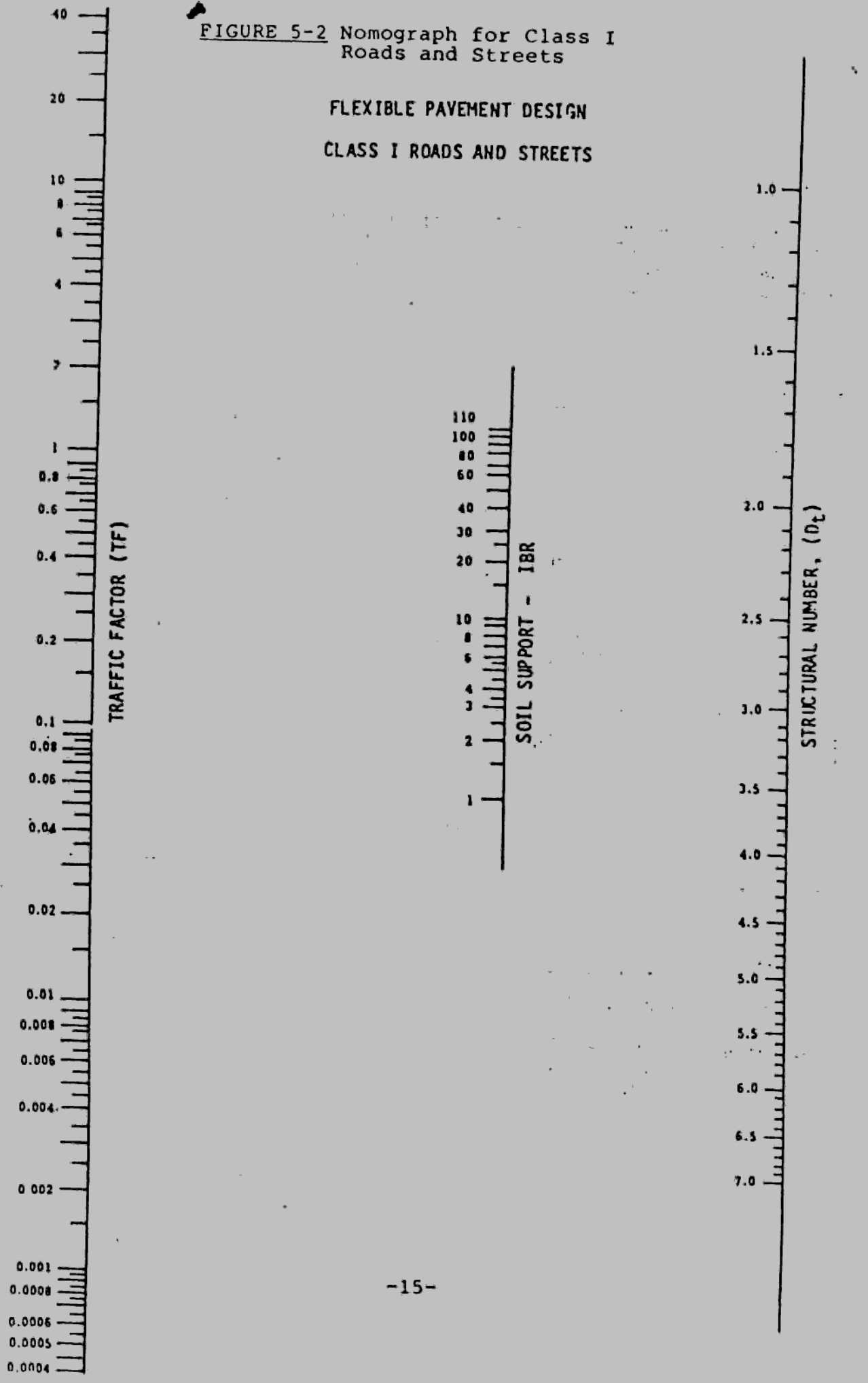


FIGURE 5-3 Nomograph for Class II, III, and IV Roads and Streets

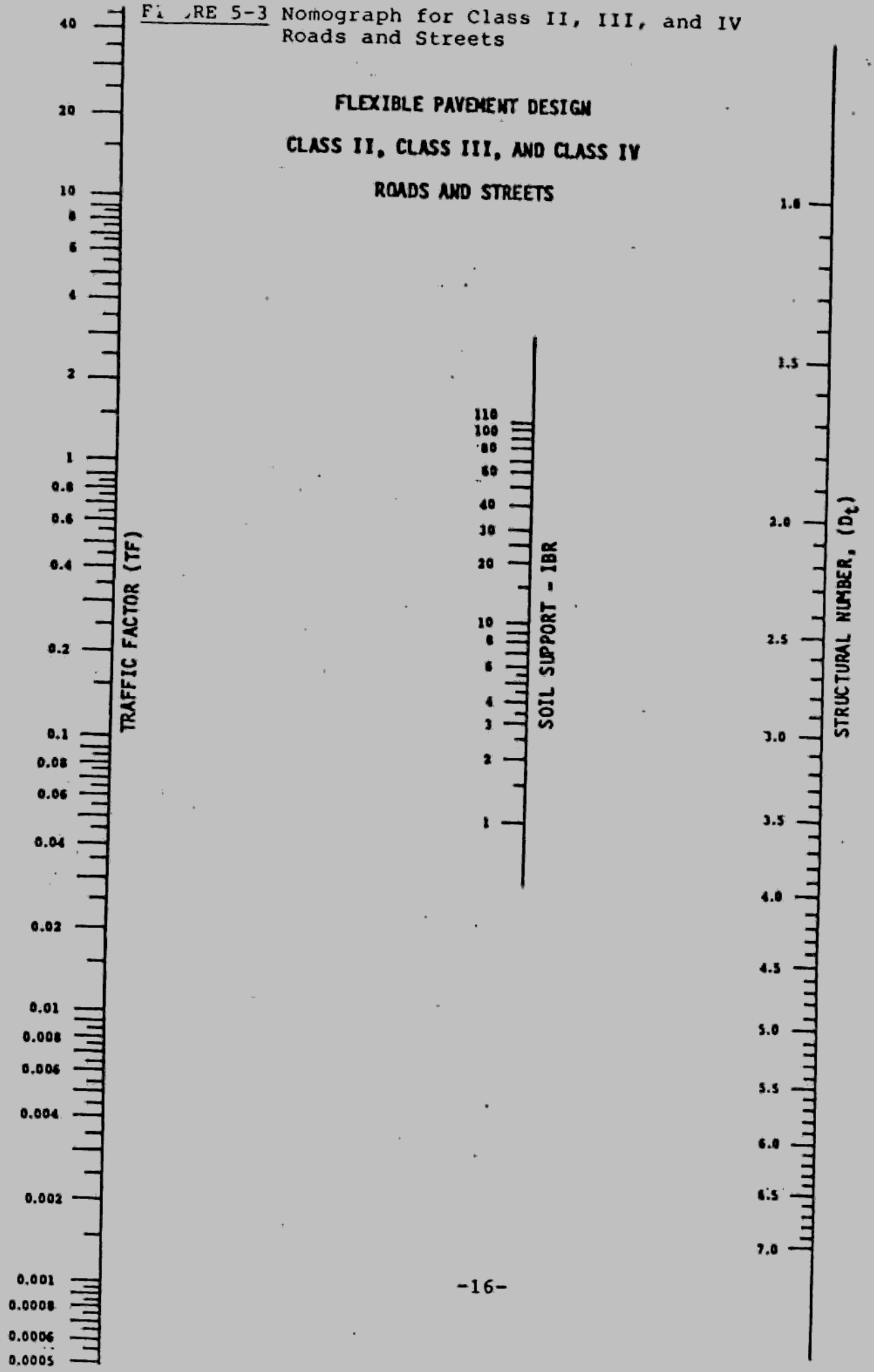


FIGURE 5-4 MINIMUM THICKNESS AND MATERIAL REQUIREMENTS

STRUCT. NO. D_t		MINIMUM THICKNESS, (INCHES)			MINIMUM MATERIAL 4/				
From	To	Surface	Base 1/	Subbase 2/ 6/	Surface	Base	Minimum 5/ M.S.	Minimum 5/ C.S.	Subbase 2/ 6/
1.00	1.99	2	8	4 3/	Class B Road Mix	Aggregate, Type B 2/			Gran. Mat., Type B 3/
		2	6	4		Stab. Gran. Mat.	300	300	
2.00	2.49	2	8	4 3/	Class B Plant Mix	Aggregate, Type B 2/			Gran. Mat., Type B 3/
		2	6	4	(asphalt cement)	Stab. Gran. Mat.	300	300	
2.50	2.99	3	9	4	Class B Plant Mix	Aggregate Type A			Gran. Mat., Type B
		3	7	4	(asphalt cement)	Stab. Gran. Mat.	300	300	
3.00	3.49	3	11	4	Class B Plant Mix	Aggregate, Type A			Gran. Mat., Type B
		3	8	4	(asphalt cement)	Stab. Gran. Mat.	400	400	
3.50	3.99	3	8	4	Class I	Stab. Gran. Mat.	800	650	Gran. Mat., Type B
4.00	4.49	4	8	4	Class I	Stab. Gran. Mat.	1000	750	Gran. Mat., Type B
4.50	4.99	4	9	4	Class I	Stab. Gran. Mat.	1200	1000	Gran. Mat., Type B
		4	9	4		Pozzolanic, Type A			
5.00	5.99	4	10	4	Class I	Stab. Gran. Mat.	1500		Gran. Mat., Type A
6.00	or greater	4	12	4	Class I	Stab. Gran. Mat.	1700		Gran. Mat., Type A

Notes: 1/ When bituminous stabilized granular material with a strength greater than the minimum required above is used, a reduction in the minimum required thickness, up to a maximum of 1 inch, will be allowed for D_t's 2.5 or greater.

2/ The minimum thickness of a lime stabilized soil shall be 6 inches for subbases and 8 inches for bases.

3/ If an uncrushed Aggregate Base Course, Type B, is used, a subbase shall not be used.

4/ Other approved materials having equal or greater strengths may be substituted for those listed above.

5/ M.S. = Marshall Stability or equivalent. C.S. = 7-day compressive strength that can be reasonably expected under field conditions.

6/ The use of a granular subbase is not mandatory for D_t less than 5.00.

6-1 GENERAL COEFFICIENT LIMITS

Some of the coefficients presented in this policy were determined from AASHO Road Test data, while others were obtained through correlations with standard strength test procedures used by the Illinois Department of Transportation. The correlations were developed on the basis of engineering experience and judgment, using the coefficients developed on the Road Test and the results of additional tests conducted by the Department on the Road Test materials.

Values of the coefficients for the various materials normally used in the pavement structure are given in Figure 6-1 on page 19. Values of coefficients for materials other than those listed, or for materials with minimum strengths in excess of those given, may be determined from the coefficient vs. strenth-test relationships shown on pages 20 thru 25.

The coefficients listed in Figure 6-1 on page 19 are consistent with minimum strength values that can be expected to be obtained throughout the State and may be used in determining the structural design of any road or street. The minimum strength values of the materials available in a particular area may, in some instances, be different from the values in Figure 6-1 on page 19, and the coefficients may be adjusted to take advantage of the materials in the area. Any change in minimum strengths for the materials listed should be based on actual test results. The minimum strength selected for adjusting the coefficient of a particular material need not be the absolute minimum test result; however, it should be selected such that the results of at least 85 percent of individual tests are at or above the minimum value. The strength tests should be conducted on representative samples obtained from all local sources likely to furnish materials for the pavement being designed.

In the event that a coefficient other than the value listed is used for a particular material, it will be necessary to revise, by special provision, the standard specifications for the material to include the increased minimum strength assumed in design as a condition of acceptance of the material for use in the construction.

FIGURE 6-1 COEFFICIENT LIMITS FOR PAVEMENT STRUCTURE MATERIALS

Structure Materials	Strength Requirements			Coefficient Limits 3/		
	M.S. 1/	IBR	PSI 2/	a_1	a_2	a_3
BITUMINOUS SURFACE						
Class B Road Mix				0.20		
Class B Plant Mix (Liquid Asphalt)				0.22		
Class B Plant Mix (Asphalt Cement)	900			0.30		
Class I	1700			0.40		
BASE COURSE						
Aggregate Ty B (Uncrushed)		50		0.10		
Aggregate Ty B (100% crushed)		80		0.13		
Aggregate Ty A		80		0.13		
Lime Stabilized Mixture			150	0.11		
Soil Cement			300-500		0.15-0.20	
Cement Aggregate (LR 312)			650		0.23	
			750		0.25	
			1000		0.28	
Pozzolanic					0.28	
Asphalt Stabilized (LR310) Liq. Asphalt					0.18	
Bituminous Aggregate Mixture (LR311)	900-1900				0.24-0.33	
Bituminous Mixture, Class I	1700+				0.33	
SUBBASE						
Lime Stabilized Soil Mixture			100			0.12
Granular Material, Type B		30				0.11
Granular Material, Type A (Uncrushed)		50				0.12
Granular Material, Type A (100% crushed)		80				0.14

1/ Marshall Stability or equivalent
2/ 7-day design compressive strength
3/ For materials with strengths other than that shown, the coefficients may be determined from pages 20-25. Other approved materials of similar strengths may be substituted for those listed in the table.

FIGURE 6-2

COEFFICIENTS FOR BITUMINOUS SURFACE COURSE MATERIALS

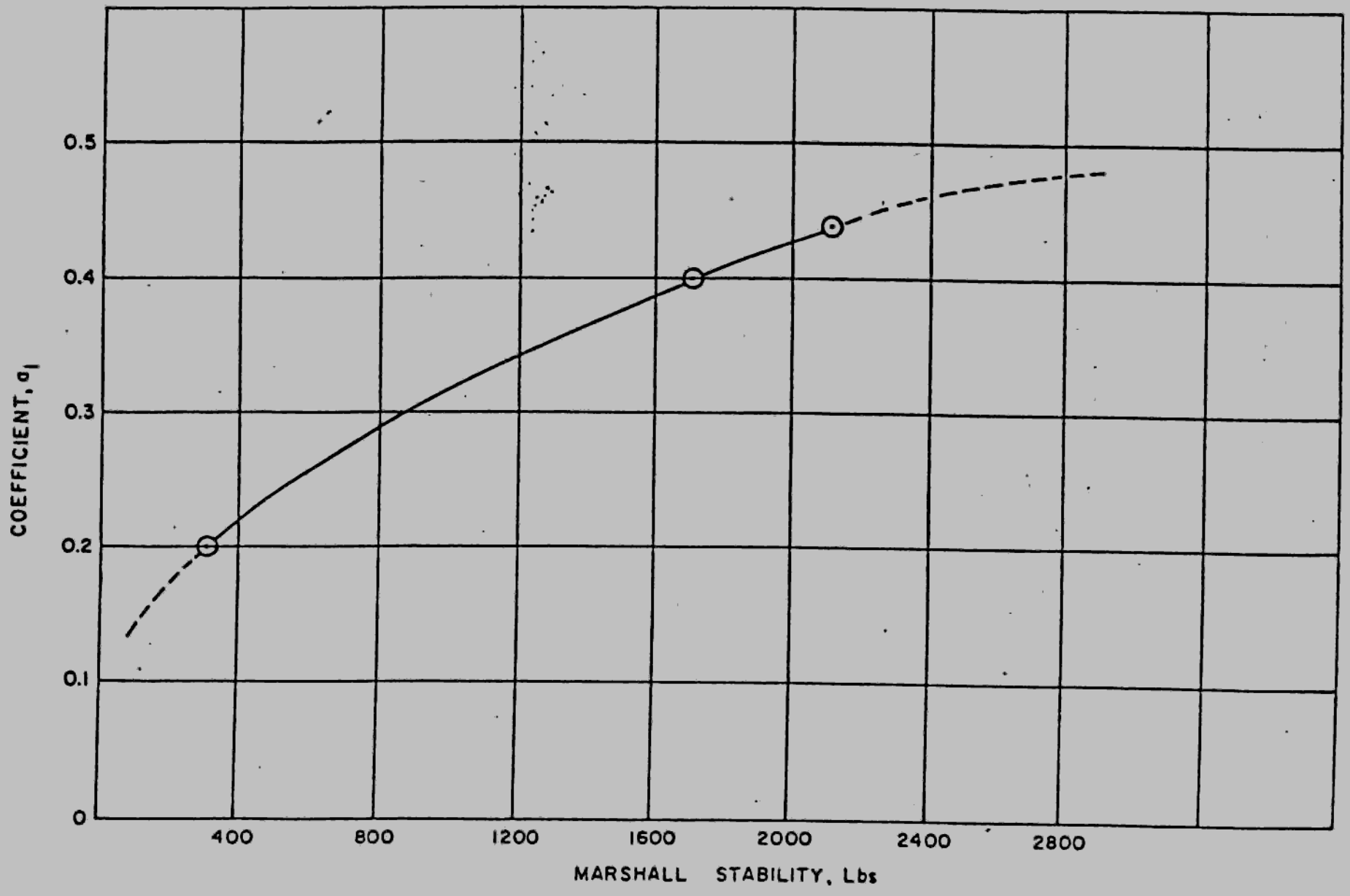


FIGURE 6-3

COEFFICIENTS FOR BITUMINOUS STABILIZED GRANULAR MATERIALS

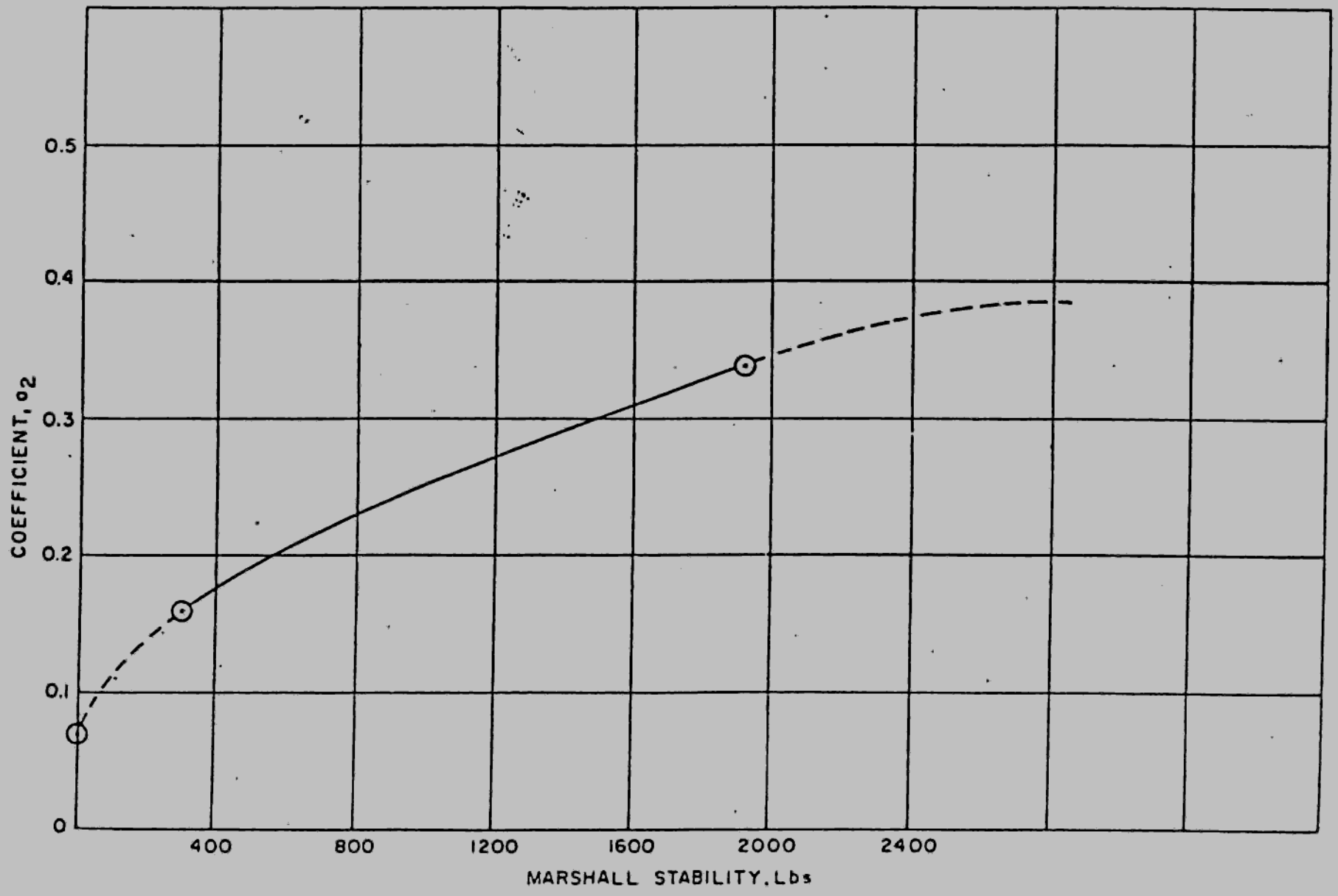


FIGURE 6-4

COEFFICIENTS FOR CEMENT STABILIZED GRANULAR MATERIALS

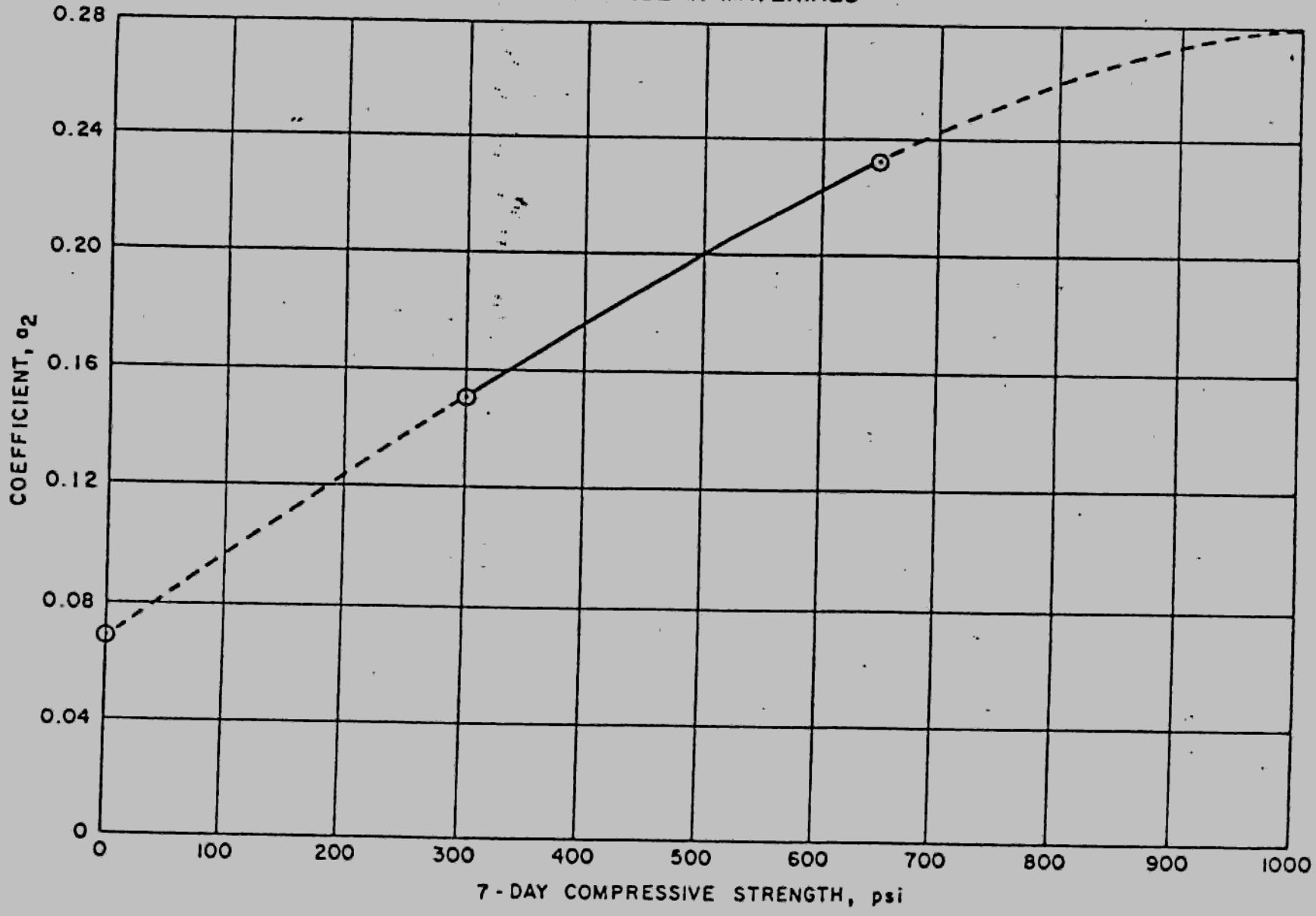
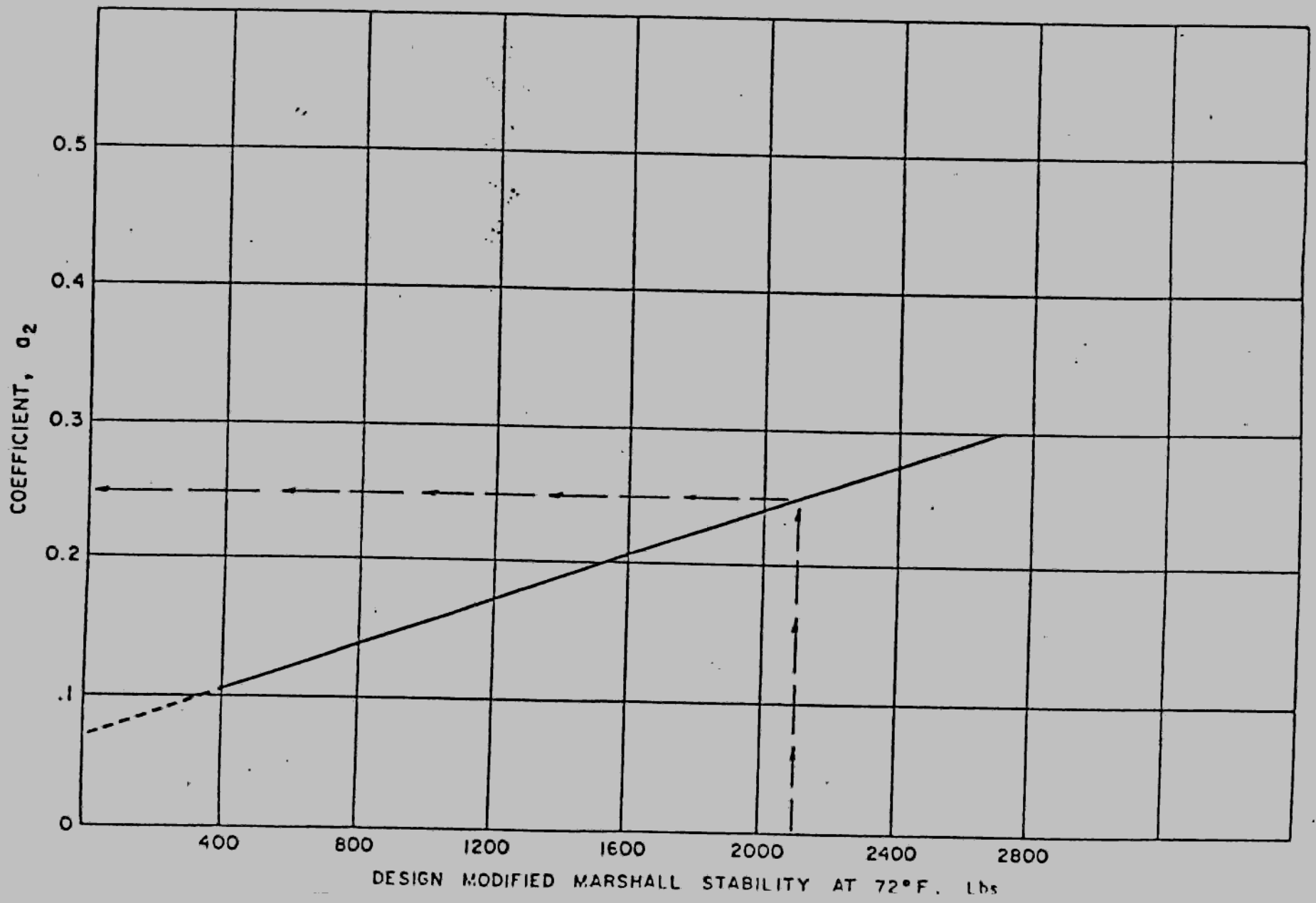


FIGURE 6-5

COEFFICIENTS FOR EMULSIFIED ASPHALT - AGGREGATE BASE COURSE MIXTURES



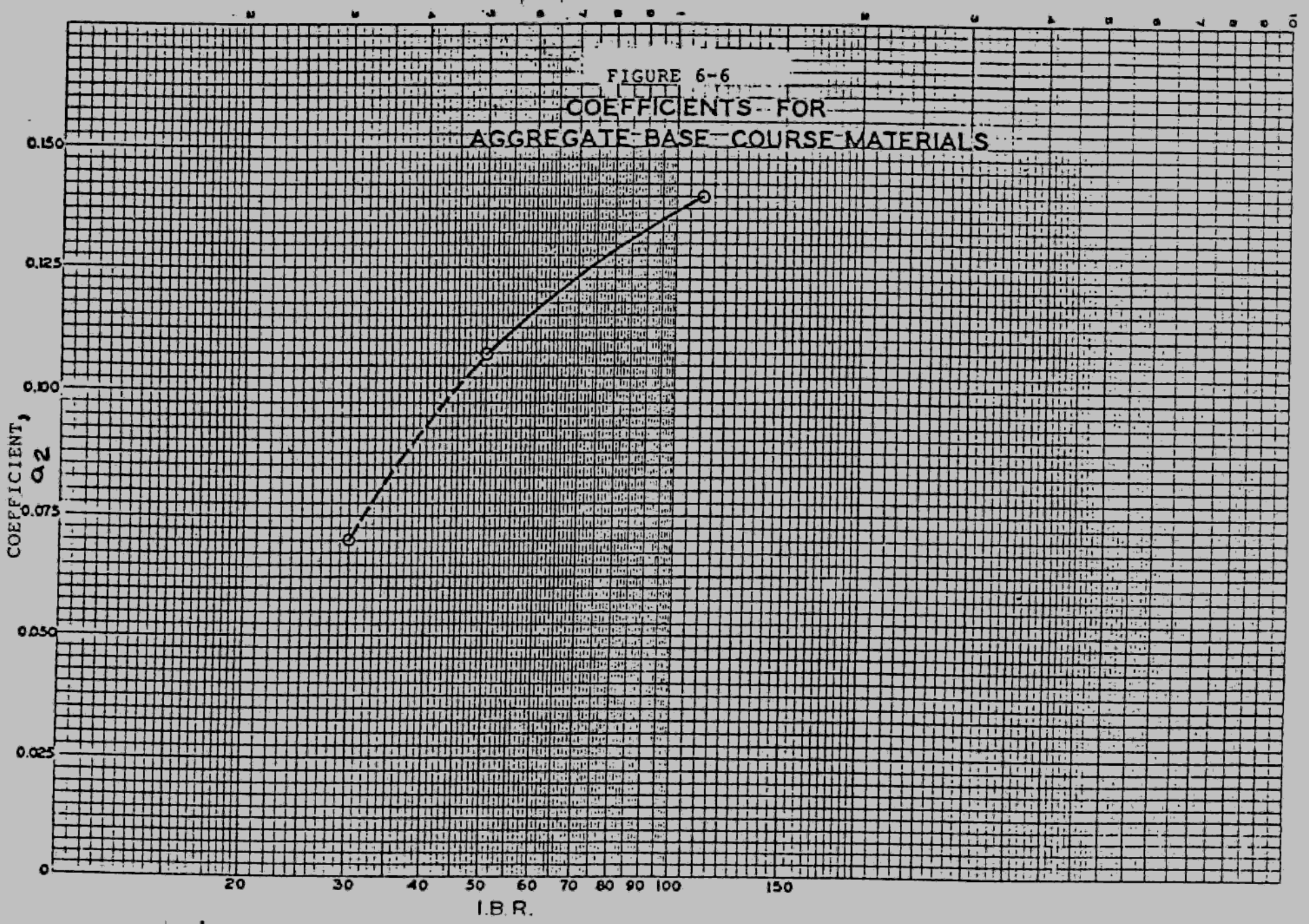
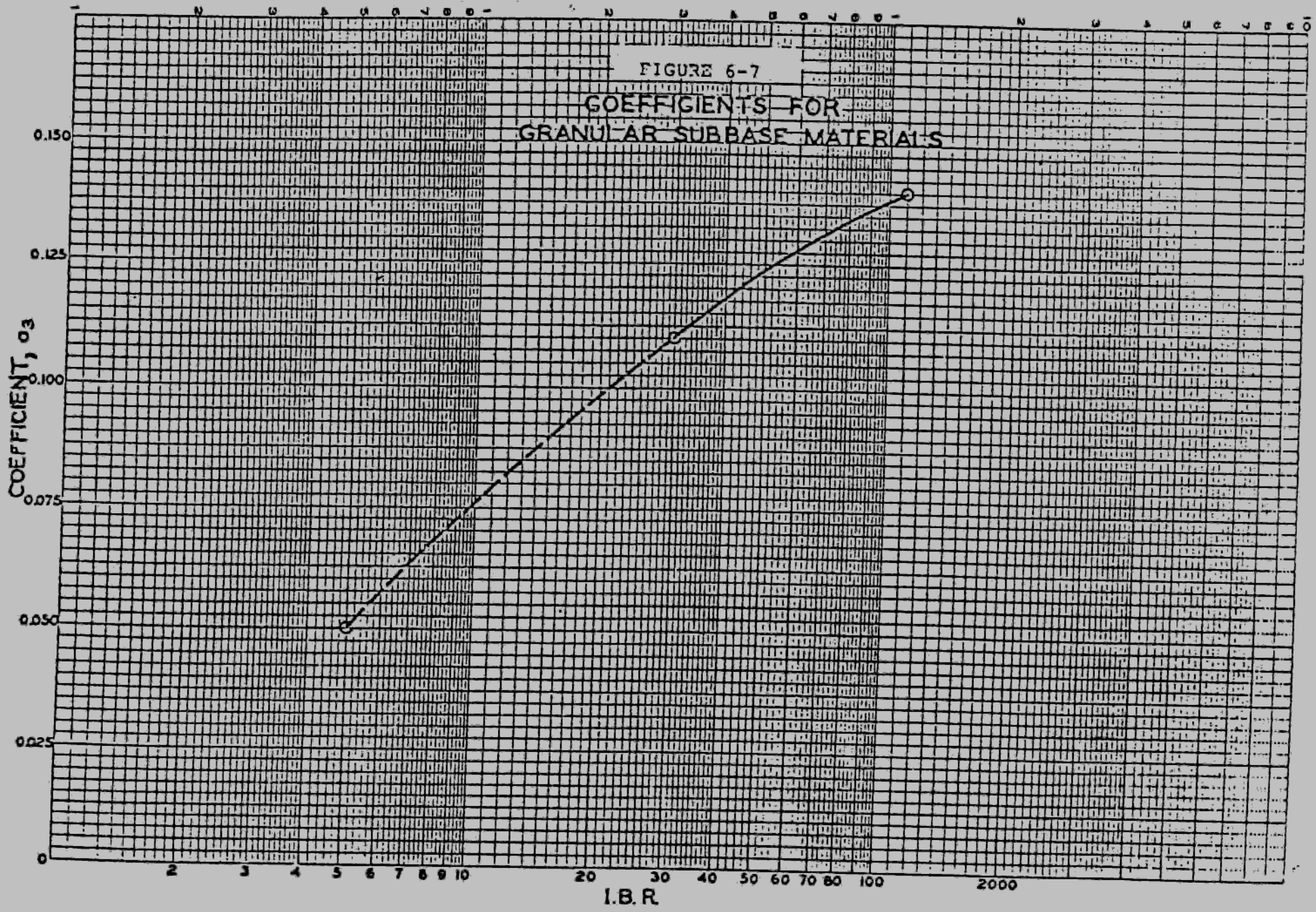


FIGURE 6-6
COEFFICIENTS FOR
AGGREGATE BASE COURSE MATERIALS
COEFFICIENT, a2
0.150
0.125
0.100
0.075
0.050
0.025
0
20
30
40
50
60
70
80
90
100
150
I.B.R.

FIGURE 6-7

GOEFFIGIENTS FOR

GRANULAR SUBBASE MATERIALS



SECTION 7 - 80,000 POUND TRUCKS

7-1 GENERAL

This Section provides modified traffic factor equations to accommodate 80,000 pound trucks. In Illinois these larger and heavier trucks are permitted to use the Interstate system and a system of designated state primary routes. In addition, trucks operating on this system are allowed to have access for a distance of five (5) miles on any street or highway in the state system of highways and upon any street or highway designated by local authorities or road district commissioners, to points of loading and unloading and facilities for food, fuel, repairs and rest.

7-2 PAVEMENT DESIGN FOR 80,000 POUND TRUCKS

The design for 80,000 trucks shall follow the procedures for flexible pavements outlined in this manual, except that the traffic factors used shall be those listed in 7-3 of this manual.

7-3 FLEXIBLE PAVEMENT TRAFFIC FACTORS FOR 80,000 POUND TRUCKS

The traffic factor (T.F.) for 80,000 pound trucks is determined for the various classes of roads and streets from the following formulae:

Class I Roads and Streets

Four-lane Pavement (Rural & Urban) - $T.F. = D.P. \frac{(0.047\ P.V. + 59.625\ S.U. + 217.139\ M.U.)}{1,000,000}$

Six or more lane Pavement (Rural) - $T.F. = D.P. \frac{(0.029\ P.V. + 53.000\ S.U. + 193.012\ M.U.)}{1,000,000}$

Six or more lane Pavement (Urban) - $T.F. = D.P. \frac{(0.012\ P.V. + 49.025\ S.U. + 178.536\ M.U.)}{1,000,000}$

One-way streets & three-lane Pavement (Rural & Urban) - $T.F. = D.P. \frac{(0.073\ P.V. + 66.25\ S.U. + 241.265\ M.U.)}{1,000,000}$

Class II Roads and Streets

Two or three-lane Pavement - $T.F. = D.P. \frac{(0.073\ P.V. + 56.03\ S.U. + 192.72\ M.U.)}{1,000,000}$

Class III Roads and Streets

Two or three-lane Pavement - $T.F. = D.P. \frac{(0.073\ P.V. + 54.57\ S.U. + 192.175\ M.U.)}{1,000,000}$

Class IV Roads and Streets

Two-lane Pavement - $T.F. = D.P. \frac{(0.073\ P.V. + 54.57\ S.U. + 192.175\ M.U.)}{1,000,000}$

TECH 3 CONSULTING GF IP, INC.
1395 C Main Street
CRETE, ILLINOIS 60417

(312) 672-4994

LETTER OF TRANSMITTAL

DATE	JOB NO
9-19-88	87028

ATTENTION: ROY ALLEN

RE: MEADOW CREEK

TO WILL COUNTY LAND USE DEPT.

WE ARE SENDING YOU ☐ Attached ☐ Under separate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change order ☐ _____

COPIES	DATE	NO	DESCRIPTION
1			LETTER FROM S.G. HAYES ON PAVEMENT DESIGN

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval

☐ For your use ☐ Approved as noted ☐ Submit _____ copies for distribution

☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints

☐ For review and comment ☐ _____

☐ FOR BIDS DUE _____ 19____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS

COPY TO _____ SIGNED: WJS

If enclosures are not as noted, kindly notify us at once

S. G. HAYES
AND COMPANY
CONTRACTORS - ENGINEERS

162nd and WESTERN AVENUE
P. O. Box 130, MARKHAM, ILLINOIS 60426

SUBURBAN 331-3380 CHICAGO 264-6342

September 15, 1988

Meadow Creek Corporation
2180 Governor's Highway - Suite 201
Olympia Fields, IL 60461

ATTENTION: Mr. William Pradelski
President

RE: Alternate Pavement Design and Construction
Meadow Creek Subdivision
Harlem Ave. & Monee-Manhattan Road
Monee Township, Illinois

Dear Mr. Pradelski:

In evaluating the scheduling of the site work construction and the probable underground utility scheduling conflicts on the above referenced project, it is becoming more and more apparent that time is extremely valuable and should not be wasted with the winter months rapidly approaching us.

Expedition of this site work is of paramont importance and it is for this reason that we would like to offer, for your consideration, an alternate pavement design for the roadway areas. This design would consist of a 5" bituminous aggregate mixture base course, Class I and a ~~2½"~~ 1 3/4" bituminous surface course, Class I. per Steve Spunke

It is our opinion that this design would help expedite the pavement construction by reduction of individual operations plus it would also expedite overall site work by permitting more timely access to various areas under construction which normally would be inaccessable due to inclement weather.

The original pavement design for the roadway areas was a 10" aggregate base course (Type B crushed), a 2" bituminous concrete binder course, and a 1" bituminous concrete surface course, Class I. This design resulted in a Structural Number (D_t) of 2.28 as defined in the IDOT Flexible Pavement Design Manual for Local Agencies, dated August, 1988. Our alternate pavement design results in a Structural Number (D_t) of 2.62 also as defined in the IDOT Design Manual. These Structural Numbers are determined by the Structural Number Equation in which the structural coefficients are determined from the Marshall Stability-Coefficient Graphs as shown in figures (6-2 & 6-3) attached. The Marshall Stabilities are physical test

S. G. HAYES
AND COMPANY
CONTRACTORS - ENGINEERS

results of our manufactured material as shown on the Bituminous Extraction/Marshall Report conducted by the State of Illinois - Bureau of Materials (Copy attached).

The additional cost to Meadow Creek Corporation for the change in Roadway Pavement selection would be $6,080.00

In conclusion, the selection of this alternate pavement design would not only expedite the pavement and general site work construction but would also offer an ultimately more structurally sound finished pavement. We thank you for your time and consideration in this matter and we hope that the above is met with favorable approval.

Respectfully submitted,

S. G. HAYES AND COMPANY

Steven E. Brunke
Vice President

SEB:Jg

"FIGURE 5-1 EXAMPLE CALCULATIONS"

Example Number	Required Structural Number (D_t)	Structural Components and Types			Coefficients (From Figure 6-1)		
		Surface (D_1)	Base (D_2)	Subbase (D_3)	Surface (a_1)	Base (a_2)	Subbase (a_3)
1	1.90	Road Mix (Class B)	Aggregate, Type A	Type B	0.20	0.13	0.11
2	2.60	Class I	Soil Cement existing soil	None	0.40	0.15	--
3	2.60	Pl Mix Cl B w/Asph Cement	Soil Cement imported soil	Type B	0.30	0.20	0.11
4	3.10	Class I	Bituminous Stabilized-1900 MS	None	0.40	0.33	--
5	3.10	Class I	MC Asphlat Stabilized	None	0.40	0.18	--
6	1.90	Road Mix (Class B)	Waterbound Macadam	Type B	0.20	0.14	0.11

EXAMPLE 1

A. The Problem-to determine the structural thickness needed for a Type A aggregate base with a 4-inch Type B subbase, for a 2-inch road mix Class B surface, under the following conditions:

1. Class IV road,
2. Two-lane pavement,
3. Design period-15 years,
4. Structural design traffic:
   (a) 250 total average daily traffic
      (1) 178 passenger cars
      (2) 70 single units
      (3) 2 multiple units
5. Soil support IBR value = 3,
6. Both crushed and uncrushed are available for use in the pavement structure.

B. The Solution:

1. From Section 2-6 on Page 4, seventh formula, traffic factor (T.F.) =
$$\frac{15(0.073x178+4.928x70+39.420x2)}{1,000,000} = .0065$$

   use .0066

2. From Figure 5-3 on Page 16 using the IBR of 3 and the T.F. of 0.0066 the structural number (D_t)= 1.90

3. Using the structural number equation, determine D_2, the required base thickness, as follows:
$$D_t = a_1D_1 + a_2D_2 + a_3D_3$$
$$1.90 = (.20)2 + .13D_2 + (.11)4$$
$$D_2 = \frac{1.06}{.13} = 8.2 \text{ inches, use 8 inches}$$

FIGURE 6-1 COEFFICIENT LIMITS FOR PAVEMENT STRUCTURE MATERIALS

Structure Materials	Strength Requirements			Coefficient Limits 3/		
	M.S. 1/	IBR	PSI 2/	a_1	a_2	a_3
BITUMINOUS SURFACE						
Class B Road Mix				0.20		
Class B Plant Mix (Liquid Asphalt)				0.22		
Class B Plant Mix (Asphalt Cement)	900			0.30		
Class I	1700			0.40		
BASE COURSE						
Aggregate Ty B (Uncrushed)		50		0.10		
Aggregate Ty B (100% crushed)		80		0.13		
Aggregate Ty A		80		0.13		
Lime Stabilized Mixture			150	0.11		
Soil Cement			300-500		0.15-0.20	
Cement Aggregate (LR 312)			650		0.23	
			750		0.25	
			1000		0.28	
Pozzolanic					0.28	
Asphalt Stabilized (LR310) Liq. Asphalt					0.18	
Bituminous Aggregate Mixture (LR311)	900-1900				0.24-0.33	
Bituminous Mixture, Class I	1700+				0.33	
SUBBASE						
Lime Stabilized Soil Mixture			100			0.12
Granular Material, Type B		30				0.11
Granular Material, Type A (Uncrushed)		50				0.12
Granular Material, Type A (100% crushed)		80				0.14

1/ Marshall Stability or equivalent
2/ 7-day design compressive strength
3/ For materials with strengths other than that shown, the coefficients may be determined from pages 20-25. Other approved materials of similar strengths may be substituted for those listed in the table.

FIGURE 6-2

COEFFICIENTS FOR BITUMINOUS SURFACE COURSE MATERIALS

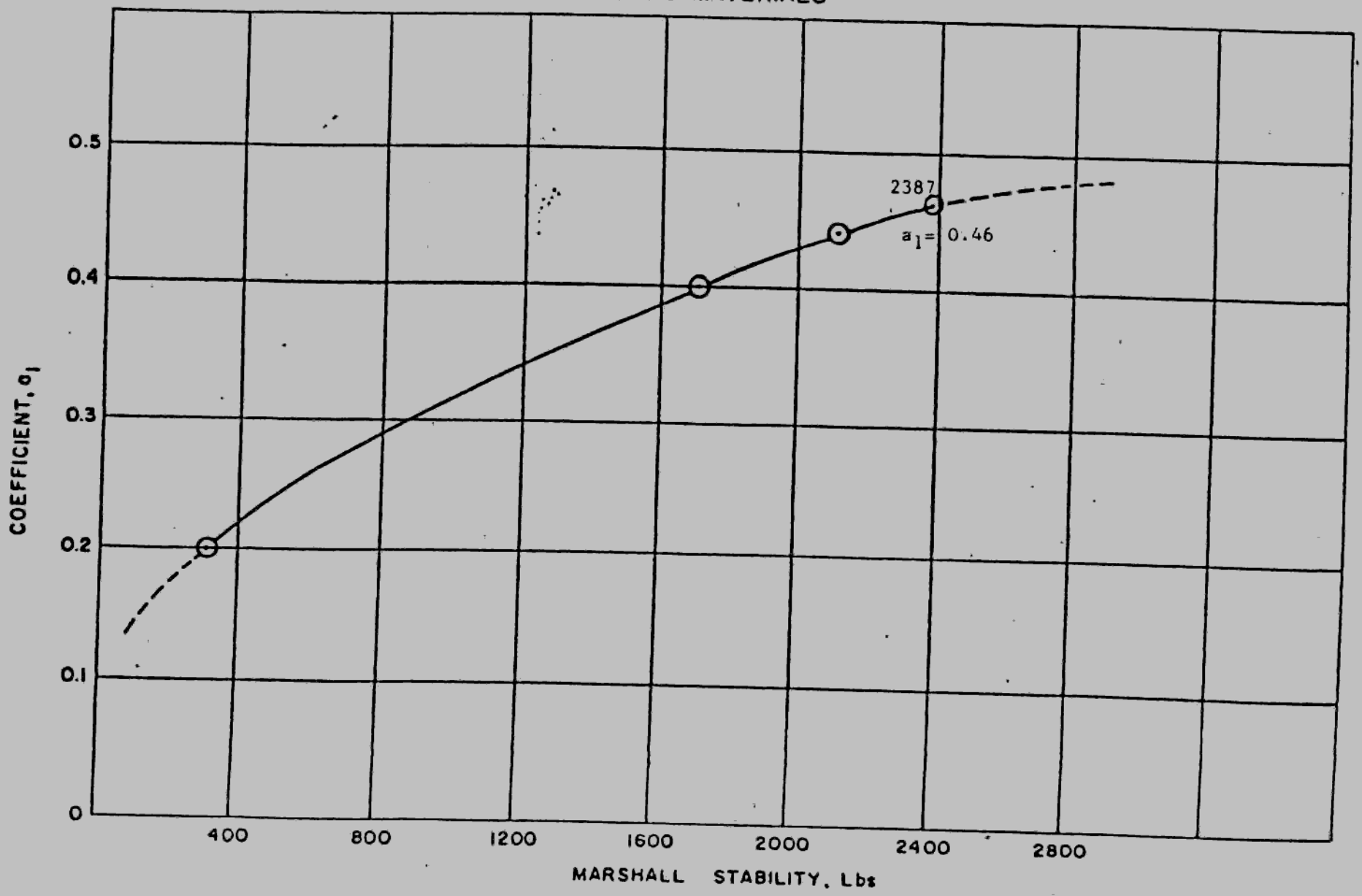
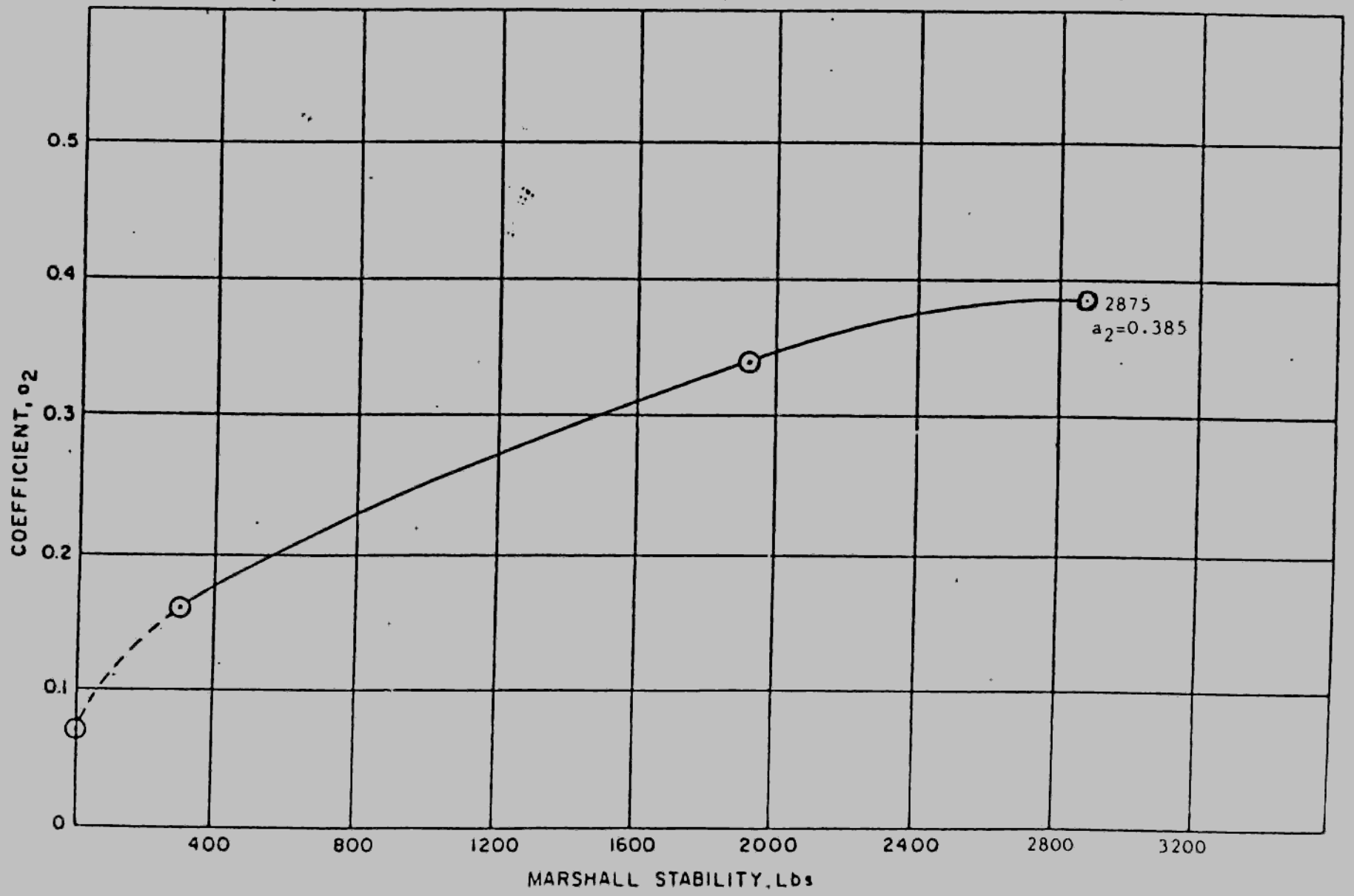


FIGURE 6--3

COEFFICIENTS FOR BITUMINOUS STABILIZED GRANULAR MATERIALS



REQUESTOR: DAN TIEDEMANN
DISTRICT: 91 THRU 91
MATERIAL: 17501 THRU 19999
FROM: 01/01/86 TO 09/23/98
SELECT PRODUCERS OUTSIDE DIST 91
PRODUCER 1:
PRODUCER 2:
PRODUCER 3:

I D O T - BUREAU OF MATERIALS AND PHYSICAL RESEARCH

BITUMINOUS EXTRACTION/MARSHALL REPORT
(TRAN 309)

PRODUCER: 858-03 DISTRICT: 91
NAME : HAYES, S. G. & CO.
STREET :
CITY, ST, ZIP: MARKHAM ,IL - 60426

REPORT DATE: 8/25/98
REPORT NAME: MIR813N
PROGRAM NAME: MIRT745

==========> MATERIAL: 17532 NAME: BITCONC BCS CLI P B <========== Binder

DATE RESPL	TEST-IDENT LAB EQ WASH	TYPE MIXNUM CYCL STAB FLOW	LOT LITO	BIGD VOIDS	CONTRACT DENPCF	1.5	1	3/4	1/2	3/8	#4	#8	#16	#30	#50	#100	#200	BIT	NEW BIT
072999 88	9867851 IN V Y	PRO 819IT9004			9383029008931670		100	97	74	64	47	34	24		11	8	4.7	4.4	

==========> MATERIAL: 17534 NAME: [redacted] <========== SURFACE

DATE RESPL	TEST-IDENT LAB EQ WASH	TYPE MIXNUM CYCL STAB FLOW	LOT LITO	BIGD VOIDS	CONTRACT DENPCF	1.5	1	3/4	1/2	3/8	#4	#8	#16	#30	#50	#100	#200	BIT	NEW BIT
051788 91	8863000 IN V Y	PRO 81BITD002			41542			100	100	97	62	41	27		10	6	2.3	6.0	B
072688 91	8856323 DS R N	INV 81BITD002 50 [redacted] 11.1	2.39	2.53 5.5	44049			100	100	98	60	42	26	18	11	6	5.1	5.7	

==========> MATERIAL: 17535 NAME: BITCONC SCS CLI P E <========== SLAG SURFACE

DATE RESPL	TEST-IDENT LAB EQ WASH	TYPE MIXNUM CYCL STAB FLOW	LOT LITO	BIGD VOIDS	CONTRACT DENPCF	1.5	1	3/4	1/2	3/8	#4	#8	#16	#30	#50	#100	#200	BIT	NEW BIT
042988 501	8826304 BM R N	INV 48BIT1507 50 3879 12.1	2.74	2.91 5.8	42284			100	97	85	53	39	26	17	12	8	5.7	5.0	
042988 91	8831812 FP V N	INV 48BIT1507			42284			100	98	82	52	38	25	16	10	7	3.8	5.0	
050288 501	8926305 BM R N	INV 48BIT1507 50 3664 12.1	2.77	2.44 3.9	42284			100	98	86	52	36	24	17	12	8	5.7	4.9	

==========> MATERIAL: 17564 NAME: BITCONC SCS PRIM TYD <========== SURFACE

DATE RESPL	TEST-IDENT LAB EQ WASH	TYPE MIXNUM CYCL STAB FLOW	LOT LITO	BIGD VOIDS	CONTRACT DENPCF	1.5	1	3/4	1/2	3/8	#4	#8	#16	#30	#50	#100	#200	BIT	NEW BIT
072688 91	8863362 FP V N	INV 81BITD002			44049			100	100	98	64	46	29	18	12	6	5.3	5.5	

REQUESTOR: DAN TIEDEMANN
DISTRICT: 91 THRU 91
MATERIAL: 17501 THRU 19999
FROM: 01/01/88 TO 08/23/88
SELECT PRODUCERS OUTSIDE DIST 91
PRODUCER 1:
PRODUCER 2:
PRODUCER 3:

I D O T - BUREAU OF MATERIALS AND PHYSICAL RESEARCH

BITUMINOUS EXTRACTION/MARSHALL REPORT
(TRAN 308)

PRODUCER: 858-03 DISTRICT: 91
NAME : HAYES, S. G. & CO.
STREET :
CITY, ST, ZIP: MARKHAM ,IL - 60426

PAGE: 2
REPORT DATE: 8/25/88
REPORT NAME: MIR213N
PROGRAM NAME: MIRT745

==========> MATERIAL: 17565 NAME: BITCONC SCS PRIM TYE <========== SLAG SURFACE

DATE / RESP	TEST-IDENT / LAB	EQ	WASH	TYPE MIXNUM / CYCL	STAB	FLOW	LOT / LITO	BIGD	VOIDS	CONTRACT / DENPCF	1.5	1	3/4	1/2	3/8	#4	#8	#16	#30	#50	#100	#200	BIT	NEW BIT
050188	8831794			INV 48BIT1507						42284														
91	FP	V	N										100		99	87	50	35	24	15	11	7	4.0	4.6	T
050288	8831802			INV 48BIT1507						42284														
91	FP	V	N										100		99	84	48	34	23	16	10	7	4.1	4.5	T

==========> MATERIAL: 17723 NAME: BAM SHOULDER REC <==========

DATE / RESPL	TEST-IDENT / LAB	EQ	WASH	TYPE MIXNUM / CYCL	STAB	FLOW	LOT / LITO	BIGD	VOIDS	CONTRACT / DENPCF	1.5	1	3/4	1/2	3/8	#4	#8	#16	#30	#50	#100	#200	BIT	NEW BIT
051288	8831709			INV 81BIT8004						42284														
91	FP	V	N										100		77		48		46				4.3	4.6	S
051388	8831730			INV 81BIT8004						42284														
91	FP	V	N											99	76	64	51	44	30	19	12	7	3.6	5.9	

==========> MATERIAL: 17821 NAME: [redacted] <========== Recycle B.WKR

DATE / RESPL	TEST-IDENT / LAB	EQ	WASH	TYPE MIXNUM / CYCL	STAB	FLOW	LOT / LITO	BIGD	VOIDS	CONTRACT / DENPCF	1.5	1	3/4	1/2	3/8	#4	#8	#16	#30	#50	#100	#200	BIT	NEW BIT
062788	8848442			INV 81BIT8004						42376														
91	FP	V	N									100	100		82		51		26				4.8	4.8	S
062888	8848384			INV 81BIT8004						42376														
501	BM	9	N	50	[redacted]	13.9	2.33	2.59	8.1			100	100	94	75	59	36	25	19	15	12	6	6.1	3.7	S
062888	8848420			INV 81BIT8004						42376														
91	FP	V	N									100	100		68		31		16				2.4	4.7	S
070688	8848368			INV 81BIT8004						42376														
501	BM	R	N	50	[redacted]	13.6	2.41	2.57	6.2			100	100	97	76	61	37	27	21	16	13	8	5.8	4.0	
070688	8848387			INV 81BIT8004						42376														
91	FP	V	N									100	100		72		34		19				3.9	3.5	S

Meadow Creek MO Twp

10" CA6 @ 0.13 = 1.30
X" BAM @ 0.23 = 5.65"

If total revision

1½ x 0.40 = 0.60
1½ x 0.33 = 0.495
10 x 0.13 = 1.30
2.395 Use 2.40

2.40 - (2 x 0.40) = 1.60
÷ 0.25 = 6.4 Use 6.5"

1.60 ÷ 0.33 = 4.85 Use 5"

TECH 3 CONSULTING GROUP, INC.
1395 C Main Street
CRETE, ILLINOIS 60417

(312) 672-4994

LETTER OF TRANSMITTAL

DATE	JOB NO
7-5-88	87028

ATTENTION: RICH EVELY

RE: MEADOW CREEK

TO WILL COUNTY LAND USE DEPT.

WE ARE SENDING YOU ☐ Attached ☐ Under separate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change order ☐ _____

COPIES	DATE	NO	DESCRIPTION
1			RUNWAY COST OPINION

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval

☐ For your use ☐ Approved as noted ☐ Submit _____ copies for distribution

☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints

☐ For review and comment ☐ _____

☐ FOR BIDS DUE _____ 19____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS (THIS ARRIVED ON 7-7-88 RRE)

COPY TO _____ SIGNED: WJB

* enclosures are not as noted kindly notify us at once

87028WJS
7-5-88

MEADOW CREEK

RUNWAY COST OPINION

ITEM	DESCRIPTION	QUANTITY	UNIT PRICE	COST
1.	1" Bituminous Surface 1 ½" Bituminous Binder 8" BAM	15111 sy	12.60	190398.60
2.	Fertilize & Seed with 6" Topsoil Replaced	17 ac	3737.00	63529.00
3.	Clay Cut Replace & Compact	150000 cy	1.91	286500.00
4.	Topsoil Strip & Stockpile	45000 cy	1.00	45000.00
			TOTAL	$585,427.60

LYMAN C. TIEMAN

ATTORNEY AT LAW

167 N. CHICAGO STREET
JOLIET, ILLINOIS 60431
(815) 727-9000

ROMEOVILLE, ILLINOIS
(815) 886-6111

FRANKFORT, ILLINOIS
(815) 469-3383

July 6, 1988

Mr. Roy Allen
Chief Subdivision Engineer
County of Will
501 Ella Avenue
Joliet, IL 60432

Re: Meadow Creek Subdivision

Dear Mr. Allen:

Please be advised that I represent the principals who are the developers of Meadow Creek Subdivision in Monee Township. It is my understanding that this subdivision will be up before the Will County Land Use and Zoning Committee on July 7 for final plat approval.

As you are aware, their engineer, Mr. Bill Stefek, of Tech 3, has determined that the cost of on-site utilities and roadway improvements (excluding runway development) would be approximately $2,200,000.

At the present time, my clients have $300,000 in earnest money deposits representing approximately $3,000,000 in total sales for approximately 70 lots in this subdivision. This money is being held at South Holland Trust and Savings Bank in an escrow account and these contracts will be converted to cash closings within approximately 90 days after recording of the final plat. My clients have halted sales but will resume sales for the remaining lots immediately upon recording the final plat.

Additionally, my clients are establishing a $2,000,000 construction escrow account at the South Holland Trust and Savings Bank. These funds are coming from a private investor and will be used for on-site and off-site utilties as well as on-site roadway improvements. Several contracts have been let for this work. However, the terms of our Contract with the investor call for recording of the final plat before these monies are deposited.

The immediate problem that we have is in the nature of a cash flow problem. My clients are not able to obtain the required letter of credit for the on-site improvements due to the fact that they have

reached their credit limit at the South Holland Trust and Savings Bank. The plat cannot be recorded until the letter of credit is obtained and the $2,000,000 construction account cannot be funded until the plat is recorded.

As an alternative to providing a letter of credit, I suggest that my clients be allowed to pledge the $2,000,000 construction account to the County of Will in lieu of an immediate letter of credit. This construction account will decrease as construction progresses and will be used only for utilities and roadways. As soon as we are able to record the plat, close on some lots and complete as much on-site improvements as possible with the $2,000,000 construction escrow, we will be in a position to provide a letter of credit for any then remaining on-site work to be completed.

At this point, but no later than six months, we will be in a position to obtain the necessary letter of credit. Although this is an unusual request, I would appreciate you checking with the State's Attorney's office to see whether or not the use of the $2,000,000 construction escrow and future letter of credit proposal would be a satisfactory alternative to the posting of the required initial letter of credit.

If this is not possible, we stand the risk of losing our $2,000,000 investor and, what could be a showplace subdivision, may never come to fruition.

Very truly yours,

LYMAN C. TIEMAN

LCT/mg

cc: Mr. Edward Masters
Mr. Jerry Reeder

WILL COUNTY LAND USE DEPARTMENT

501 ELLA AVENUE • JOLIET, ILLINOIS 60433

June 6, 1988

Tech 3 Consulting Group, Inc.
1395 C Main Street
Crete, Il 60417

Attn: William J. Stefek L.S.

Subject: Meadow Creek Subdivision
Estimate of Cost
Monee Township

Dear Mr. Stefek:

We have reviewed the Estimate of Cost for the subject subdivision. We found the estimate of cost to be acceptable.

Therefcre, please have a letter of credit prepared in the amount of $2,738,208.00. This is 110% of the estimate of cost per Section #7.2 of the Subdivision Ordinance. The letter of credit is due prior to final plat approval.

A letter of credit filing fee in the amount of $2,738.00 is required at the time of final plat approval also.

If you have any questions, please feel free to call on us.

Very truly yours
Will County Land Use Dept.

Roy L. Allen P.E.
Chief Subdivision Engineer &
Plat Officer

RLA/plf
cc: W. Stassen
Meadow Creek Co.

PATRICIA L. SPRAY
ADMINISTRATION
(815) 727-8831

PAUL M. GORTE
CHIEF PLANNER
(815) 727-8787

JAMES J. GIBBONS
CHIEF ZONING INSPECTOR
(815) 727-8850

ROBERT J. ERICKSON
CHIEF BUILDING INSPECTOR
(815) 727-8834

TECH 3 CONSULTING GROUP, INC.
ENGINEERS SURVEYORS PLANNERS
1395 C MAIN STREET
CRETE, ILLINOIS 60417
(312) 672-4994

May 31, 1988

Mr. Roy Allen
Will County Land Use Department
501 Ella Avenue
Joliet, IL 60433

RE: Meadow Creek
Job No. 87028

Dear Mr. Allen:

You requested a copy of a cost opinion for the above referenced project. Enclosed you will find copies of the actual bid schedules. These reflect the bids from two contractors. One contractor for the sanitary, water and storm sewers and another contractor for the earthwork and paving.

Please contact me if you require additional information.

Sincerely,

TECH 3 Consulting Group, Inc.

William J. Stefek

William J. Stefek,
President

Encs.

WJS:sls

0·◊

0·*G

0·A

457,863·6+
190,398·6+
2,020·8+
2,622,000·+
2,622,000·-
26,220·+
2,842·5+
205,040·+
446,268·+
78,477·+
27,600·+
011
1,436,731·*+

1,436,731··+
001
1,436,731··*+

0·*

0·A

2,842·5+
001
2,843·*+

MEADOW CREEK SUBDIVISION

ON SITE IMPROVEMENTS

ITEM	DESCRIPTION	QUANTITY	UNIT PRICE	COST
	SANITARY SEWER			
1.	8" ABS Sanitary Sewer	16320 lf	$ 11.90	$ 194,208.00
2.	4' Dia. Type 'A' Manhole	73 ea	1,167.00	85,191.00
3.	Drop Connection	5 ea	540.00	2,700.00
4.	4" PVC Force Main	332 ea	9.50	3,154.00
5.	San. Pump Sta. #1 Complete	Lump Sum	32,000.00	32,000.00
6.	San. Pump Sta. #2 Complete	Lump Sum	32,000.00	32,000.00
7.	Riser Connection	55 ea	77.50	4,262.50
8.	6" ABS San. Service	5230 lf	9.65	50,469.50
9.	Granular Backfill	3200 cy	16.97	54,304.00
	WATER MAINS			
1.	8" Ductile Iron CL 50 w/Polywrap	10800 lf	14.90	160,920.00
2.	12" Ductile Iron CL 50 w/Polywrap	7700 lf	20.50	157,850.00
3.	8" Valve & Valve Box	15 ea	540.00	8,100.00
4.	12" Valve & Valve Box	9 ea	900.00	8,100.00
5.	Hydrant Installation	47 ea	1,480.00	69,560.00
6.	1" Type 'K' Copper Water Services	5870 lf	NO BID	NO BID
7.	1" Service Valve-Complete	150 ea	NO BID	NO BID
8.	Granular Backfill	1800 cy	16.40	29,520.00
	TOTAL SANITARY SEWER, WATER MAIN, & STORM SEWER- ON SITE:			$ 1,052,549.00
	2% DISCOUNT ON INVOICES PAID WITHIN 45 DAYS OF BILLING DATE:			(21,050.98)
	TOTAL ON SITE IMPROVEMENTS INCLUDING 2% DISCOUNT:			$ 1,031,498.02
	Carried Forward			$892,339.00

NOTE: DISCOUNT DOES NOT APPLY TO RETENTION MONEY...

NOTE: OUR GENERAL TERMS AND CONDITIONS HAVE BEEN ATTACHED TO THIS PROPOSAL AND SHALL BE A PART OF ANY SUBSEQUENT CONTRACT...

NOTE: THIS PROPOSAL IS BASED ON YOUR ENGINEER'S ESTIMATE OF QUANTITIES. OUR CONTRACT SHALL BE BILLED BY UNIT PRICE AS FIELD MEASURED.

3. 2,738208

1,052,549
1,436,731
2,489,280

ITEM	DESCRIPTION	QUANTITY	UNIT PRICE	COST
	STORM SEWER			
1.	6' Dia. MH w/Galv. Grate	1 ea	$1,760.00	$ 1,760.00
2.	6' Dia. MH w/Type 8	4 ea	1,500.00	6,000.00
3.	5' Dia. MH w/Type 8	2 ea	1,050.00	2,100.00
4.	8" RCP CL V	25 lf	10.50	262.50
5.	15" RCP CL III	60 lf	13.50	810.00
6.	18" RCP CL III	95 lf	14.80	1,406.00
7.	24" RCP CL III	15 lf	18.50	277.50
8.	30" RCP CL III	1115 lf	29.50	32,892.50
9.	42" RCP CL III	883 lf	45.50	40,176.50
10.	8" End Section	2 ea	266.75	533.50
11.	15" End Section	10 ea	290.00	2,900.00
12.	18" End Section	11 ea	315.75	~~3,467.75~~ 3473.25
13.	24" End Section	22 ea	425.00	9,350.00
14.	30" End Section	9 ea	500.00	4,500.00
15.	36" End Section	6 ea	600.00	3,600.00
16.	42" End Section	1 ea	725.00	725.00
17.	15" CMP	225 lf	22.31	5,019.75
18.	18" CMP	160 lf	24.00	3,840.00
19.	24" CMP	470 lf	32.80	15,416.00
20.	30" CMP	135 lf	45.80	6,183.00
21.	36" CMP	150 lf	65.00	9,750.00
22.	Granular Backfill	700 cy	13.20	9,240.00
	*SEE NOTE ON FRONT PAGE OF ON-SITE.		Carried Forward	$1,052,549.00

ITEM	DESCRIPTION	QUANTITY	UNIT PRICE	COST
	STORM SEWER			
1.	6' Dia. MH w/Galv. Grate	1 ea	$1,760.00	$ 1,760.00 ✓
2.	6' Dia. MH w/Type 8	4 ea	1,500.00	6,000.00 ✓
3.	5' Dia. MH w/Type 8	2 ea	1,050.00	2,100.00 ✓
4.	8" RCP CL V	25 lf	10.50	262.50 ✓
5.	15" RCP CL III	60 lf	13.50	810.00 ✓
6.	18" RCP CL III	95 lf	14.80	1,406.00 ✓
7.	24" RCP CL III	15 lf	18.50	277.50 ✓
8.	30" RCP CL III	1115 lf	29.50	32,892.50 ✓
9.	42" RCP CL III	883 lf	45.50	40,176.50 ✓
10.	8" End Section	2 ea	266.75	533.50 ✓
11.	15" End Section	10 ea	290.00	2,900.00 ✓
12.	18" End Section	11 ea	315.75	3473.25 ~~3,467.75~~
13.	24" End Section	22 ea	425.00	9,350.00
14.	30" End Section	9 ea	500.00	4,500.00 ✓
15.	36" End Section	6 ea	600.00	3,600.00 ✓
16.	42" End Section	1 ea	725.00	725.00 ✓
17.	15" CMP	225 lf	22.31	5,019.75 ✓
18.	18" CMP	160 lf	24.00	3,840.00 ✓
19.	24" CMP	470 lf	32.80	15,416.00 ✓
20.	30" CMP	135 lf	45.80	6,183.00 ✓
21.	36" CMP	150 lf	65.00	9,750.00 ✓
22.	Granular Backfill	700 cy	13.20	9,240.00 ✓
	*SEE NOTE ON FRONT PAGE OF ON-SITE.		Carried Forward	$1,052,549.00

MEADOW CREEK SUBDIVISION

ON SITE IMPROVEMENTS

ITEM	DESCRIPTION	QUANTITY	UNIT PRICE	COST
	PAVEMENT			
1.	1" Bituminous Surface 2" Bituminous Binder MC-30 Prime Coat 10" Crushed Stone Base	51330 sy	8.92	457863.60 ✓
2.	1" Bituminous Surface 1 1/2 " Bituminous Binder 8" BAM Base Course	15111 sy	12.60	190398.60 ✓
3.	B-6.12 Conc. Curb & Gutter	240 lf	8.42	2020.80 ✓
4.	Crushed Stone Shoulder	6000 sy	4.37	26220.00 ✓
5.	Pavement Marking (Runway)	Lump Sum	No Bid	No Bid
6.	6' Wide Concrete Paved Swale	150 lf	18.95	2842.50 ✓
	EARTHWORK			
1.	Topsoil - Strip & Stockpile	Lump Sum	205940.00	205940.00 ✓
2.	Clay Cut Replace & Compact	Lump Sum	446268.00	446268.00 ✓
	MISC.			
1.	Fertilize & Seed with 6" Topsoil Replaced	21 ac	3737.00	78477.00 ✓
2.	Parkway Trees	150 ea	184.00	27600.00 ✓
	UNIT PRICES			?
1.	EARTH EXCAVATION / CY (clay only)		1.55	
2.	EARTH FILL (COMPACTED) / CY (clay only)		0.36	?
	SEE ATTACHED SPECIAL CONDITIONS			
			TOTAL	1436739.50

MEADOW CREEK SUBDIVISION

OFF SITE IMPROVEMENTS

ITEM	DESCRIPTION	QUANTITY	UNIT PRICE	COST
	SANITARY SEWER			
1.	8" ABS Sanitary Sewer	180 lf	$ 20.50	$ 3,690.00
2.	10" ABS Sanitary Sewer	1200 lf	39.90	47,880.00
3.	4' Dia. Type 'A' Manhole	4 ea	3,288.00	13,152.00
4.	Drop Connection	2 ea	1,500.00	3,000.00
5.	Bore & Jack 24" O.D. Steel Casing 3/8" W.T.	200 lf	125.00	25,000.00
6.	5' Dia. Type 'A' Manhole with Type 1 Frame & Closed Lid with Sewage Air Release & Vacuum Valve	3 ea	1,600.00	4,800.00
7.	10" PVC CL 100 DR25 Force Main	4560 lf	14.80	67,488.00
8.	Sanitary Pump Sta. #3 Complete	Lump Sum	60,000.00	60,000.00
9.	Granular Backfill	250 cy	16.00	4,000.00
10.	Remove and Replace B-6.12 Concrete Curb & Gutter	20 lf	16.00	320.00
	WATER MAINS			
1.	12" Ductile Iron CL 50 w/Polywrap	5800 lf	20.30	117,740.00
2.	12" Gate Valve & Valve Box	4 ea	1,440.00	5,760.00
3.	Hydrant Installation	1 ea	1,500.00	1,500.00
4.	5' Dia. Valve Vault w/Type 1 Frame & Closed Lid w/Automatic Air Release Valve	2 ea	1,605.00	3,210.00
5.	Bore & Jack 24" O.D. Steel Casing 3/8" W.T.	200 lf	125.00	25,000.00
6.	Granular Backfill	50 cy	14.00	700.00
			Carried Forward	$383,240.00

MEADOW CREEK SUBDIVISION

OFF SITE IMPROVEMENTS

ITEM	DESCRIPTION	QUANTITY	UNIT PRICE	COST
	STORM SEWER			
1.	30" RCP CL III	880 lf	$ 27.00	$ 23,760.00
2.	5' Dia. Type 'A' Manhole	3 ea	1,050.00	3,150.00
3.	30" End Section	1 ea	500.00	500.00
4.	Regrade Existing Ditch	830 lf	2.40	1,992.00
	MISC.			
1.	Fertilize & Seed with 6" Topsoil Replaced	1 ac	12,500.00	12,500.00
2.	Remove & Replace B-6.12 Concrete Curb & Gutter	20 lf	16.00	320.00
3.	Sawcut Remove and Replace Existing Bituminous Pavement (3" Binder Course & 1" Surface Course Min)	450 sy	20.00	9,000.00
	TOTAL SANITARY SEWER, WATER MAIN, STORM SEWER, & MISC.-OFF SITE:			$434,462.00
	2% DISCOUNT ON INVOICES PAID WITHIN 45 DAYS OF BILLING DATE:			8,689.24)
	TOTAL OFF SITE IMPROVEMENTS INCLUDING 2% DISCOUNT:			$425,772.76
	NOTE: DISCOUNT DOES NOT APPLY TO RETENTION MONEY...			
	NOTE: OUR GENERAL TERMS & CONDITIONS HAVE BEEN ATTACHED TO THIS PROPOSAL AND SHALL BE A PART OF ANY SUBSEQUENT CONTRACT...			
	NOTE: THIS PROPOSAL IS BASED ON YOUR ENGINEER'S ESTIMATE OF QUANTITIES. OUR CONTRACT SHALL BE BILLED BY UNIT PRICE AS FIELD MEASURED.			
			TOTAL	$434,462.00

TECH 3 CONSULTING GRO' INC.
1395 C Main Street
CRETE, ILLINOIS 60417

(312) 672-4994

LETTER OF TRANSMITTAL

DATE	JOB NO
5-18-88	87028

ATTENTION: ROY ALLEN

RE: MEADOW CREEK ✓
Mo.

TO WILL COUNTY LAND USE DEPT.

WE ARE SENDING YOU ☐ Attached ☐ Under separate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change order ☐ _____

COPIES	DATE	NO	DESCRIPTION
1			REVISED ENGINEERING PLANS AND FINAL PLAT OF SUB.

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval

☐ For your use ☐ Approved as noted ☐ Submit _____ copies for distribution

☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints

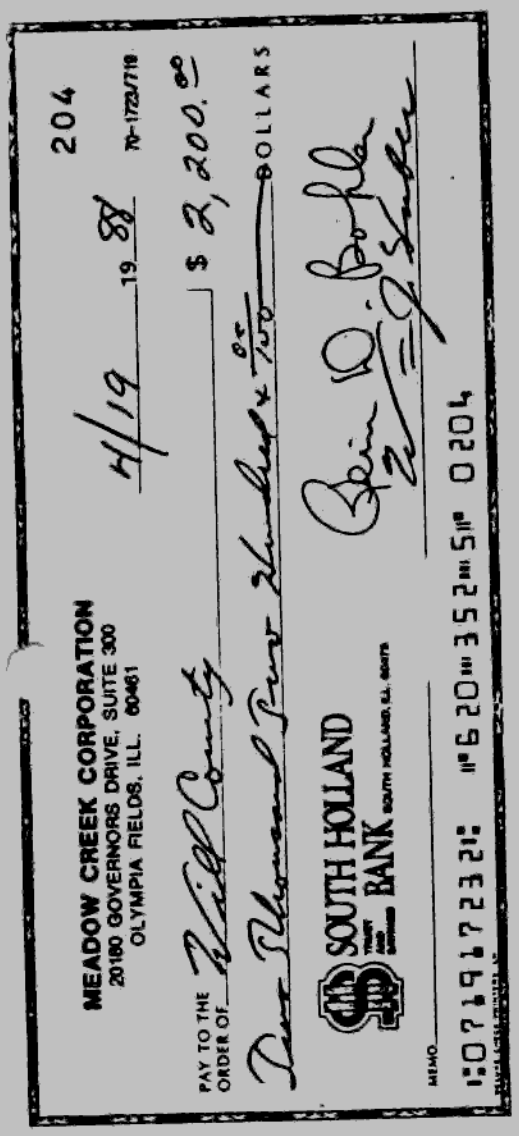
☐ For review and comment ☐ _____

☐ FOR BIDS DUE _____ 19 ____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS

COPY TO _____ SIGNED: WJS

If enclosures are not as noted, kindly notify us at once



AREA CODE 815
727-8471
727-8469

WILL COUNTY DEVELOPMENT DEPARTMENT

Joliet, Illinois 60433

501 ELLA AVE.

No. 20454

Date 4/19 19 88

Received of Meadow Creek Corp

Address 20180 Governors Dr Suite 300
Olympia Fields Il.

$2,200.00 Dollars $2,200.00
Ck # 204

LEGAL DESCRIPTION

Final Plat Review Fee
Meadow Creek Sub
Monee Twp

James J. Gibbons Jr.
OFFICER

BUILDING PERMIT NO.

UARCO Business Forms

TECH 3 CONSULTING GR' 'P, INC.
1395 C Main Street
CRETE, ILLINOIS 60417

(312) 672-4994

LETT .R OF TRANSMITTAL

DATE	JOB NO
4-18-88	87028

ATTENTION: ROY ALLEN

RE: MEADOW CREEK

TO WILL COUNTY LAND USE DEPT.

WE ARE SENDING YOU ☐ Attached ☐ Under separate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change order ☐ _____

COPIES	DATE	NO	DESCRIPTION
1			CHECK FOR FINAL REVIEW FEE #204 FOR $2200.00 Monarch Trip

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval

☐ For your use ☐ Approved as noted ☐ Submit _____ copies for distribution

☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints

☐ For review and comment ☐ _____

☐ FOR BIDS DUE _____ 19____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS

COPY TO _____ SIGNED: WJB

If enclosures are not as noted, kindly notify us at once

WILL COUNTY LAND USE DEPARTMENT

501 ELLA AVENUE • JOLIET, ILLINOIS 60433

March 15, 1988

Tech 3 Consulting Group, Inc.
1395 C Main Street
Crete Il 60417

Attn: William J. Stefek L.S.

Subject: Meadow Creek Subdivision
Monee Township
Final Plat Review

Dear Mr. Stefek:

We have reviewed the final plat and improvement plans for the subject subdivision. The following comments are the result of that review:

Improvement Plans

1. The final plat review fee has not been paid. The fee is $2,200.00.
2. No street lights are shown or a letter from the township highway commissioner waiving the same. Pg 4, 5
3. The manhole frame and lid shown is East Jordan 2850. This should be East Jordan 1050, we believe Pg 3
4. No detail of the overflow structure for the detention areas has been show. Pg 5, 6
5. A certificate by the owner and engineer regarding storm water drainage as required by Chapter #109 of the Illinois State Statutes. (see attached)
6. No construction is permitted in the flood plain without the approval of the IDOT-Division of Water Resources. Not
7. It appears that some wetlands as determined by the Corps of Engineers exist on the site. Recommend that this be resolved with the Corps of Engineers.

Final Plat

1. Show chords on table of curves.
2. Provide two (2) concrete monuments along one perimeter of the subdivision.
3. Show percent of lots in the flood plain before and after construction.
4. Show minimum first floor elevation.
5. Show limits of flood plain before and after construction.
6. Approval of the utilities as to easements is needed.

PATRICIA L. SPRAY
ADMINISTRATION
(815) 727-5092

PAUL M. GORTE
CHIEF PLANNER
(815) 727-8787

JAMES J. GIBBONS
CHIEF ZONING INSPECTOR
(815) 727-8850

ROBERT J. ERICKSON
CHIEF BUILDING INSPECTOR
(815) 727-8471

7. A letter stating when and how tap-on fees are to be paid is needed.
8. Signature blocks for the Village of Monee and Monee Planning Commission is required.
9. Cable television is to be included as a user of utility easements.
10. Suggest eliminating Lots #1, 144,146, 147, 148, 149, 150, and 152 if construction in the flood plain is required to make them buildable.
11. Suggest changing Lot #152 to #151, if it is to be included in the plat.

Estimate of Cost

1. No estimate of cost was submitted.

Please feel free to call on us, if you have any questions.

Very truly yours
Will County Land Use Dept.

Roy L. Allen P.E.
Chief Subdivision Engineer &
Plat Officer

RLA/plf
cc: W. Stassen
Meadow Creek Co.

DATE May 18, 1987 NAME Meadow Creek Subdivision P.U.D. STATUS Planned Unit Development

NUMBER OF LOT 150 (res.) 2 (indl.)

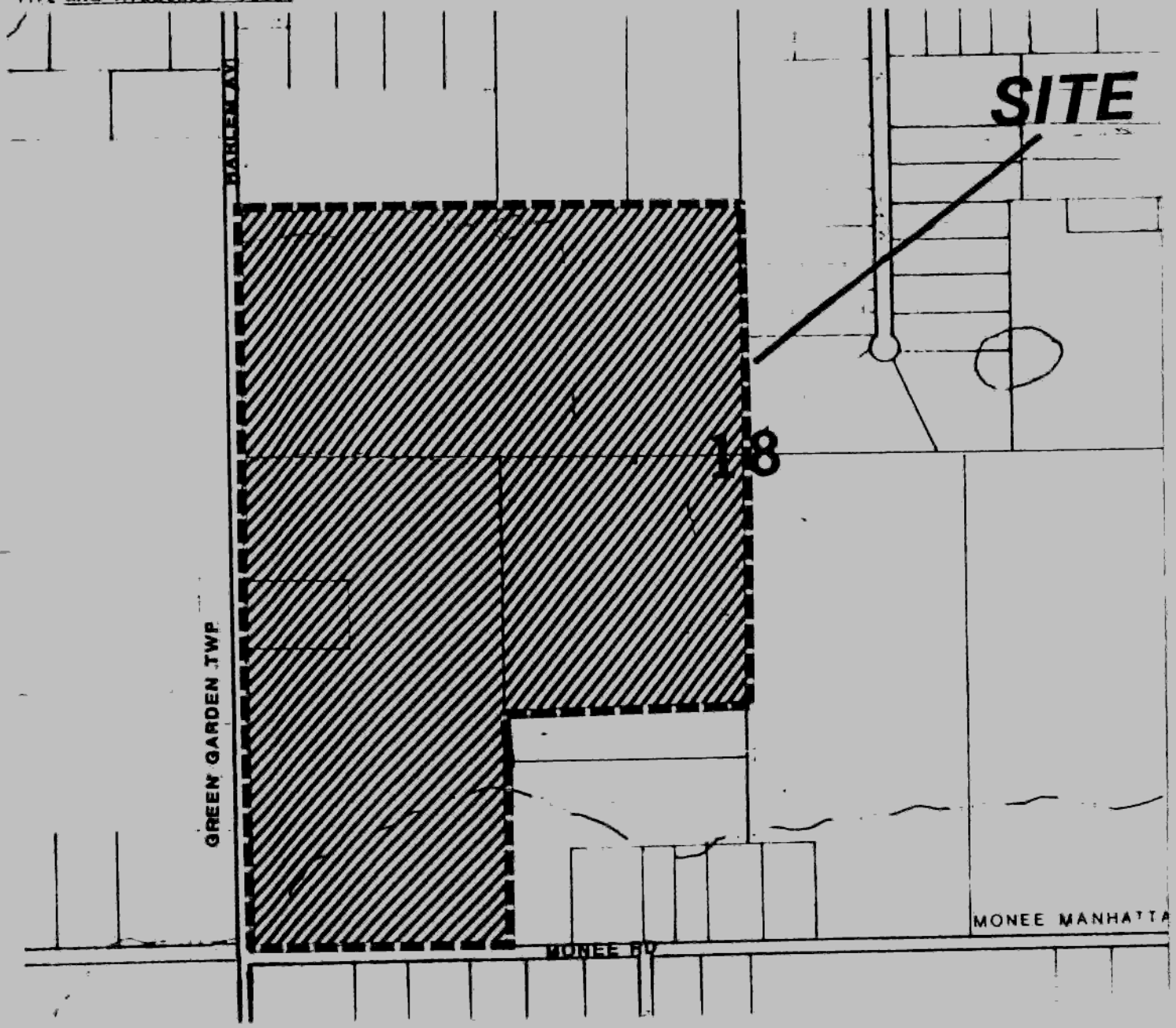
TAX NUMBER 14-18-002, -006, -009, -010

ACREAGE : 213

TOWNSHIP / SECTION Monee/18

TYPE Residential, Commercial and Aviation P.U.D.

1.5 MILE MUNICIPAL JURISDICTION Monee University Park



SOIL TYPE (S) 148,235,241,238,295,320

Monee Twp
Green Garden Twp

PERCENT FLOODPLAIN 15%

WATER SUPPLY Wells

HIGHWAY AGENCIES Will County

SCHOOL DISTRICT Crete-Monee #201U

SEWAGE DISPOSAL Septic

PARK DISTRICT none

FIRE DISTRICT Monee F.P.D.

ZONING ON SITE R-1* N A-1,A-2 S A-1 E A-1 W A-2, R-3, A-2

AGENDA DATES : PZC 08/04/87 LU COMM 08/06/87

(*requesting R-2A/P.U.D.)

DEVELOPER / OWNER Meadow Creek Development Corporation

AGENT Lyman Tieman,Atty.

ENGINEER Tech 3 Consulting Group

STAFF REPORT

Will County Planning and Zoning Commission
Case Number: 2957-RM2S2/Meadow Creek Planned Unit Development (Monee Township)
July 28, 1987
Prepared by: Will County Land Use Department

GENERAL INFORMATION

APPLICANT: Meadow Creek Corporation; Lyman C. Tieman, attorney
OWNER: South Holland Trust & Savings Bank, Trusts #6733, 7388, & 8460; William Pradelski, John Refieuna, William Huber, Edward Rachanski, Reiner D. Bohlan, and James DeGroot, beneficiaries
STATUS OF APPLICANT: Developers; Principals will be disclosed at the public hearing.
REQUESTED ACTIONS:
1. Preliminary Plat approval
2. Special Use Permit for a Planned Unit Development

PURPOSE: To create a mixed residential, industrial, and aviation use Planned Unit Development
EXISTING ZONING: A-1, A-2 and R-1(pending request for R-2A, I-1 and A-1/ Special Use Permit for a private airstrip)
LOCATION: Northeast corner of Harlem Avenue and Monee-Manhattan Road
SIZE: 213 acres
EXISTING LAND USE: Agricultural(fallow) and open space
SURROUNDING ZONING AND LAND USE

NORTH:	A-1	agricultural
SOUTH:	A-1,A-2	agricultural
EAST:	A-1,R-2	agricultural and vacant subdivision lots
WEST:	A-2	residential and agricultural

LAND USE PLAN: County: Residential and Agricultural
Village of Monee: area not included
Village of University Park: Low Density Residential and Open Space (floodplain)

ZONING HISTORY: 1947 Zoning Map indicates "Farming". A portion was rezoned "B-1-a" by case #1678-S on June 12, 1972. The 1978 comprehensive zoning amendment classified the site as A-1. Portions of the site were rezoned as follows: to R-1 by case #2343-C on April 23, 1981, and to A-2 by case #2413-C on October 22, 1981. The Planning and Zoning Commission and the Land Use and Zoning Committee have recommended approval of the underlying zoning for the proposed development.
APPLICABLE REGULATIONS: Sections 4.2A-4-2, 6.1-4-3, 7.1-4-6, 14.12,and 15 of the Zoning Ordinance and the Subdivision Ordinance

SPECIAL INFORMATION

PUBLIC UTILITIES: The applicant proposes to serve the site with the central sewer and water facilities Consumers Illinois Water Company University Park. The Will County Health Department has no objection to the proposed rezoning and special use but will require verification of capacity by the Illinois Environmental Protection Agency. The site is not located within any Facilities Planning Area, but service as proposed would require an amendment of the Village's Facility Planning Area.

PUBLIC SERVICES: The Monee Fire Protection District, which serves the site from a station located 2.5 miles away, has no objection to the proposed rezoning. Fire protection response distance factors are adequate.

TRANSPORTATION: The site fronts Harlem Avenue, a two-lane, gravel, Township road, which is maintained at this point by Green Garden Township. It also fronts Manhattan-Monee Road, a two-lane, blacktop, County highway. The developers plan to install private streets within the development. The Monee Township Highway Commissioner has no objection to the proposed development. The Green Garden Highway Commissioner has indicated that Harlem Road must be improved to accommodate the traffic to be generated by the proposed development. The Will County Highway Department has no objections to the proposed rezoning but notes that any entrances to Monee-Manhattan Road must meet County standards for design and sight distance. Federal Aviation Administration location approval is required in order to construct an aircraft landing field.

PARKING: Adequate area exists on the site to meet parking requirements.

PHYSICAL CHARACTERISTICS: The site is gently rolling, with some wetland areas near the eastern edge. This area flows northward toward the main branch of Forked Creek. Another tributary of Forked Creek passes through the southern portion of the site. About ten percent of the site lies within its floodplain. Trees are located near the floodplain, fencerows, and the former farmstead on the west edge of the site. Some marsh vegetation, ducks and wading birds are present on the wetland areas of the site. The soils on approximately 30% of the site have very severe limitations for buildings due to seasonal high water table and high shrink-swell potential. Two pipeline easements cross the northern part of the site.

ANALYSIS

The applicant is requesting map amendments to R-2A and I-1, a special use permit for an airfield, preliminary plat approval and a special use permit for a Planned Unit Development (PUD). The PUD proposed includes 150 residential lots, a 3400-foot runway and parallel taxiway, and a zoned light industrial area. The map amendments and airstrip special use permit were previously heard and recommended for approval. Approval of zoning and a preliminary plat prior to PUD approval is required by Section 15 of the Zoning Ordinance.

The applicant has obtained Federal Aviation Administration (FAA) approval and extensions of approval to allow a private use airway/restricted landing area on the site. An airspace study performed by the agency determined that the proposed airstrip would not conflict with existing aviation patterns. A private airstrip must also seek certification from the Illinois Division of Aeronautics as well as the FAA. The FAA recommended safety guidelines for small landing strips call for a 60 foot wide runway, a 120 foot wide clear area for the runway and a 240 foot clear zone beyond each end of the runway. To meet these guidelines, the runway would have to be widened by 20 feet and a setback from all obstructions on the rear portion of lots #33 and 93-107 has been included.

The development would have several impacts upon the surrounding area. Vehicular traffic on Harlem Avenue would be increased by the addition of 150 homes. Air traffic noise and safety would become a factor affecting adjoining properties, especially to the northeast and southwest of the site. Industrial traffic would slightly increase on Monee-Manhattan Road. Significant grading is required to install a level runway on the rolling site and to develop existing, low-lying areas. There are no plans at this time for improvement, fill, ownership and disposition of "future proposed lots" #1, 144, and 146-150, which are located within the floodplain.

There are presently several deficiencies in the plat submitted:
1. preliminary plat approval by 1.5-mile municipality is missing,
2. a utility easement for the water line between lots #44, 45, 51, & 52 is missing,
3. floodplain percentages per lot before and after construction are missing,
4. some fire hydrant spacings exceed 350 foot maximum(up to 470 feet),
5. no mention is made of improvements to Harlem Road, which is currently gravel and to be partially dedicated,
6. the disposition of private road right-of-way, detention areas #2,4 & 5, and runway property remains unclear,
7. there should be consideration of shared access to industrial lots along Monee-Manhattan Road for safety reasons,

The applicants request the following variances from the strict preliminary plat standards:
8. maximum length for a cul-de-sac on Boyington Lane, which exceeds 1200 feet,
9. front yard setbacks reduced from 47 feet to 40 feet,
10. block length on Gabreski Lane, which exceeds the 1500 foot maximum,
11. consideration of providing access to the property to the south,
12. use of the interior streets as airplane taxiways.

Due to the unique nature of the PUD proposal with its private streets the requested variances would not create hazards to the public.

The special use permit for PUD requires several items to be present. Besides underlying zoning and a conditionally-approved preliminary plat, several additional items of information specific to the concept of the plat are required in Section 15.4 of the Zoning Ordinance. The applicants have submitted a bound document, titled "Development Concept Report Meadow Creek" in support of this requirement. Section 6 of this report, which specifically addresses the requirement, attempts to answer the necessary questions. However, the following information is incomplete:
A. no architectural plans or development schedule were submitted for the industrial area but applicant notes the area will be resubdivided in the future and will be subject to design approval requirements of the homeowners association,
B. the estimated school population generated does not use the same factors as the Will County School Site Contribution Ordinance and undercounts the child count by almost 40%,

C. the traffic analysis estimates 1520 vehicle trips from the single family area and 500 from the industrial area but does not address the adequacy of the local thoroughfares to handle this additional traffic,
D. future ownership and maintenance of property, especially roads, runway and detention areas, needs to be irrevocably stated either within the covenants or on the plat,

The applicant states the request deviates from the Zoning and Subdivision Ordinance in that they request an aircraft runway, that interior roads(which also serve as taxiways) are to remain in private ownership(homeowners association), that aircraft may be stored on individual lots with storage structures permitted on those lots, and that no sidewalks be required. In fact, the runway will be permitted only if the special use permit for a private airstrip is approved by the County Board, and sidewalks are not required in this development. The Homeowners Association would be responsible for maintenance of the private roads, but this is not apparent from the plat itself. It is also apparent, but not stated, that three stormwater detention areas would be owned and maintained by the Homeowners Association. The construction of hangars and garages on lots is limited in size by the covenants to a total of 3,000 square feet or 48,000 cubic feet. Hangars and garages must be attached.

The Village of University Park recommended approval of the map amendment for the development, while urging the developer to pursue annexation as soon as possible. No comments on the preliminary plat have yet been received. The Monee Township Board has no objection to the proposed development. The Green Garden Township Board has been unable to research sufficiently the impact of the proposed development next to their Township. They feel that they will suffer from increased traffic, noise and air traffic while gaining no positive economic benefit from the development and state "we cannot look upon this development favorably." No comments have been received from the Village of Monee.

FINDINGS AND RECOMMENDATIONS

Findings:

Preliminary Plat

1. The plat proposes 143 residential lots, 7 "future proposed" residential lots, and 2 industrial lots which appear to meet minimum lot area and width requirements for the R-2A and I-1 districts.
2. There are several deficiencies in the plat, which are cited as items numbered 1 through 7 above.
3. Zoning for the proposed use is currently pending County Board action.

Special Use Permit for Planned Unit Development

1. The required preliminary plat has not yet been tentatively approved.
2. Items which appear as letters A through D above remain unclear within the development concept report submitted by the applicant.
3. The special use should not adversely affect the health and safety of the public and adjoining property owners.
4. The special use should not impede the development of neighboring property, although there will be increased air traffic in the vicinity

as a result of the previous special use permit request for a private airstrip.

5. The Monee Township Highway Commissioner has indicated that Harlem Road is planned for improvements which will allow it to accommodate the increased traffic generated by this development.
6. Adequate utilities will be provided to serve the proposed PUD.
7. The special use permit generally conforms to the regulations of the various underlying zoning districts except that internal streets, taxiways, the runway, and some detention areas will be owned and maintained by a private homeowners association. Additional variances from the maximum block length restrictions are needed for Gabreski Lane and Boyington Lane, and for a frontyard setback of 40 feet.

Recommendations:

Preliminary plat

That the Planning and Zoning Commission recommend that the Land Use and Zoning Committee approve the preliminary plat for the Meadow Creek PUD with the following conditions:

1. preliminary plat approval by University Park,
2. fire hydrant spacings to meet the standards of the Subdivision Ordinance,
3. provision of a statement regarding the responsibilities for ownership and maintenance of detention areas #2,4, and 5,
4. approval of the underlying zoning requests.

Special Use Permit

That the Planning and Zoning Commission recommend that the County Board approve the special use permit for a planned unit development based on the tentatively approved preliminary plat for Meadow Creek which meets the four conditions listed immediately above and the submission of information sufficient to respond to points A, B, C, and D of this report.

ATTACHMENTS

1. Plat of Survey (reduced)
2. Site Location Map
3. Zoning Map (unofficial)
4. Preliminary Plat (reduced)
5. Development Concept Report(Sections 1-7)
6. Subdivision Engineer's letter

pzc#7mjb/medowcrk

as a result of the previous special use permit request for a private airstrip.

5. The Monee Township Highway Commissioner has indicated that Harlem Road is planned for improvements which will allow it to accommodate the increased traffic generated by this development.
6. Adequate utilities will be provided to serve the proposed PUD.
7. The special use permit generally conforms to the regulations of the various underlying zoning districts except that internal streets, taxiways, the runway, and some detention areas will be owned and maintained by a private homeowners association. Additional variances from the maximum block length restrictions are needed for Gabreski Lane and Boyington Lane, and for a frontyard setback of 40 feet.

Recommendations:

Preliminary plat

That the Planning and Zoning Commission recommend that the Land Use and Zoning Committee approve the preliminary plat for the Meadow Creek PUD with the following conditions:

1. preliminary plat approval by University Park,
2. fire hydrant spacings to meet the standards of the Subdivision Ordinance,
3. provision of a statement regarding the responsibilities for ownership and maintenance of detention areas #2,4, and 5,
4. approval of the underlying zoning requests.

Special Use Permit

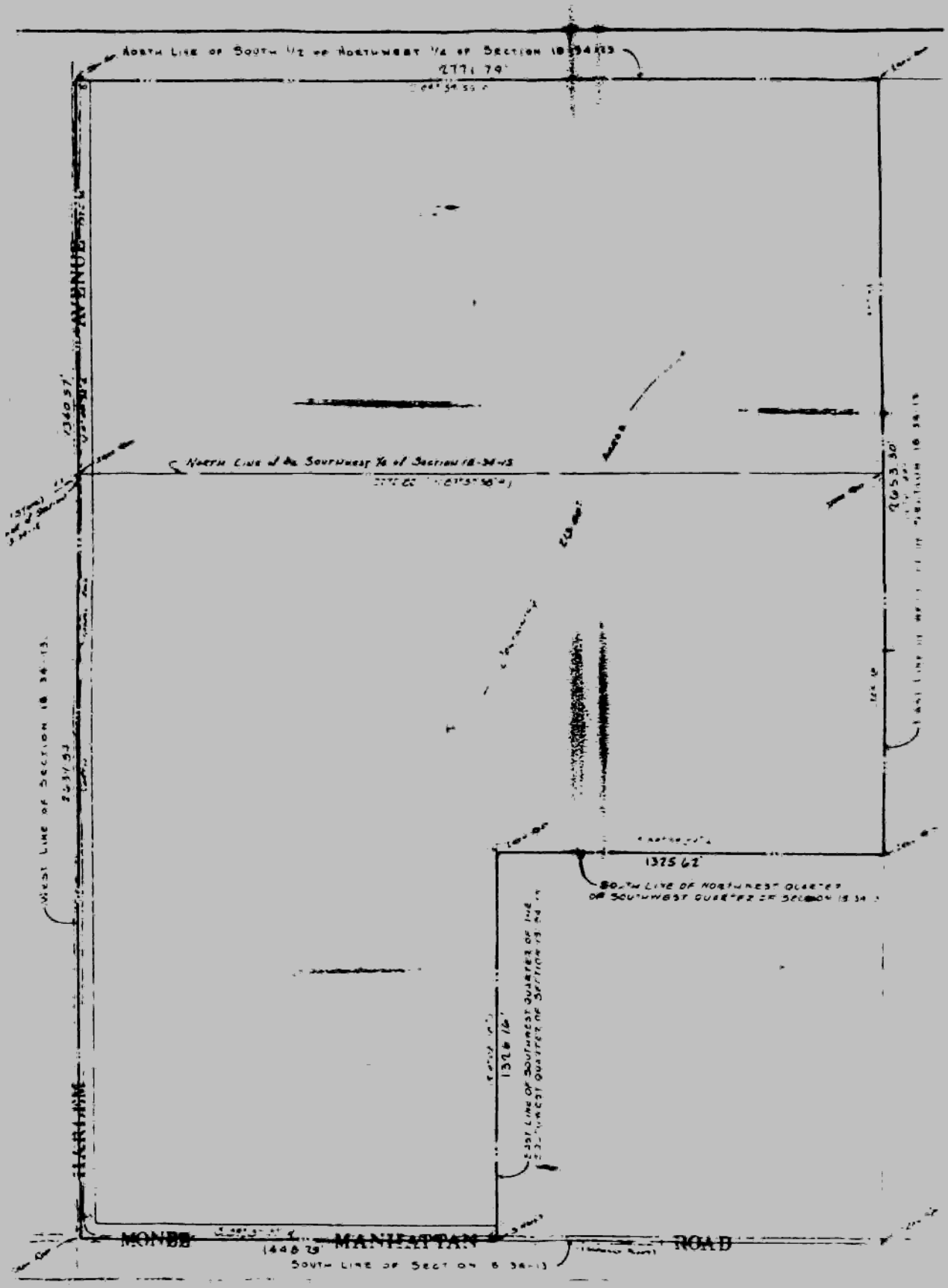
That the Planning and Zoning Commission recommend that the County Board approve the special use permit for a planned unit development based on the tentatively approved preliminary plat for Meadow Creek which meets the four conditions listed immediately above and the submission of information sufficient to respond to points A, B, C, and D of this report.

ATTACHMENTS

1. Plat of Survey (reduced)
2. Site Location Map
3. Zoning Map (unofficial)
4. Preliminary Plat (reduced)
5. Development Concept Report(Sections 1-7)
6. Subdivision Engineer's letter

pzc#7mjb/medowcrk

2957-RM2S2
Monee Township



AUG 26 1987

Our 20th Year

August 20, 1987

the village of
University Park

WE'RE ON THE MOVE

Mr. Michael Brown
Planner
Will County Land Use Department
501 Ella Avenue
Joliet, Illinois 60433

Dear Mr. Brown:

The Village of University Park has no objections to the preliminary plan for Meadow Creek Subdivision. However, approval is based on Job # 87028 which proposes a residential air park with approximately 150 homes. I have enclosed a copy of Resolution 1987-15 for your information.

Please do not hesitate to call me if you have any questions about the plan.

Very Truly Yours,

VILLAGE OF UNIVERSITY PARK

Gary C. Holmes

Gary C. Holmes
Village Manager

GCH:ss

Enclosure

cc: Attorney Lyman Tieman

Village Hall — 698 Burnham Drive University Park, Illinois 60466 (312) 534-6451

RESOLUTION NO. 1987-15

RESOLUTION APPROVING THE CONCEPT OF A RESIDENTIAL AIR PARK TO BE CONSTRUCTED WITHIN THE MEADOW CREEK SUBDIVISION AT THE NORTH EAST CORNER OF HARLEM AVENUE AND MANHATTAN-MONEE ROAD, MONEE TOWNSHIP, WILL COUNTY, ILLINOIS

WHEREAS, Meadow Creek Development Corporation has submitted its Application for a "map amendment" to the Will County Zoning Ordinance in the matter of Meadow Creek Development Corporation, Appellant vs. Zoning Administrator, Appellee, a copy of which Application is attached to and made a part of this Resolution as Exhibit "A"; and

WHEREAS, said Application requests rezoning of a parcel of land consisting of approximately 213 +/- acres situated at the North East corner of Harlem Avenue and Manhattan-Monee Road, Monee Township, Will County, Illinois (hereinafter referred to as the "Subject Property") from A-1 and A-2 to R-2A, IL PUD. A copy of the proposed "site location" is attached to and made a part of this Resolution as Exhibit "B"; and

WHEREAS, said Application proposes that the Subject Property be improved with a "Residential Air Park" consisting of expensive homesites surrounding a runway/taxiway configuration sufficient to accommodate the taking off, landing taxiing, and storage of light aircraft. A copy of the proposed Meadow Creek Subdivision Plan is attached to and made a part of this Resolution as Exhibit "C"; and

WHEREAS, the Subject Property lies within 1 1/2 miles of the Village of University Park; and

WHEREAS, Meadow Creek Development Corporation has, in compliance with its Application, requested the recommendation of the Village of University Park as to the proposed use of the Subject Property; and

WHEREAS, the Village of University Park, while approving the concept proposed by Meadow Creek Development Corporation, desires to expand its borders and annex additional property including the Subject Property.

THEREFORE, THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF UNIVERSITY PARK, WILL AND COOK COUNTIES, ILLINOIS, HEREBY PROCLAIM AND DECLARE:

1. That the Village of University Park does hereby approve the proposed use of the Subject Property as delineated in the attached Exhibits, subject, however, to the express condition that Meadow Creek Development Corporation shall take such action necessary, appropriate, helpful, or reasonably required within

the limits of the law, to assist the Village of University Park in annexing the Subject Property.

DATED: This 23rd day of June, 1987.

AYES: Trustees Young, Bernd, Palmer, Gibert, Waller, and President Collins

NAYS: None

ABSENT: Trustee Tsikouris

APPROVED: This 23rd day of June, 1987.

Charles P. Collins
Village President

ATTEST:

Irma A. Berry, Village Clerk

WILL COUNTY LAND USE DEPARTMENT

501 ELLA AVENUE • JOLIET, ILLINOIS 60433

August 17, 1987

Wayne C. Stassen
Township Highway Commissioner
Rt # 2, Box #86
Monee, Il 60449

Subject: Meadow Creek Subdivision
Monee TOwnship
Preliminary Plat (Revised)

Dear Mr. Stassen:

Transmitted herewith is one (1) copy of the Preliminary Plat (Revised) for Meadow Creek Subdivision.

Please review and comment on the same.

If you have any questions, please, feel free to call on us.

Very truly yours
Will County Land Use Dept.

Roy L. Allen P.E.
Subdivision Engineer & Plat Officer

RLA/plf

PATRICIA L. SPRAY
ADMINISTRATION
(815) 727-8631

PAUL M. GORTE
CHIEF PLANNER
(815) 727-8767

JAMES J. GIBBONS
CHIEF ZONING INSPECTOR
(815) 727-8850

ROBERT J. ERICKSON
CHIEF BUILDING INSPECTOR
(815) 727-8634

TECH 3 CONSULTING GRO , INC.
1395 C Main Street
CRETE, ILLINOIS 60417

(312) 672-4994

LETTE . OF TRANSMITTAL

DATE	JOB NO
8-10-87	87028

ATTENTION: ROY ALLEN

RE: MEADOW CR.

TO WILL COUNTY-LAND USE DEPT.

WE ARE SENDING YOU ☐ Attached ☐ Under separate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change order ☐ _____

COPIES	DATE	NO	DESCRIPTION
6			REVISED PRELIMINARY PLAN

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval

☐ For your use ☐ Approved as noted ☐ Submit _____ copies for distribution

☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints

☐ For review and comment ☐ _____

☐ FOR BIDS DUE _____ 19____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS

COPY TO _____ SIGNED: wjs

If enclosures are not as noted kindly notify us at once

TECH 3 CONSULTING GRO , INC.
1395 C Main Street
CRETE, ILLINOIS 60417
(312) 672-4994

LETTER OF TRANSMITTAL

TO Will Co. Land Use Dept.

DATE 4-31-84 JOB NO. 84028

ATTENTION Ray Allen

RE Meadow Creek

WE ARE SENDING YOU ☐ Attached ☐ Under separate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change order ☐ _____

COPIES	DATE	NO	DESCRIPTION
6ea.			Revised Preliminary Revised Storm Comps

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval

☐ For your use ☐ Approved as noted ☐ Submit _____ copies for distribution

☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints

☐ For review and comment ☐ _____

☐ FOR BIDS DUE _____ 19 ____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS

COPY TO _____ SIGNED: _____

If enclosures are not as noted, kindly notify us at once

DATE 07-10-1987 PROJECT # 1

TECH 3 CONSULTING GROUP DETENTION DATA

PROJECT NAME: MEADOW CREEK
POND NUMBER: 1

TOTAL CONTIGUOUS AREA = 43.2 ACRES
TOTAL PROJ AREA = 43.2 ACRES
IMPERVIOUS AREA = 12.3 ACRES @ Runoff Coeff. = 0.90
PERVIOUS AREA = 30.9 ACRES @ Runoff Coeff. = 0.20
OTHER IMPERV AREAS = 0 ACRES @ Runoff Coeff. = 0.00
Composite runoff coeff. 'C' = 0.40
HIGH ELEV = 796
LOW ELEV = 759
DISTANCE = 1600 FT.
SLOPE = 2.313 FT/FT

OVERLAND FLOW TIME. EXISTING CONDITIONS = 51.7 min.
INTENSITY OF A 51.7 MIN. 10-yr FREQUENCY STORM = **2.33** in/hr.
RELEASE RATE USED 15.1 cfs.
ALLOWABLE RELEASE RATE **15.10** cfs.

****
DETENTION SUMMARY
****

STORM DURATION	RAINFALL INTENSITY	INFLOW RATE, cfs	STORAGE RATE, cfs	STORAGE REQ'D, ac.ft.
0.17	7.60	131.33	116.23	1.647
0.33	5.50	95.04	79.94	2.198
0.50	4.40	76.03	60.93	2.539
0.67	3.70	63.94	48.84	2.727
0.83	**3.20**	**55.30**	**40.20**	**2.781** <<MAX
1.00	2.80	48.38	33.28	2.773
1.50	2.10	36.29	21.19	2.649
2.00	1.70	29.38	14.28	2.380
3.00	1.20	20.74	5.64	1.410
4.00	1.00	17.28	2.18	0.727

DATE 07-29-1987 PROJECT # 87028

TECH 3 CONSULTING GROUP DETENTION DATA

PROJECT NAME: MEADOW CREEK
POND NUMBER: 2

TOTAL CONTIGUOUS AREA = 33 ACRES
TOTAL PROJ AREA = 33 ACRES
IMPERVIOUS AREA = 9.399999 ACRES @ Runoff Coeff. = 0.90
PERVIOUS AREA = 23.6 ACRES @ Runoff Coeff. = 0.20
OTHER IMPERV AREAS = 0 ACRES @ Runoff Coeff. = 0.00
Composite runoff coeff. 'C' = 0.40
HIGH ELEV = 798
LOW ELEV = 768
DISTANCE = 900 FT.
SLOPE = 0.033 FT/FT

OVERLAND FLOW TIME, EXISTING CONDITIONS = 28.6 min.
INTENSITY OF A 28.6 MIN. 10-yr FREQUENCY STORM = 2.95 in/hr.
RELEASE RATE USED 14.6 cfs.
ALLOWABLE RELEASE RATE 14.60 cfs.

****
DETENTION SUMMARY
****

STORM DURATION	RAINFALL INTENSITY	INFLOW RATE, cfs	STORAGE RATE, cfs	STORAGE REQ'D, ac.ft.	
0.17	7.60	100.32	85.72	1.214	
0.33	5.50	72.60	58.00	1.595	
0.50	4.40	58.08	43.48	1.812	
0.67	3.70	48.84	34.24	1.912	
0.83	**3.20**	**42.24**	**27.64**	**1.912**	**<<MAX**
1.00	2.80	36.96	22.36	1.863	
1.50	2.10	27.72	13.12	1.640	
2.00	1.70	22.44	7.84	1.307	
3.00	1.20	15.84	1.24	0.310	

DATE 07-29-1987 PROJECT # FILE NUMBER

TECH 3 CONSULTING GROUP DETENTION DATA

PROJECT NAME: MEADOW CREEK
POND NUMBER: 3

TOTAL CONTIGUOUS AREA = 30.8 ACRES
TOTAL PROJ AREA = 30.8 ACRES
IMPERVIOUS AREA = 8.8 ACRES @ Runoff Coeff. = 0.90
PERVIOUS AREA = 22 ACRES @ Runoff Coeff. = 0.20
OTHER IMPERV AREAS = 0 ACRES @ Runoff Coeff. = 0.00
Composite runoff coeff. 'C' = 0.40
HIGH ELEV = 777
LOW ELEV = 766
DISTANCE = 700 FT.
SLOPE = 0.016 FT/FT

OVERLAND FLOW TIME, EXISTING CONDITIONS = 30.3 min.
INTENSITY OF A 30.3 MIN. 10-yr FREQUENCY STORM = 2.95 in/hr.
RELEASE RATE USED 13.63 cfs.
ALLOWABLE RELEASE RATE 13.63 cfs.

****
DETENTION SUMMARY
****

STORM DURATION	RAINFALL INTENSITY	INFLOW RATE, cfs	STORAGE RATE, cfs	STORAGE REQ'D, ac.ft.	
0.17	7.60	93.63	80.00	1.133	
0.33	5.50	67.76	54.13	1.489	
0.50	4.40	54.21	40.58	1.691	
0.67	**3.70**	**45.58**	**31.95**	**1.784**	**<<MAX**
0.83	3.20	39.42	25.79	1.784	
1.00	2.80	34.50	20.87	1.739	
1.50	2.10	25.87	12.24	1.530	
2.00	1.70	20.94	7.31	1.218	
3.00	1.20	14.78	1.15	0.288	

DATE 07-29-1987 PROJECT # 87028

TECH 3 CONSULTING GROUP DETENTION DATA

PROJECT NAME: MEADOW CREEK
POND NUMBER: 4

TOTAL CONTIGUOUS AREA = 7.4 ACRES
TOTAL PROJ AREA = 7.4 ACRES
IMPERVIOUS AREA = 2.1 ACRES @ Runoff Coeff. = 0.90
PERVIOUS AREA = 5.3 ACRES @ Runoff Coeff. = 0.20
OTHER IMPERV AREAS = 0 ACRES @ Runoff Coeff. = 0.00
Composite runoff coeff. 'C' = 0.40
HIGH ELEV = 778
LOW ELEV = 772
DISTANCE = 400 FT.
SLOPE = 0.015 FT/FT

OVERLAND FLOW TIME, EXISTING CONDITIONS = 23.7 min. ✓
INTENSITY OF A 23.7 MIN. 10-yr FREQUENCY STORM = 3.25 in/hr.
RELEASE RATE USED 3.61 cfs.
ALLOWABLE RELEASE RATE 3.61 cfs.

****
DETENTION SUMMARY
****

STORM DURATION	RAINFALL INTENSITY	INFLOW RATE, cfs	STORAGE RATE, cfs	STORAGE REQ'D, ac.ft.	
0.17	7.60	22.50	18.89	0.268	
0.33	5.50	16.28	12.67	0.348	
0.50	4.40	13.02	9.41	0.392	
0.67	**3.70**	**10.95**	**7.34**	**0.410** ✓	<<MAX
0.83	3.20	9.47	5.86	0.405	
1.00	2.80	8.29	4.68	0.390	
1.50	2.10	6.22	2.61	0.326	
2.00	1.70	5.03	1.42	0.237	

DATE 07-29-1987 PROJECT # 87028

TECH 3 CONSULTING GROUP DETENTION DATA

PROJECT NAME: MEADOW CREEK
POND NUMBER: 5

TOTAL CONTIGUOUS AREA = 40.9 ACRES
TOTAL PROJ AREA = 40.9 ACRES
IMPERVIOUS AREA = 11.7 ACRES @ Runoff Coeff. = 0.90
PERVIOUS AREA = 29.2 ACRES @ Runoff Coeff. = 0.20
OTHER IMPERV AREAS = 0 ACRES @ Runoff Coeff. = 0.00
Composite runoff coeff. 'C' = 0.40
HIGH ELEV = 794
LOW ELEV = 758
DISTANCE = 1500 FT.
SLOPE = 2.400 FT/FT

OVERLAND FLOW TIME, EXISTING CONDITIONS = 49.5 min. ✓
INTENSITY OF A 49.5 MIN. 10-yr FREQUENCY STORM = **2.20** in/hr.
RELEASE RATE USED 13.5 cfs.
ALLOWABLE RELEASE RATE **13.50** cfs.

****
DETENTION SUMMARY
****

STORM DURATION	RAINFALL INTENSITY	INFLOW RATE, cfs	STORAGE RATE, cfs	STORAGE REQ'D, ac.ft.
0.17	7.60	124.34	110.84	1.570
0.33	5.50	89.98	76.48	2.103
0.50	4.40	71.98	58.48	2.437
0.67	3.70	60.53	47.03	2.626
0.83	3.20	52.35	38.85	2.687
1.00	**2.80**	**45.81**	**32.31**	**2.693** ✓ <<MAX
1.50	2.10	34.36	20.86	2.608
2.00	1.70	27.81	14.31	2.385
3.00	1.20	19.63	6.13	1.532
4.00	1.00	16.36	2.86	0.953
5.00	0.84	13.74	0.24	0.100

DATE 07-29-1987 PROJECT # 87028

TECH 3 CONSULTING GROUP DETENTION DATA

PROJECT NAME: MEADOW CREEK
POND NUMBER: 6

TOTAL CONTIGUOUS AREA = 17.8 ACRES
TOTAL PROJ AREA = 17.8 ACRES
IMPERVIOUS AREA = 5.1 ACRES @ Runoff Coeff. = 0.90
PERVIOUS AREA = 12.7 ACRES @ Runoff Coeff. = 0.20
OTHER IMPERV AREAS = 0 ACRES @ Runoff Coeff. = 0.00
Composite runoff coeff. 'C' = 0.40
HIGH ELEV = 799
LOW ELEV = 767
DISTANCE = 1400 FT.
SLOPE = 2.286 FT/FT

OVERLAND FLOW TIME, EXISTING CONDITIONS = 48.6 min. ✓
INTENSITY OF A 48.6 MIN. 10-yr FREQUENCY STORM = 2.25 in/hr.
RELEASE RATE USED 6.01 cfs.
ALLOWABLE RELEASE RATE 6.01 cfs.

****
DETENTION SUMMARY
****

STORM DURATION	RAINFALL INTENSITY	INFLOW RATE, cfs	STORAGE RATE, cfs	STORAGE REQ'D, ac.ft.	
0.17	7.60	54.11	48.10	0.681	
0.33	5.50	39.16	33.15	0.912	
0.50	4.40	31.33	25.32	1.055	
0.67	3.70	26.34	20.33	1.135	
0.83	3.20	22.78	16.77	1.160	
1.00	**2.80**	**19.94**	**13.93**	**1.161**	**<<MAX**
1.50	2.10	14.95	8.94	1.118	
2.00	1.70	12.10	6.09	1.015	
3.00	1.20	8.54	2.53	0.633	
4.00	1.00	7.12	1.11	0.370	

DATE 07-29-1987 PROJECT # 87028

TECH 3 CONSULTING GROUP DETENTION DATA

PROJECT NAME: MEADOW CREEK
POND NUMBER: 7

TOTAL CONTIGUOUS AREA = 7 ACRES
TOTAL PROJ AREA = 7 ACRES
IMPERVIOUS AREA = 2 ACRES @ Runoff Coeff. = 0.90
PERVIOUS AREA = 5 ACRES @ Runoff Coeff. = 0.20
OTHER IMPERV AREAS = 0 ACRES @ Runoff Coeff. = 0.00
Composite runoff coeff. 'C' = 0.40
HIGH ELEV = 782
LOW ELEV = 760
DISTANCE = 850 FT.
SLOPE = 0.026 FT/FT

OVERLAND FLOW TIME, EXISTING CONDITIONS = 29.5 min.
INTENSITY OF A 29.5 MIN. 3-yr FREQUENCY STORM = 2.95 in/hr.
RELEASE RATE USED 3.1 cfs.
ALLOWABLE RELEASE RATE 3.1 cfs.

****
DETENTION SUMMARY
****

STORM DURATION	RAINFALL INTENSITY	INFLOW RATE, cfs	STORAGE RATE, cfs	STORAGE REQ'D, ac.ft.	
0.17	7.60	21.28	18.18	0.258	
0.33	5.50	15.40	12.30	0.338	
0.50	4.40	12.32	9.22	0.384	
0.67	**3.70**	**10.36**	**7.26**	**0.405**	**<<MAX**
0.83	3.20	8.96	5.86	0.405	
1.00	2.80	7.84	4.74	0.395	
1.50	2.10	5.88	2.78	0.348	
2.00	1.70	4.76	1.66	0.277	
3.00	1.20	3.36	0.26	0.065	

DATE 07-10-1987 PROJECT # 1

TECH 3 CONSULTING GROUP DETENTION DATA

PROJECT NAME: MEADOW CREEK
POND NUMBER: 1

TOTAL CONTIGUOUS AREA = 43.2 ACRES
TOTAL PROJ AREA = 43.2 ACRES
IMPERVIOUS AREA = 12.3 ACRES @ Runoff Coeff. = 0.90
PERVIOUS AREA = 30.9 ACRES @ Runoff Coeff. = 0.20
OTHER IMPERV AREAS = 0 ACRES @ Runoff Coeff. = 0.00
Composite runoff coeff. 'C' = 0.40
HIGH ELEV = 796
LOW ELEV = 759
DISTANCE = 1600 FT.
SLOPE = 2.313 FT/FT

OVERLAND FLOW TIME. EXISTING CONDITIONS = 51.7 min. ~~51.7~~ 200
INTENSITY OF A 51.7 MIN. 10-yr FREQUENCY STORM = ~~2.33~~ in/hr.
RELEASE RATE USED 15.1 cfs.
ALLOWABLE RELEASE RATE ~~15.10~~ cfs.

****
DETENTION SUMMARY
****

STORM DURATION	RAINFALL INTENSITY	INFLOW RATE. cfs	STORAGE RATE, cfs	STORAGE REQ'D, ac.ft.
0.17	7.60	131.33	116.23	1.647
0.33	5.50	95.04	79.94	2.198
0.50	4.40	76.03	60.93	2.539
0.67	3.70	63.94	~~48.84~~	2.727
0.83	**3.20**	**55.30**	~~40.20~~	2.781 ← MAX
1.00	2.80	48.38	~~33.28~~	~~2.773~~
1.50	2.10	36.29	~~21.19~~	~~2.617~~
2.00	1.70	29.38	14.28	2.380
3.00	1.20	20.74	5.64	1.410
4.00	1.00	17.28	2.18	0.727

DATE 07-10-1987 PROJECT # B7028

TECH 3 CONSULTING GROUP DETENTION DATA

PROJECT NAME: MEADOW CREEK
POND NUMBER: 2

TOTAL CONTIGUOUS AREA = 33 ACRES
TOTAL PROJ AREA = 33 ACRES
IMPERVIOUS AREA = 9.399999 ACRES @ Runoff Coeff. = 0.90
PERVIOUS AREA = 23.6 ACRES @ Runoff Coeff. = 0.20
OTHER IMPERV AREAS = 0 ACRES @ Runoff Coeff. = 0.00
Composite runoff coeff. 'C' = 0.40
HIGH ELEV = 798
LOW ELEV = 768
DISTANCE = 900 FT.
SLOPE = 0.033 FT/FT

OVERLAND FLOW TIME. EXISTING CONDITIONS = 28.6 min. ✓
INTENSITY OF A 28.6 MIN. 10-yr FREQUENCY STORM = 2.95 in/hr.
RELEASE RATE USED 16.48 cfs. ✓
ALLOWABLE RELEASE RATE 16.48 cfs. 17.60

****
DETENTION SUMMARY
****

STORM DURATION	RAINFALL INTENSITY	INFLOW RATE. cfs	STORAGE RATE, cfs	STORAGE REQ'D, ac.ft.
0.17	7.60	100.32	83.84	1.188
0.33	5.50	72.60	55.12	1.543
0.50	4.40	58.08	41.60	1.733
0.67	**3.70**	**48.84** ✓	~~32.36~~ 34.238	**1.807** 1.91 <<MAX
0.83	3.20	42.24	25.76	1.782
1.00	2.80	36.96	20.48	1.707
1.50	2.10	27.72	11.24	1.405
2.00	1.70	22.44	5.96	0.993

10

3.33

DATE 07-10-1987 PROJECT # 87028

TECH 3 CONSULTING GROUP DETENTION DATA

PROJECT NAME: MEADOW CREEK
POND NUMBER: 3

TOTAL CONTIGUOUS AREA = 30.8 ACRES
TOTAL PROJ AREA = 30.8 ACRES
IMPERVIOUS AREA = 8.8 ACRES @ Runoff Coeff. = 0.90
PERVIOUS AREA = 22 ACRES @ Runoff Coeff. = 0.20
OTHER IMPERV AREAS = 0 ACRES @ Runoff Coeff. = 0.00
Composite runoff coeff. 'C' = 0.40
HIGH ELEV = 777
LOW ELEV = 766
DISTANCE = 700 FT.
SLOPE = 0.016 FT/FT

OVERLAND FLOW TIME, EXISTING CONDITIONS = 30.3 min.
INTENSITY OF A 30.3 MIN. 10-yr FREQUENCY STORM = ~~3.25~~ 1.95 in/hr.
RELEASE RATE USED 15.02 cfs. ~~15.02~~ 13.63
ALLOWABLE RELEASE RATE 15.02 cfs.

****
DETENTION SUMMARY
****

STORM DURATION	RAINFALL INTENSITY	INFLOW RATE, cfs	STORAGE RATE, cfs	STORAGE REQ'D, ac.ft.	
0.17	7.60	93.63	78.61	1.114	
0.33	5.50	67.76	52.74	1.450	
0.50	4.40	54.21	39.19	1.633	1.78
0.67	**3.70**	**45.58**	**30.56** 31.95	~~1.706~~	<<MAX
0.83	3.20	39.42	24.40	1.688	
1.00	2.80	34.50	19.48	1.623	
1.50	2.10	25.87	10.85	1.356	
2.00	1.70	20.94	5.92	0.987	

DATE 07-10-1987 PROJECT #

TECH - 3 CONSULTING GROUP DETENTION DATA

PROJECT NAME: MEADOW CREEK
POND NUMBER: 4

TOTAL CONTIGUOUS AREA = 7.4 ACRES
TOTAL PROJ AREA = 7.4 ACRES
IMPERVIOUS AREA = 2.1 ACRES @ Runoff Coeff. = 0.90
PERVIOUS AREA = 5.3 ACRES @ Runoff Coeff. = 0.20
OTHER IMPERV AREAS = 0 ACRES @ Runoff Coeff. = 0.00
Composite runoff coeff. 'C = 0.40
HIGH ELEV = 778
LOW - ELEV = 772
DISTANCE = 400 FT.
SLOPE = 0.015 FT/FT

OVERLAND FLOW TIME, EXISTING CONDITIONS = 23.7 min.
INTENSITY OF A 23.7 MIN. 10-yr FREQUENCY STORM = ~~3.75~~ 3.25 in/hr.
RELEASE RATE USED 4.14 cfs.
ALLOWABLE RELEASE RATE 4.14 cfs. 3.6075

****
DETENTION SUMMARY
****

STORM DURATION	RAINFALL INTENSITY	INFLOW RATE, cfs	STORAGE RATE, cfs	STORAGE REQ'D, ac.ft.
0.17	7.60	22.50	18.36	0.260
0.33	5.50	16.28	12.14	0.334
0.50	4.40	13.02	8.88	0.370
0.67	**3.70**	**10.95**	**6.81** 7.34	**0.380** 0.41 <<MAX
0.83	3.20	9.47	5.33	0.369
1.00	2.80	8.29	4.15	0.346
1.50	2.10	6.22	2.08	0.260
2.00	1.70	5.03	0.89	0.148

DATE 07-10-1987 PROJECT # 87028

TECH 3 CONSULTING GROUP DETENTION DATA

PROJECT NAME: MEADOW CREEK
POND NUMBER: 5

TOTAL CONTIGUOUS AREA = 40.9 ACRES
TOTAL PROJ AREA = 40.9 ACRES
IMPERVIOUS AREA = 11.7 ACRES @ Runoff Coeff. = 0.90
PERVIOUS AREA = 29.2 ACRES @ Runoff Coeff. = 0.20
OTHER IMPERV AREAS = 0 ACRES @ Runoff Coeff. = 0.00
Composite runoff coeff. 'C' = 0.40
HIGH ELEV = 794
LOW ELEV = 758
DISTANCE = 1500 FT.
SLOPE = 2.400 FT/FT

OVERLAND FLOW TIME, EXISTING CONDITIONS = 49.5 min.
INTENSITY OF A 49.5 MIN. 10-yr FREQUENCY STORM = 2.40 in/hr.
RELEASE RATE USED 14.72 cfs. 2.2
ALLOWABLE RELEASE RATE ~~14.72~~ 13.491 cfs.

****
DETENTION SUMMARY
****

STORM DURATION	RAINFALL INTENSITY	INFLOW RATE, cfs	STORAGE RATE, cfs	STORAGE REQ'D, ac.ft.	
0.17	7.60	124.34	109.62	1.553	
0.33	5.50	89.98	75.26	2.070	
0.50	4.40	71.98	57.26	2.386	
0.67	3.70	60.53	45.81 38.045	2.558 2.69	
0.83	3.20	52.35	~~37.63~~	2.603	<<MAX
1.00	2.80	45.81	31.09	2.591	
1.50	2.10	34.36	19.64	2.455	
2.00	1.70	27.81	13.09	2.182	
3.00	1.20	19.63	4.91	1.228	
4.00	1.00	16.36	1.64	0.547	

DATE 07-10-1987 PROJECT # 87028

TECH 3 CONSULTING GROUP DETENTION DATA

PROJECT NAME: MEADOW CREEK
POND NUMBER: 6

TOTAL CONTIGUOUS AREA = 17.8 ACRES
TOTAL PROJ AREA = 17.8 ACRES
IMPERVIOUS AREA = 5.1 ACRES @ Runoff Coeff. = 0.90
PERVIOUS AREA = 12.7 ACRES @ Runoff Coeff. = 0.20
OTHER IMPERV AREAS = 0 ACRES @ Runoff Coeff. = 0.00
Composite runoff coeff. 'C' = 0.40
HIGH ELEV = 799
LOW ELEV = 767
DISTANCE = 1400 FT.
SLOPE = 2.286 FT/FT

OVERLAND FLOW TIME, EXISTING CONDITIONS = 48.6 min.
INTENSITY OF A 48.6 MIN. 10-yr FREQUENCY STORM = ~~2.43~~ 1.15 in/hr.
RELEASE RATE USED 6.49 cfs.
ALLOWABLE RELEASE RATE **6.49** cfs.

****
DETENTION SUMMARY
****

STORM DURATION	RAINFALL INTENSITY	INFLOW RATE, cfs	STORAGE RATE, cfs	STORAGE REQ D, ac.ft.	
0.17	7.60	54.11	47.62	0.675	
0.33	5.50	39.16	32.67	0.898	
0.50	4.40	31.33	24.84	1.035	
0.67	3.70	26.34	19.85	1.108	
0.83	**3.20**	**22.78**	**16.29**	**1.127**	<<MAX
1.00	2.80	19.94	13.45	1.121	
1.50	2.10	14.95	8.46	1.058	
2.00	1.70	12.10	5.61	0.935	
3.00	1.20	8.54	2.05	0.513	
4.00	1.00	7.12	0.63	0.210	

DATE 07-10-1987 PROJECT # 87028

TECH 3 CONSULTING GROUP DETENTION DATA

PROJECT NAME: MEADOW CREEK
POND NUMBER: 7

TOTAL CONTIGUOUS AREA = 7 ACRES
TOTAL PROJ AREA = 7 ACRES
IMPERVIOUS AREA = 2 ACRES @ Runoff Coeff. = 0.90
PERVIOUS AREA = 5 ACRES @ Runoff Coeff. = 0.20
OTHER IMPERV AREAS = 0 ACRES @ Runoff Coeff. = 0.00
Composite runoff coeff. 'C' = 0.40
HIGH ELEV = 782
LOW- ELEV = 760
DISTANCE = 850 FT.
SLOPE = 0.026 FT/FT

OVERLAND FLOW TIME, EXISTING CONDITIONS = 29.5 min.
INTENSITY OF A 29.5 MIN. 10-yr FREQUENCY STORM = 3.25 in/hr.
RELEASE RATE USED 3.41 cfs. 2.93
ALLOWABLE RELEASE RATE 3.41 cfs. 3.09

****
DETENTION SUMMARY
****

STORM DURATION	RAINFALL INTENSITY	INFLOW RATE, cfs	STORAGE RATE, cfs	STORAGE REQ'D, ac.ft.	
0.17	7.60	21.28	17.87	0.253	
0.33	5.50	15.40	11.99	0.330	
0.50	4.40	12.32	8.91	0.371	
0.67	**3.70**	**10.36**	**6.95**	**0.388**	**<<MAX**
0.83	3.20	8.96	5.55	0.384	
1.00	2.80	7.84	4.43	0.369	
1.50	2.10	5.88	2.47	0.309	
2.00	1.70	4.76	1.35	0.225	

2957-RM2S2/

Case #: Meadow Creek P.U.D. (Requested action:) R-2A & I-1

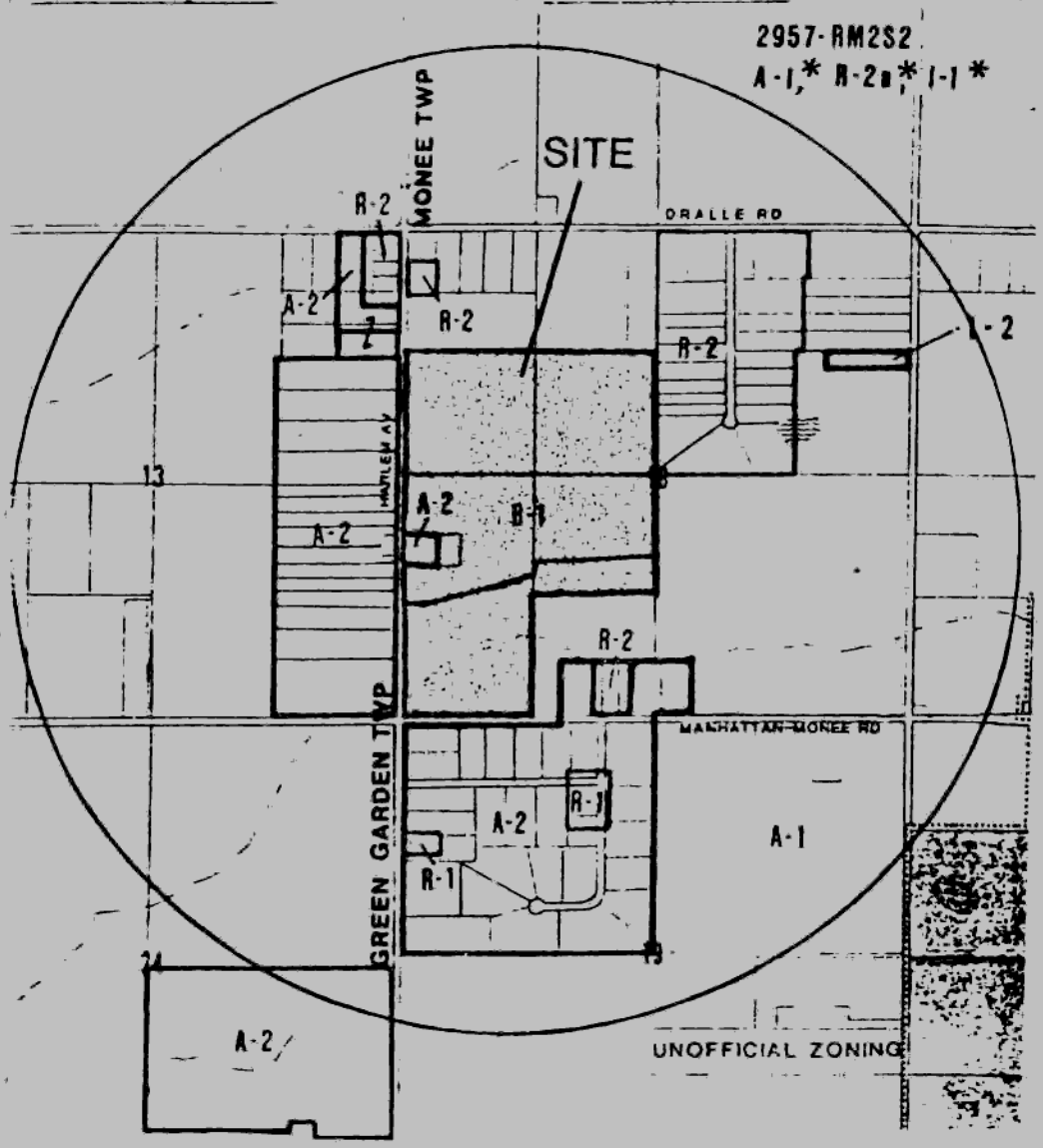
SUP for airstrip

& PUD

Township: Monee

Current zoning: A-1, R-1, & A-2

Plans: County: Res. & Agri. Township: none Municipal: Res. (Vil. [illegible] Park)



UNOFFICIAL ZONING MAP NOT TO SCALE

Findings: "SEE REVERSE SIDE"

Preliminary Plat=A w/Conditions

Recommendations: Staff:SUP-P.U.D.=A PZC:Prelim Plat=A w/Conditions ZBZC: A w/conditions

[illegible], Will County, Planning Division (815-727-8291)

Findings:

Preliminary Plat

1. The plat proposes 143 residential lots, 7 "future proposed" residential lots, and 2 industrial lots which appear to meet minimum lot area and width requirements for the R-2A and I-1 districts.
2. There are several deficiencies in the plat, which are cited as items numbered 1 through 7 above.
3. Zoning for the proposed use is currently pending County Board action.

Special Use Permit for Planned Unit Development

1. The required preliminary plat has not yet been tentatively approved.
2. Items which appear as letters A through D above remain unclear within the development concept report submitted by the applicant.
3. The special use should not adversely affect the health and safety of the public and adjoining property owners.
4. The special use should not impede the development of neighboring property, although there will be increased air traffic in the vicinity as a result of the previous special use permit request for a private airstrip.
5. The Monee Township Highway Commissioner has indicated that Harlem Road is planned for improvements which will allow it to accommodate the increased traffic generated by this development.
6. Adequate utilities will be provided to serve the proposed PUD.
7. The special use permit generally conforms to the regulations of the various underlying zoning districts except that internal streets, taxiways, the runway, and some detention areas will be owned and maintained by a private homeowners association. Additional variances from the maximum block length restrictions are needed for Gabreski Lane and Boyington Lane, and for a frontyard setback of 40 feet.

2936-3S (Peotone Twp.) Tuescher C-4 to C-4*
Bollero opened the public hearing.

Brown read the staff report recommending approval of the special use permit for a tavern for parcel 1.

Thomas briefly explained the history of the proposal.

There being no further testimony, the public hearing was closed.

Canalia moved to recommend that the County Board approve the requested special use permit for parcel 1. Narbone seconded the motion, which passed unanimously with 6 affirmative votes. Voting "aye" were Bollero, Canalia, Collins, Muren, Narbone, and Rozak. Absent was Groszek.

Thomas noted that the applicant had also published a request for a special use permit for the residence of the proprietor. Rozak noted this was true.

Canalia moved to recommend that the County Board approve the requested special use permit for the residence of the proprietor. Narbone seconded the motion, which passed unanimously with 6 affirmative votes. Voting "aye" were Bollero, Canalia, Collins, Muren, Narbone, and Rozak. Absent was Groszek. (Refer to 8/4/87, Tape 1/Side 1.)

2937-RM2S2 (Monee Twp.) Pradelski A-1, A-2 & R-1 to
Meadow Creek Subdivision R-2A*, I-1* (S1 pt.)
Bollero opened the public hearing.

Brown read the staff report recommending approval of the preliminary plat for the Meadow Creek Subdivision and the special use permit for a planned unit development (PUD) with several conditions.

Tieman stated he had no further information to add.

Muren asked why variances were needed.

Stefek explained hardships involved, including the location of existing pipelines.

Tieman indicated the developers will address the deficiencies of the preliminary plat listed in the staff review as follows:

#1. Municipal approval will be sought.
#3. Floodplain percentages will be added to the plat.
#4. Fire hydrant spacing will be adjusted.
#5. The developers will meet the requirements of the Monee Township Highway Commissioner.
#7. Future resubdivision of the industrial lots will address entrances to Monee-Manhattan Road.

The developers will also address items A through C in the staff analysis which deal with the special use permit.

There being no further testimony, the public hearing was closed.

Canalia moved to recommend that the Land Use and Zoning Committee approve the preliminary plat of Meadow Creek Subdivision with conditions #1 through #4, as listed in staff's recommendation. Narbone seconded the motion, which passed unanimously with 6 affirmative votes. Voting "aye" were Bollero, Canalia, Collins, Muren, Narbone, and Rozak. Absent was Groszek.

Narbone moved to recommend that the County Board approve the special use permit for a PUD for Meadow Creek Subdivision with conditions A through D as listed in the staff's analysis. Canalia seconded the motion, which passed unanimously with 6 affirmative votes. Voting "aye" were Bollero, Canalia, Collins, Muren, Narbone, and Rozak. Absent was Groszek. (Refer to 8/4/87, Tape 1/Side 1.)

High Meadow Subdivision (Wheatland Twp.) Preliminary Plat
Brown stated that consideration of the preliminary plat of subdivision for High Meadow Subdivision has been continued to the August 18, 1987, Planning & Zoning Commission meeting. (Refer to 8/4/87, Tape 1/Side 2.)

2934-RMS (Homer Twp.) Beemsterboer C-2 to C-4*
Bollero opened the public hearing.

Brown read the staff report recommending approval of the requested map amendment and special use permit.

Beemsterboer explained changes to his development proposal, including permanent metal buildings and daily security. He stated he is not tied to his request for C-4 zoning but would accept a special use permit for mini-warehouses with C-2, if possible.

Ihrke, the owner of the veterinary clinic adjoining the site, opposes the zone change and use based on concerns about security and property values.

Skubal presented the neighbors' petition, which objects to the earlier container proposal and also opposes the development due to traffic, cleanliness, maintenance, landscaping, and safety concerns.

Beemsterboer agreed to a resident manager to police the site.

Moran, who owns a nearby landscape business, objected to the density of the use.

There being no further testimony, Bollero closed the public hearing.

After a general discussion, Narbone moved to recommend that the County Board deny the requested map amendment to C-4 zoning. Muren seconded the motion, which failed with 3 affirmative and 3 negative votes. Voting "aye" were Bollero, Muren, and Narbone. Voting "nay" were Canalia, Collins, and Rozak. Absent was Groszek.

WILL COUNTY LAND USE DEPARTMENT

501 ELLA AVENUE • JOLIET, ILLINOIS 60433

July 29, 1987

Wayne C. Stassen
Township Highway Commissioner
Rt # 2, Box #86
Monee, Il 60449

Subject: Meadow Creek Subdivision
Monee Township
Preliminary Plat (Revised)

Dear Mr. Stassen:

Transmitted herewith is one (1) copy of the Preliminary Plat (Revised) for Meadow Creek Subdivision.

Please review and comment on the same.

If you have any questions, please, feel free to call on us.

Very truly yours
Will County Land Use Dept.

Roy L. Allen P.E.
Subdivision Engineer & Plat Officer

RLA/plf

PATRICIA L. SPRAY
ADMINISTRATION
(815) 727-8631

PAUL M. GORTE
CHIEF PLANNER
(815) 727-8767

JAMES J. GIBBONS
CHIEF ZONING INSPECTOR
(815) 727-8850

ROBERT J. ERICKSON
CHIEF BUILDING INSPECTOR
(815) 727-8634

TECH 3 CONSULTING GROUP, INC.
ENGINEERS SURVEYORS PLANNERS
1395 C MAIN STREET
CRETE, ILLINOIS 60417
(312) 672-4994

July 27, 1987

Mr. Roy L. Allen
Will County Land Use Department
501 Ella Avenue
Joliet, IL 60433

RE: Meadow Creek
Job No. 87028

Dear Mr. Allen:

We have revised the preliminary plat, in response to your review letter dated July 20, 1987, as follows:

1. The ownership of the property to the north has been added.
2. The zoning of the contiguous properties has been added.
3. The General Note regarding Sewer and Water has been revised as indicated.
4. A note regarding return radii has been added.
5. Drainage and Utility Easements have been shown.
6. A "No Access" Easement has been added.
7. Building Setback lines have been shown as 40 feet as indicated in the covenants.
8. Elevations of highwater and outlets for the detention ponds have been added,
9. Detention pond size computations have been submitted.
10. Boyington Lane is approximately 1270 feet long. Because this is a private street and a Planned Unit Development we would prefer not to revise it.
11. Gabreski Lane is located between two pipeline easements. Because of the engineering difficulties we crossed the pipeline only once, which made Gabreski Lane somewhat longer than the permitted 1500 feet. Because all interior roads are private, the location of the existing pipleines and the fact that this is a Planned Unit Development we request Gabreski Lane remain as shown on our preliminary plan.
12. All detention ponds are on private property.

13. The alignment for Boyington Lane has been revised.
14. The Peter Buccellato property has access to Monee Manhattan Road. The streets in this project are privately owned and we would prefer not to encourage any additional traffic.
15. A note indicating the roads shall be private has been added.
16. It is our understanding that Monee Township now has plans to improve Harlem Avenue on its own accord.

Should you have any questions or if you require any additional information please contact me.

Yours truly,

TECH 3 Consulting Group, Inc.

William J. Stefek

William J. Stefek,
President

WJS:sls

TECH 3 CONSULTING GR P, INC.
1395 C Main Street
CRETE, ILLINOIS 60417

(312) 672-4994

LETTER OF TRANSMITTAL

TO WILL COUNTY

DATE	JOB NO
7-27-87	87028

ATTENTION ROY ALLEN

RE MEADOW CREEK

WE ARE SENDING YOU ☐ Attached ☐ Under separate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change order ☐ _____

COPIES	DATE	NO	DESCRIPTION
6			REVISED PRELIMINARY PLAN
1			DETENTION COMP'S.

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval

☐ For your use ☐ Approved as noted ☐ Submit _____ copies for distribution

☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints

☐ For review and comment ☐ _____

☐ FOR BIDS DUE _____ 19____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS

COPY TO _____ SIGNED: WJS

If enclosures are not as noted, kindly notify us at once.

WILL COUNTY LAND USE DEPARTMENT

501 ELLA AVENUE • JOLIET, ILLINOIS 60433

July 20, 1987

Tech 3 Consulting Group, Inc.
1395C Main Street
Crete, Il 60417

Attn: William J. Stefek

Subject: Meadow Creek Subdivision
Monee Township
Preliminary Plat

Dear Mr. Stefek:

We have reviewed the preliminary plat for the subject subdivision. The following comments are the result of said review:

1. The ownership of the property to the north is not indicated.
2. The zoning of the contiguous properties is not shown.
3. The note regarding water and sewer should state that public water and sewer will be provided.
4. Note stating that all return radii will be 20 feet minimum.
5. Drainage and utility easements not shown. Required along back lot line of all lots and where needed along side lots.
6. A "No Access" easement is required along Harlem Avenue for all lots per Section 6.5.4 of the Subdivision Ordinance.
7. The building set back line was not shown.
8. The elevations of the highwater line and outlets for the detention ponds was not shown.
9. The sizing computations for the detention ponds were not included.
10. Boyington Lane is too long. A maximum length of 1200 feet is permitted by ordinance.
11. The length of Grabreski Lane is too long. A maximum length of 1500 is permitted by ordinance.
12. The detention ponds are to be private ownership, where possible.
13. A minimum angle of intersection is 70° by ordinance. Boyington Lane at Chennault Avenue is 30°+.
14. Consideration should be given to providing access to the Peter Buccellato property to the south.
15. A note to the fact that the roads will be private should appear on the plat.

PATRICIA L. SPRAY
ADMINISTRATION
(815) 727-8631

PAUL M. GORTE
CHIEF PLANNER
(815) 727-8767

JAMES J. GIBBONS
CHIEF ZONING INSPECTOR
(815) 727-8850

ROBERT J. ERICKSON
CHIEF BUILDING INSPECTOR
(815) 727-8634

16. A statement of what improvements are proposed for Harlem Avenue is needed.

Please feel free to call on us, if you have an questions.

Very truly yours
Will County Land Use Dept.

Roy L. Allen P.E.
Subdivision Engineer & Plat Officer

RLA/plf
cc: W. Stassen
Meadow Creek Corp.

TOWN: P Monee
ZONING CASE 2957-RM252

CHECK LIST
SUBDIVISION MAP
PRELIMINARY PLAT

NAME OF SUBDIVISION Meadow Creek UNIT NO.
NAME OF DEVELOPER Meadow Creek Corp
ADDRESS OF DEVELOPER 20180 Governors Drive Suite 201 Olympia Fields 60461
DATE RECEIVED 7-13-87 REVIEWER Mla

RECEIPTS

- ✓ Six copies
- ✓ Plat review fee $100 or $10/lot (receipt) pd
- Soil Report by Soil and Water Conservation District
- Environmental Plan by Health authority for well and septic
- Letter of village approval

MAPPING

- Waterproof, non fading black ink, or pencil on tracing cloth, or equal.
- ✓ Scale (100 Ft. = inch) show on plat
- ✓ Date
- ✓ North arrow
- ✓ Subdivision name (No duplication of names in Will County)
- ✓ Do name and address of owner, subdivider, engineer, surveyor appear on plat?
- ✓ Scale drawing of section showing location of subdivision Area N
- Location and names of adjoining subdivisions and parcels of undivided land shown *
- Zoning on, and contiguous to, subdivision shown based upon Ordinance dated October 22, 1981 *

SURVEY

- ✓ Signature and seal of a professional engineer or land surveyor
- ✓ Legal description and acreage
- ✓ Boundaries (Length & bearing W/ref to US Public Land Survey) and curve data
- ✓ Platted streets and alleys (location, width, type of construction and name)
- N/A Railroad and utility right of way shown
- ✓ Waterways, drainage, swamps area subject to flooding
- Parks, cemetaries, permanent building, bridges shown
- ✓ Elevations of water in adjoining lakes or streams (U.S.G.S. Datum)
- ✓ Distances and bearing of meander line not less than twenty feet from average high water mark
- ✓ Water and sewer mains (Direction, size and distance from subdivision)
- ✓ Location of property reserved or dedicated for public use
- ✓ Two (2) Ft. contour intervals (U.S.G.S. Datum)
- ✓ Lot area and dimensions
- ✓ Location (Government lot, sections, township, range and County)
- ✓ Layout of temporary tees and County entrances
- ✓ Soils overlay
- Type of sewer and water facilities * Cent Sewer & water

DESIGN

- ✓ All field tile to be located and rerouted
- Return radii (20' minimum) *
- N/A Existing buildings satisfy setback and yard requirement
- Intersection profiles and drainage
- ✓ Existing sewers and culverts (size and grade)

Bk 18

✓ Disturbed areas to be seeded
New streets and right-of-ways - layout, width, approximate grade and typical cross-sections Private
Sufficient easements for sewers, watermains, drainage ways and other public utilities, rear lot drainage and utility easements, flood plain, lake, and detention easements, screen planting easements, etc.
Easement locations fixed *
✓ Flood Plain Development Permit required at a later date
✓ Site Development Permit obtained before construction
✓ Park donation provided at a later date
✓ County Entrance required at a later date
N/A County frontage 1300' apart
No residential lots fronting county highways. No Access Easements Harlem
✓ Lot depth 90' minimum
✓ No out-lots
✓ Building site available on all lots
✓ Lot depth: width (approximately 2½:1)
Building setback lines (30' minimum) * Not Shown
✓ Lot lines radial to street lines
✓ Minimum lot size and minimum lot width in Zoning Ordinance

10,000 sq. ft. - 70 feet R-5 -- central sewer and water
12,000 sq. ft. - 70 feet R-4 -- central sewer and water
20,000 sq. ft. - 90 feet R-3 -- B, C, D, E, IMST, central water only
30,000 sq. ft. - 120 feet R-2A -- C, D, E, IMST
43,560 sq. ft. - 150 feet R-2 -- E, IMST
2½ Acres - 200 feet R-1 -- E, IMST
5 Acres - 300 feet A-2, IMST
10 Acres - 660 feet A-1, IMST

Private Roads

Lot size based upon soils classification in Sewage Treatment Ordinance exclusive of easements
A - Sands -- 15,000 sq. ft. - 80 feet -- R-4
B - Mucks -- 20,000 sq. ft. - 100 feet -- R-3
C - Silts -- 30,000 sq. ft. - 125 feet -- R-3
D - Clays -- 40,000 sq. ft. - 150 feet -- R-3, IMST
E - Loams -- 2½ acres - 200 feet -- R-1, IMST
F - Bedrock -- None
✓ Parkway trees, 1 per lot
✓ Zoning case # 2957 RM pending App 7-16-87
✓ Preliminary Drainage Plan
Elevation of outlets for detention ponds *
Flood protection elevation, high water elevation, minimum building elevation
Flood plain percentage of lot (before and after construction) *
✓ Flood plain shaded
Drainage ditch cross-section, detention pond cross-section *
Detention pond and outlet calculations for sizing *
Curb and gutter on 5% grade or 120' frontage or less
✓ Street jogs 125' minimum
N/A Cul-de-sac 1200' length maximum * Boyington Lane
Blocks not longer than 1500' * Gabreski
Detention ponds owned privately where feasible *
✓ 100' tagent between radii of 200'
✓ Minimum centerline radius 150' (show radii)
Street intersection angles greater than 70° * Boyington
Access provided to adjacent landowners *
Adequate street dedication width Private Roads
✓ Continuation of existing streets
✓ Street signs at all intersections
✓ Street lights at intersections, or closer in high density
✓ Sidewalks on 120' frontage or less; within 1 mile of schools; crosswalks on blocks greater than 900'

WILL COUNTY LAND USE DEPARTMENT

501 ELLA AVENUE • JOLIET, ILLINOIS 60433

July 13, 1987

Robert P. Massat
Green Garden Township Highway Commissioner
Rt. # 2, Box 62E, Burns Road
Monee, Illinois 60449

Subject: Meadow Creek Subdivision
Monee Township
Preliminary Plat

Dear Mr. Massat:

Transmitted herewith is one (1) copy of the Preliminary Plat for Meadow Creek Subdivision.

Please review and comment on the same.

If you have any questions, please feel free to call on us.

Very truly yours,
Will County Land Use Dept.

Roy L. Allen P.E.
Subdivision Engineer & Plat Officer

RLA/bal

PATRICIA L. SPRAY
ADMINISTRATION
(815) 727-5982

PAUL M. GORTE
CHIEF PLANNER
(815) 727-8767

JAMES J. GIBBONS
CHIEF ZONING INSPECTOR
(815) 727-8850

ROBERT J. ERICKSON
CHIEF BUILDING INSPECTOR
(815) 727-8471

WILL COUNTY LAND USE DEPARTMENT

501 ELLA AVENUE • JOLIET, ILLINOIS 60433

July 13, 1987

Robert P. Massat
Green Garden Township Highway Commissioner
Rt. # 2, Box 62E, Burns Road
Monee, Illinois 60449

Subject: Meadow Creek Subdivision
Monee Township
Preliminary Plat

Dear Mr. Massat:

Transmitted herewith is one (1) copy of the Preliminary Plat for Meadow Creek Subdivision.

Please review and comment on the same.

If you have any questions, please feel free to call on us.

Very truly yours,
Will County Land Use Dept.

Roy L. Allen P.E.
Subdivision Engineer & Plat Officer

RLA/bal

PATRICIA L. SPRAY
ADMINISTRATION
(815) 727-5092

PAUL M. GORTE
CHIEF PLANNER
(815) 727-8767

JAMES J. GIBBONS
CHIEF ZONING INSPECTOR
(815) 727-8850

ROBERT J. ERICKSON
CHIEF BUILDING INSPECTOR
(815) 727-8471

WILL COUNTY LAND USE DEPARTMENT

501 ELLA AVENUE • JOLIET, ILLINOIS 60433

July 13, 1987

Wayne C. Stassen
Monee Township Highway Commissioner
Rt. # 2, Box 86
Monee, Illinois 60449

Subject: Meadow Creek Subdivision
Monee Township .
Preliminary Plat

Dear Mr.Stassen:

Transmitted herewith is one (1) copy of the Preliminary Plat for Meadow Creek Subdivision.

Please review and comment on the same.

If you have any questions, please feel free to call on us.

Very truly yours,
Will County Land Use Dept.

Roy L. Allen P.E.
Subdivision Engineer & Plat Officer

RLA/bal

PATRICIA L. SPRAY
ADMINISTRATION
(815) 727-5092

PAUL M. GORTE
CHIEF PLANNER
(815) 727-8767

JAMES J. GIBBONS
CHIEF ZONING INSPECTOR
(815) 727-8850

ROBERT J. ERICKSON
CHIEF BUILDING INSPECTOR
(815) 727-8471

AREA CODE 815
727-8471
727-8469

WILL COUNTY DEVELOPMENT DEPARTMENT

501 ELLA AVE.
Joliet, Illinois 60433

No. 18665

Date ______ 19__

Received of TECH 3 CONSULTING GROUP, INC.

Address 1395 C MAIN ST.
CRETE, IL.

2,200.00 Dollars $2,200.00

LEGAL DESCRIPTION
MEADOW CREEK
PRELIMINARY PLAT
MONEE TWP

Robert J. [signature] OFFICER

BUILDING PERMIT NO.

ARCO Business Forms

TECH 3 CONSULTING GROUP INC.
1395C MAIN ST.
CRETE, ILL. 60417

3287

July 13 1987

Pay to the order of Will County Land Use Dept. $ 2200.00

Two Thousand Two Hundred and 00/100 Dollars

United Bank of Crete-Steger

For

William J. [signature]

⑈003287⑈ ⑆071923750⑆ ⑈111 287⑈

TECH 3 CONSULTING GRO , INC.
1395 C Main Street
CRETE, ILLINOIS 60417

(312) 672-4994

LETTER OF TRANSMITTAL

DATE	JOB NO
7-13-87	87028

ATTENTION

RE MEADOW CREEK
Flow Fill
Letter

10 WILL COUNTY

WE ARE SENDING YOU ☐ Attached ☐ Under separate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change order ☐ _____

COPIES	DATE	NO	DESCRIPTION
6			PRELIMINARY PLAN

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval

☐ For your use ☐ Approved as noted ☐ Submit _____ copies for distribution

☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints

☐ For review and comment ☐ _____

☐ FOR BIDS DUE _____ 19____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS

COPY TO _____ SIGNED: WJS

If enclosures are not as noted, kindly notify us at once

WILL COUNTY LAND USE DEPARTMENT

501 ELLA AVENUE • JOLIET, ILLINOIS 60433

May 29, 1987

Wayne C. Stassen
Highway Commissioner
Monee Township
P. O. Box 74
Monee, IL 60449

Dear Mr. Stassen:

I am writing to re-state the telephone discussion we had today regarding the proposed "Meadow Creek" airpark Subdivision. Specifically we discussed the current conditions of Harlem Avenue, which would serve as the primary access point to the proposed development. Since Harlem Avenue is currently a gravel road and poorly suited to handle the additional traffic generated by up to 150 new homes in this development, you felt that the developers must improve Harlem Avenue to Will County Standards.

It is my understanding, also, that this segment of Harlem Avenue is maintained by the Green Garden Township Highway Commissioner, and that you would consult with that Commissioner to make sure that improvements to Harlem Avenue would be built to his satisfaction before you would sign the plat for this development.

Thank you for your time on this issue. Please contact me if you have any questions regarding this development, any additional information, or any corrections to this summary of our discussion.

Sincerely yours,

Michael J. Brown
Staff Planner

MJB/dmr

cc: Robert Massat,
Green Garden Hwy. Comm.
Lyman Tieman
William Pradelski
Roy Allen
P. Gorte

PATRICIA L. SPRAY
ADMINISTRATION
(815) 727-8631

PAUL M. GORTE
CHIEF PLANNER
(815) 727-8787

JAMES J. GIBBONS
CHIEF ZONING INSPECTOR
(815) 727-8850

ROBERT J. ERICKSON
CHIEF BUILDING INSPECTOR
(815) 727-8634

May 27, 1987

Lyman C. Tieman
Attorney At Law
167 N. Chicago Street
Joliet, Illinois 60431

Re: Meadow Creek Development Corp.
Application for Zoning Map Amendment

Dear Mr. Tieman:

This Department has no objection to the rezoning of the above-referenced property from A-1 and A-2 to R-2A and I-1 PUD for the purpose of creating a residential air park.

It is our understanding that the subdivision will be served by public water and public sewer by Consumer Illinois from University Park.

Please supply a letter from the Illinois Environmental Protection Agency stating that adequate capacity exists at the sewage treatment plant to handle the sewage from the subdivision.

If you have any questions regarding this matter, please feel free to call upon us.

Sincerely,

James E. Zelko, R.S.
Director of Enviromental Health

JEZ:db

cc: Will County Subdivision Dept.
Will County Planning Dept.
Tech 3 Consulting Group