

**EPCOT**  
CENTER ... *People Bring It To Life*

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## INTRODUCTION

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*"The whole thing here is the organization. Whatever we accomplish belongs to our entire group, a tribute to our combined effort."*

*— Walt Disney*

The individuals represented in this manual are coordinators of the highly complex and diversified team which is translating the concept of EPCOT Center into reality. This book was assembled as a communication resource to provide assistance in two ways:

**Project Management** gives an overview of divisional leadership and responsibilities.

**Project Teams** identifies the individuals assigned to coordinate completion of each pavilion and support area.

For further information, revisions and additions, please contact the WED Florida Employee Development Department, telephone extension 2283.

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# EPCOT CENTER MANAGEMENT PLAN

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## I. SCOPE OF THE PROJECT

"EPCOT" is the acronym for "EXPERIMENTAL PROTOTYPE COMMUNITY OF TOMORROW", for which ground was broken on October 1, 1979, with opening scheduled October 1, 1982.

EPCOT Center is the largest privately owned and financed construction effort ever undertaken.

Walt Disney, speaking on EPCOT said:

*"A project like this is so vast in scope that no one company alone can make it a reality.*

*But, if we can bring together the technical know-how of American industry and the creative imagination of the Disney Organization, I'm confident we can create right here, a showcase to the world of the American free enterprise system. It will always be introducing and testing and demonstrating new materials and systems."*

The completed EPCOT Center will cover nearly 500 acres and will be supported by a network of roads, interchanges, water control structures and canals, monorail transportation link, maintenance and operations support structures, and utilities. EPCOT Center is located entirely within the Reedy Creek Improvement District.

## II. MANAGEMENT PHILOSOPHY

(A) The EPCOT Management philosophy is to utilize a "Team Concept" whereby the various Disney organizations perform in concert to achieve a truly synergistic management effort.

(B) Operating under authority from the Walt Disney Productions Executive Committee, EPCOT Project Management provides the lead in the assembly of requirements that are responsive to the Executive Committee's scope, schedule and budget. Input is provided by all organizations concerned with the Project Development, such as Reedy Creek Utilities Company, Vista-United Telecommunications, etc.

(C) EPCOT Project Management establishes a design scope, and authorization is given to WED Design to execute design solutions that are

responsive to that Design Scope. WED Design may use outside consultants to assist in the preparation of design solutions.

(D) Analysis of the EPCOT Show/Ride requirement develops the scope of the Show/Ride manufacturing effort, which EPCOT Project Management authorizes WED/MAPO Manufacturing to perform.

(E) Combining the scopes of design and manufacturing, EPCOT Project Management makes determinations as to the scope of Facilities Construction and Show/Ride installation, authorizing EPCOT Construction Management to accomplish the construction and installation.

(F) Utilizing input from WED Design, WED/MAPO and EPCOT Construction Management, EPCOT Project Management establishes a series of Project Milestones that are consistent with the schedule authorized by the Executive Committee.

(G) The Management Control of the various Departments and Organizations is the vehicle whereby the Project Milestones are achieved. The combination of Project and Departmental management controls establishes the process by which priorities are established and conflicts are resolved.

(H) To accomplish those efforts assigned by EPCOT Project Management, EPCOT Construction Management utilizes three primary resources that are available.

1. WALT DISNEY WORLD support activities, which include Construction Contract Administration, Facilities Engineering, Purchasing, Security, Loss Prevention, etc.
2. Buena Vista Construction Company Project Management and direct labor support.
3. Construction Contractors.

(I) To support EPCOT Construction Management, a contractual agreement has been entered with Tishman Construction Corporation of Florida, to provide a range of Construction Management services and act as "Owner's Agent" within the framework of the contractual agreement.



(J) TCCF, as a part of the management service, is the direct contact with all EPCOT Facility Construction contractors and provides for the integration of BVCC Show/Ride installation efforts into the Facilities construction schedules.

(K) TCCF provides milestones for the delivery of Owner Furnished, Contractor Installed Materials and equipment. Establishing, monitoring and reporting of contractor progress against established schedules are key elements of TCCF's management services.

(L) Buena Vista Construction Company supports EPCOT Construction management by the assumption of the specialized management efforts relating to Show/Ride/Facade installation. These activities are integrated into the Facilities construction in part by construction contractors and in part by BVCC direct labor forces as determined by the construction and contracting philosophies.

(M) BVCC assists in construction management by providing planning for the utilization of BVCC direct labor forces in construction activities. BVCC identifies constraints and activity durations, relating them to the overall construction schedule for each facility as developed by TCCF. Planning includes labor and resource analysis to provide optimum utilization over the total EPCOT Center construction.

(N) BVCC coordinates their activities based upon input from EPCOT Project Management, EPCOT Construction Management, TCCF Construction Management and the various Disney Support organizations.

(O) All management function for the construction of EPCOT Center will be responsive to the construction and contracting philosophies.

### III. CONSTRUCTION PHILOSOPHY

(A) The EPCOT construction philosophy is to utilize construction contractors to accomplish all items of work that can reasonably be defined in a contractual agreement and where the nature of the work does not preclude competitive procurement.

(B) When items of work cannot be reasonably defined or where the nature of the work is so special or unique as to prevent procurement at equitable

costs, these work items will be performed by Buena Vista Construction Company forces.

(C) The activities of BVCC on site shall be equated to the activities of any other contractor and shall in no way be interpreted as "Owner's Beneficial Occupancy" until such time as all other contractors' work and punch lists are completed.

### IV. ORGANIZATION

(A) The Walt Disney Production Executive Committee originates all EPCOT Center authorizations and issues all scope, schedule and budget limitations.

(B) EPCOT Project Management has responsibility for the conversion of the Executive Committee direction relating to EPCOT Center into an operating reality and issues authorizations to the various Disney Organizations involved in the design, manufacture and construction of the Facilities, Shows and Rides.

(C) WED Design has responsibility for the accumulation of all the various input defining the EPCOT Center and the conversion of this input into design solutions, which are communicated through the drawings and specifications. WED is the "Engineer of Record" for all EPCOT construction projects other than those sponsored by the Reedy Creek Utilities Company, Vista-United Telecommunications and Walt Disney World Co.

(D) WED/MAPO is given responsibility for the manufacture, technical and aesthetic direction for all Show/Ride elements that are to be incorporated into the construction.

(E) EPCOT Construction Management has responsibility for all EPCOT construction activities and is supported by the various WDW organizations described herein and by Tishman Construction Company of Florida.

(F) Tishman Construction Company of Florida provides certain construction management services under contractual agreement and acts as "Owner's Agent" within the framework of the agreement. Certain services are provided as contractual obligations, included in the fee as provided in the



agreement. At the discretion of EPCOT Construction Management, a wide range of support activities may be provided by TCCF as reimbursable services, with the concurrence of EPCOT Project Management and WALT DISNEY WORLD support areas.

(G) WED provides a Resident Engineer and staff, who in addition to the resolution of questions of engineering, will provide certain management functions such as site surveillance, quality control, etc.

(H) Construction Contract Administration and Purchasing provides support to EPCOT Construction Management by assisting in contract strategy planning and in the award of construction contracts. The department is involved in revisions to contracts and in the claims process.

Purchasing is also responsible for the procurement and expediting direct purchased Owner Furnished Materials and will coordinate the receiving, interim storage and shipment to the job site.

(I) Construction Finance will support EPCOT Construction Management by monitoring Work Authorizations and the preparation of all Sub-Work Authorizations for approval by Project Management. Construction Finance is responsible for effective management through application of consistent cost charging in accordance with EPCOT Program Management direction.

Construction Finance will review the detail of bid packages for appropriate cost segregation and reporting. After award, the Contract Schedule of Values and Account Codes will be done as the baseline for the T-Com report in accordance with EPCOT Project Management direction. Contractor Application(s) for Payment will be reviewed and processed for the Owners' approval and payment.

A monthly Construction Contract Cost Summary report will be prepared for each major Contract/Pavilion in support of EPCOT Construction Management. These monthly status reports will be submitted to EPCOT Project Management. Cost and performance analysis will support the estimated final cost.

Construction Finance will support EPCOT Construction Management and BVCC Project Management in the procurement of Authorizations as required.

(J) The Project Installation Coordination Office, (PICO), will provide construction support by functioning as a management oriented service department, to collect and provide information during design, fabrication, purchasing, and shipping and installation of WED/MAPO items.

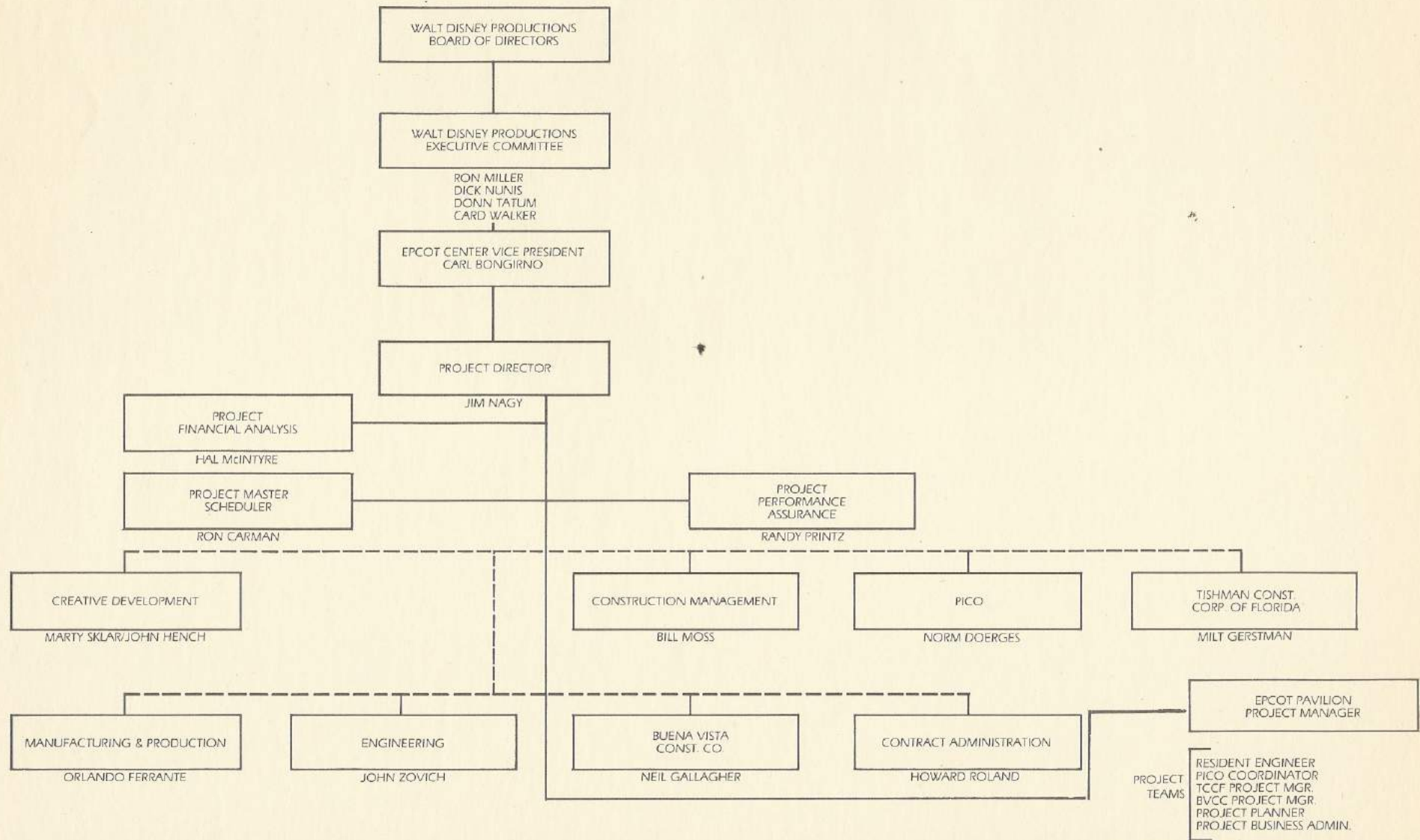
PICO will assist in integrating WDW purchased items into a master Owner Furnished Materials control system. Periodic and special status reports will be provided as required.

(K) Buena Vista Construction Company has responsibility for performing construction activities as defined in paragraph III herein, and will also coordinate Project II schedule sequences with those of TCCF T-Com Schedule and Milestone Activities.

(L) The Reedy Creek Utilities Company, holds responsibility for conversion of the definition of EPCOT Center utilities requirements into design solutions, communicated through drawings and specifications.

(M) Vista-United Telecommunications holds responsibility for conversion of the definition of EPCOT Center telecommunication requirements into design solutions, communicated through drawings and specifications.

# EPCOT CENTER PROJECT MANAGEMENT





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## EPCOT CENTER PROJECT MANAGEMENT

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This division is made up of Project Managers and vital support staff. It is a high level coordination activity broken down by pavilions and support facilities within the EPCOT Center Project. The Director has the responsibility of converting the Executive Committee direction into an operating reality. From design through installation, **Project Managers** monitor and orchestrate the various aspects of their specific areas of responsibility to insure that the original concepts are carried through completion. This requires heavy interface with several companies of Walt Disney Productions as well as vendors and contractors.

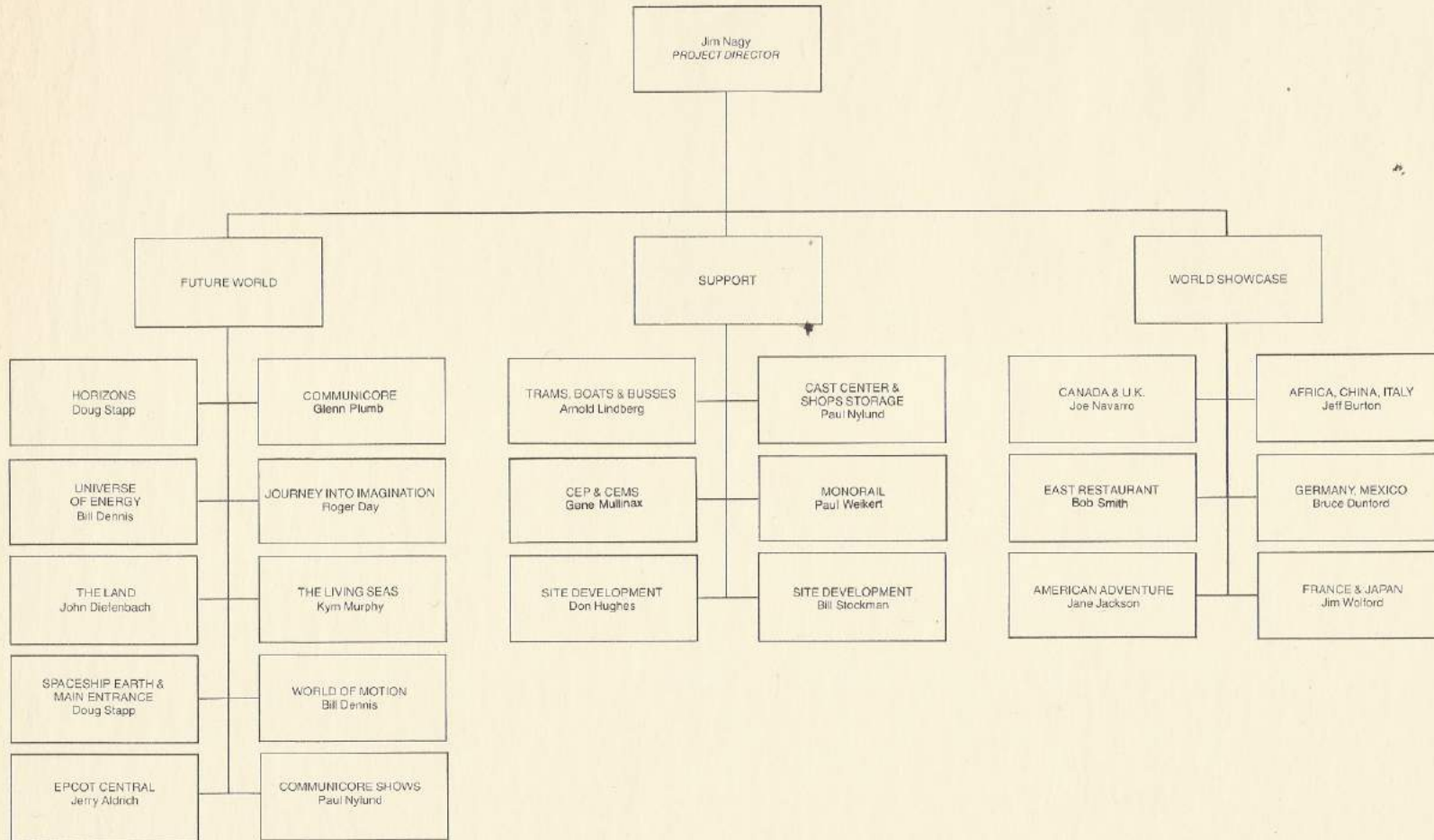
The support group is made up of the following disciplines:

**Project Financial Analysis** breaks down and allocates design and construction monies. It provides a calendar of budgets and cash flow forecasts, monitors internal costs, insures correct accounting codes, prepares cost analysis, and assimilates construction information.

**Project Performance Assurance** monitors all component (electrical, mechanical, etc.) progress from production to installation, and investigates discrepancies between performance and the master schedule.

**Project Master Scheduling** prepares a coordinated project level schedule which specifies required dates for each major element needed to build the project.

# Epcot Center Project Management





## EPCOT CENTER PROJECT MANAGEMENT



Jerry Aldrich



Jeff Burton



Ron Carman



Roger Day



Bill Dennis



John Diefenbach



Bruce Dunford



Donna Greenlee



Don Hughes



Jane Jackson



Arnold Lindberg



Hal McIntyre



Gene Mullinax



Kym Murphy



Jim Nagy



Joe Navarro



Paul Nylund



Glenn Plumb



Randy Printz



Doug Stapp



Bill Stockman



Jim Wolford



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## CONSTRUCTION MANAGEMENT

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### WALT DISNEY WORLD CONSTRUCTION

The Walt Disney World Construction Office is responsible to Walt Disney World Management for any major construction projects at Walt Disney World. It works hand-in-hand with the contractors to insure that the projects are completed and responsive to the Executive Committee's scope, schedule and budget.

Project management is also responsible to WED/Walt Disney Productions for the overall construction of the EPCOT Center Project. This office is responsible for the organizational planning, strategy and interface between the Construction Manager (Tishman Construction Corporation of Florida) and various Disney organizations including WED Enterprises, Walt Disney World Company and Buena Vista Construction Company.

### CONSTRUCTION FINANCE

Construction Finance is responsible for estimating costs on all Capital Projects, Planned Work and Work Order Requests for all Florida-based companies. In performing the estimating function, they investigate materials and methods of construction used in order to insure maximum value for the Company's construction dollar. Construction Finance is also responsible for reporting on all Capital Projects. This reporting includes cost monitoring, cost analysis, and capital reporting.

### PROJECT DEVELOPMENT

Project Development was responsible for operational input to WED for such areas as capacities on rides and attractions, restaurants, walkway dimensions, aisle space requirements, crowd control design, ride systems design, entrance and exits of attractions, vehicle design, ticket media, etc. The staff is currently coordinating manpower planning in conjunction with personnel for all divisions associated with the EPCOT Center project. The Project Development team is working closely with PICO to support engineering and construction efforts.

### PURCHASING AND CONSTRUCTION CONTRACT ADMINISTRATION

Purchasing and Construction Contract Administration provide Walt Disney Productions and related affiliated and subsidiary companies with the materials, equipment and outside services they require to accomplish their tasks. They obtain such products or services at the most beneficial terms and conditions based on professional purchasing techniques.

This responsibility includes the procurement of all maintenance, repair and operating supplies, construction materials and equipment, capital equipment purchases and leases and the leasing of warehouse and other facilities. The negotiation and award of contracts for construction work and service contracts is another major function of Purchasing, as is the procurement of food and beverages for consumption by both employees and guests. There also are continual updatings of the construction contracting general conditions and the purchase order terms and conditions, as well as all bidding documents.

### TISHMAN CONSTRUCTION CORPORATION OF FLORIDA

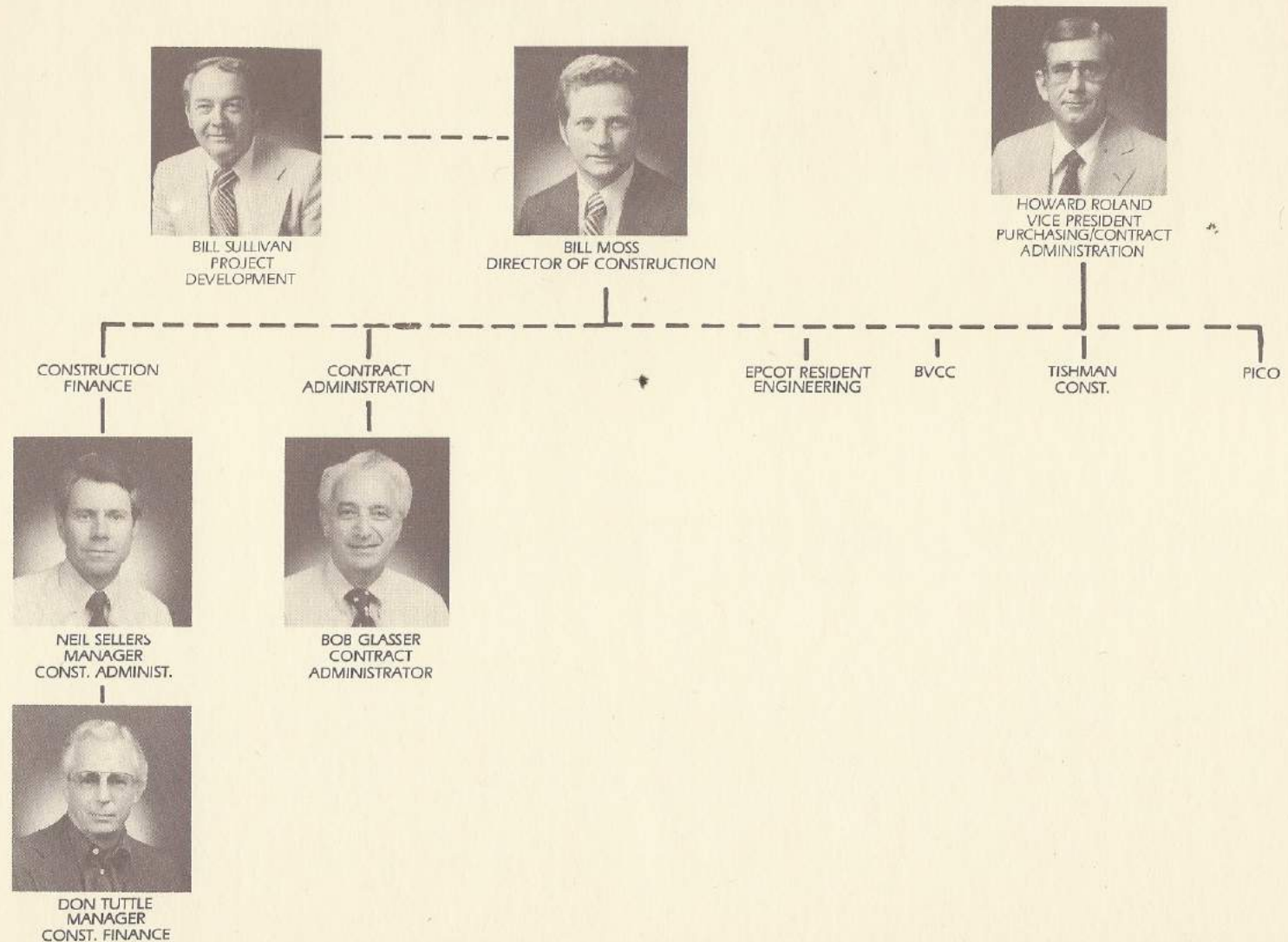
Tishman Construction Corporation of Florida provides a range of construction management services under contractual agreement and acts as "owner's agent" within the framework of the agreement. As a part of the management service, TCCF is the direct contact with all EPCOT Center Facility Construction contractors and provides for the integration of Buena Vista Construction Company Show/Ride installation efforts into Facilities construction schedules.

### BUENA VISTA CONSTRUCTION COMPANY

Buena Vista Construction Company supports EPCOT Construction management by the assumption of the specialized management efforts relating to Show/Ride/Facade installation. These activities are integrated into the Facilities construction in part by construction contractors and in part by BVCC direct labor forces as determined by the construction and contracting philosophies.



# EPCOT CONSTRUCTION MANAGEMENT



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## EPCOT RESIDENT ENGINEERING

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MILLER ANDRESS  
CHIEF RESIDENT ENGINEER



BOB HOLLAND  
SR. PROJECT  
ENGINEER



CLIFF WRIGHT  
SR. PROJECT  
ENGINEER



ART HENDERSON  
CHIEF ELEC. ENG.



PETE HETHERMAN  
CHIEF MECH. ENG.



DON HOLMQUIST  
CHIEF ARCH. ENG.



KANU PATEL  
CHIEF STRUC. ENG.



KEN FULLER  
STORE PLANNING  
MANAGER



CONRAD BLANKENZEE  
ELECTRONIC SHOW/RIDE



# BUENA VISTA CONSTRUCTION COMPANY



NEIL GALLAGHER  
DIRECTOR



JIM FRANKLIN  
SR. PROJECT  
MANAGER

MEXICO	SPACESHIP EARTH
CHINA	ENERGY
GERMANY	TRANSPORTATION
ITALY	LAND
AMERICAN ADVENTURE	THE NEW HORIZONS
JAPAN	COMMUNICORE
FRANCE	IMAGINATION
UNITED KINGDOM	SEAS
CANADA	



BOB DIMARCANTONIO  
SCHEDULING MANAGER



ED CAMPBELL  
CONSTRUCTION MANAGER

SETS  
PROPS & DRESSINGS  
PAINT  
ELECTRICAL  
ANIMATION

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# TISHMAN CONSTRUCTION CORP OF FLORIDA

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MILT GERSTMAN  
PRESIDENT



DAVE MEYERS  
CONSTRUCTION MANAGER



MARK BODNER  
CHIEF SCHEDULER



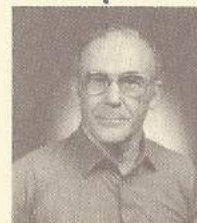
NAT MINASI  
CHIEF  
ESTIMATOR



BOB SEGAL  
DEPUTY CONST.  
MANAGER



PAT PATAFIO  
COMPTROLLER



FRED CORRADO  
DEPUTY CONST.  
MANAGER



JOE DANIELS  
LABOR RELATIONS



CHARLES FOREMAN  
AFFIRMATIVE ACTION  
OFFICER

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## PICO

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NORM DOERGES  
VICE PRESIDENT



JIM VERITY  
WED/MAPO TECHNICAL SUPPORT  
MANAGER



STEVE MILLER  
PAVILION COORDINATION  
MANAGER



TOM NABBE  
INVENTORY TRACKING  
WAREHOUSE COORDINATION  
MANAGER



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## WED-MAPO TECHNICAL SUPPORT

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JIM VERITY  
MANAGER



BILL FERGUSON  
ANIMATION/MANUFACTURING



GEORGE HEAD  
WED SHOW DESIGN



JERRY HONETOR  
ELECTRICAL/ELECTRONIC  
MANUFACTURING



TOM JOZWIAK  
PROJECTION SYSTEMS



JOHN LABRIOLA  
SPECIAL EFFECTS



BILLY NOKES  
LIGHTING



JOHN NOVAK  
THEATRICAL RIGGING



DOUG PETRINO  
AUDIO/VIDEO



MATT PRIDDY  
SHOW PRODUCTION



RON SCHRICHTEN  
RIDE SYSTEMS/MONORAIL  
EXPANSION



JACK TAYLOR  
WED PROGRAMMING

### ART DIRECTION:



COLLIN CAMPBELL



FRED JOERGER



BOB JOLLEY

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## PICO PAVILION COORDINATION

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STEVE MILLER  
MANAGER



ALAN BOURGEOIS  
CANADA, UNITED KINGDOM  
FRANCE



NANCY GEE BUGMAN  
AMERICAN ADV.



PAUL EISENBROWN  
AFRICA, CHINA



KATHY KNUTSON  
HORIZONS



BOB LAMB  
ENERGY



GARY LYDIC  
COMMUNICORE



CAROLE MITCHELL  
MEXICO  
EAST RESTAURANT



JOHN PAYNE  
AREA DEVELOPMENT  
TRANSPORTATION SYSTEMS



PETE RAHILL  
GERMANY, ITALY  
JAPAN



LES SKOLODA  
WORLD OF MOTION



JEFF SMITH  
EPCOT CENTRAL



DAVID TODD  
IMAGINATION



VALERIE TODD  
SPACESHIP EARTH



TOM TURLEY  
LAND



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## WAREHOUSE "E" INVENTORY TRACKING WAREHOUSE

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MANAGER  
TOM NABBE



HOMER MARSHALL  
SUPERINTENDENT



BEN BIXBY  
PICO HANDLER



BILL CHANEY  
PICO HANDLER



SANDY GEIGER  
PICO HANDLER



AL KHOUW  
PICO HANDLER



WALT MEHRER  
PICO HANDLER

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WED/MAPO IMAGIN

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## WED & MAPO IMAGINEERING

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WED, an acronym for Walter Elias Disney, is the Master Planning, Design, and Engineering arm of the Disney Organization. It was established in 1952 by Walt Disney to create Disneyland and its attractions. WED's primary responsibility continues to be the design and creation of outdoor entertainment such as Disneyland, Walt Disney World, EPCOT Center, and Tokyo Disneyland.

Working closely with the WED staff is MAPO. MAPO, derived from the name "Mary Poppins," is another division of Walt Disney Productions. Formed in 1965, MAPO manufactures prototype entertainment and transportation systems. It is the link between WED concepts and reality. MAPO also plays a large role in the installation of new projects.

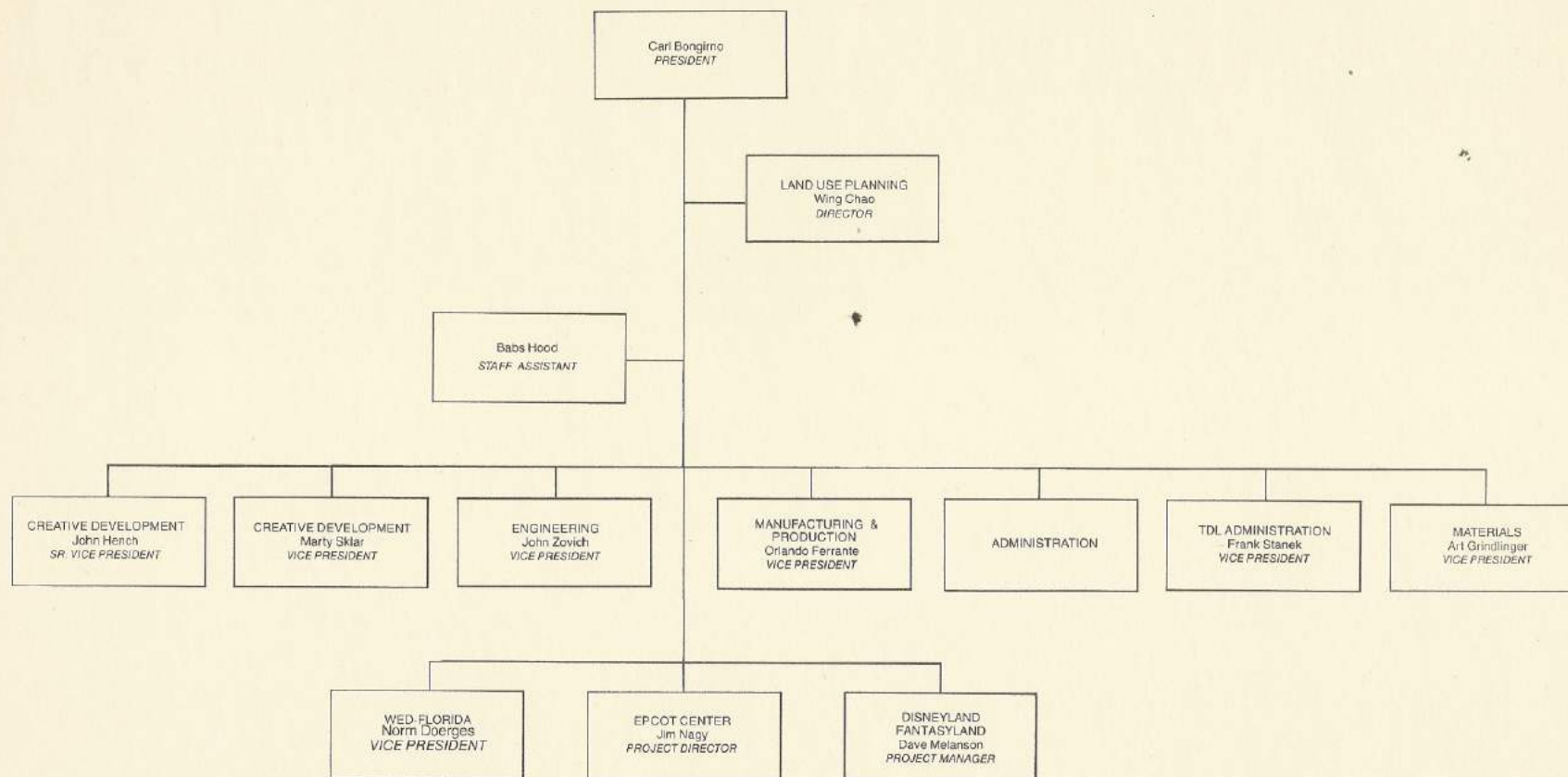
Uniquely combined and strongly interrelated, the WED and MAPO teams blend creative imagination and technical know-how. This is the art and science of "Imagineering." Project designers, artists, sculptors, research and development technicians, model builders, and interior decorators work side-by-side with architects, engineers, draftsmen, computer programmers, and skilled craftsmen. The goal is to design and fabricate attractions and adventures themed to the world of yesterday, today, tomorrow, and the timeless worlds of fantasy and fiction.

The basic structure of this highly unique organization consists of the following Divisions: **Creative Development, Engineering, Production and Manufacturing, Materials, Administration, Tokyo Disneyland Administration, WED-Florida, EPCOT Center Project Management and Disneyland/Fantasyland Project Management.**

Before ground is broken for any project, **Land Use Planning** is required to compile the necessary information relating to the project site. This department's area of responsibility includes land use studies and the recommendation of a master plan; monitoring the trends and neighboring corporate real estate holdings; project feasibility studies; and informing management of government planning regulations as related to corporate projects. Land Use Planning reports directly to the President of WED and MAPO.



# Communications Charts



## WED & MAPO IMAGINEERING



Carl Bongirno



Wing Chao



Orlando Ferrante



Art Grindlinger



John Hench



Babs Hood



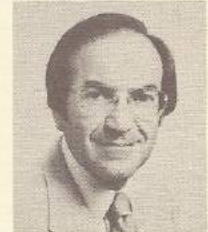
Norm Doerges



Dave Melanson



Jim Nagy



Marty Sklar



Frank Stanek



John Zovich



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## CREATIVE DEVELOPMENT

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All show planning and conceptual development of new attractions begin within the Creative Development Division. This complex process involves the integration of many talents required to conceptualize a project.

**Show Design** creates original concepts for show rides, attraction shows, theater shows and films. Illustrations, remodeling, written descriptions and models, and mock-ups are key tools. Typically, show designers follow a project through production and installation.

**Script & Show Development** works with designers to outline the show concepts, create "treatments," and "storyboard" their sequence. Narration or dialogue is developed for each show.

Within Script and Show Development, **Communications** provides support in audio-visual, publications, spiels and narrations, nomenclature, and external communication functions.

**Special Services** produces art props, color boards, photography, reprographics, and maintains an art morgue.

**EPCOT Film Production** is responsible for film, video, and "behind the scenes" material for use by the company's marketing groups.

**Architectural Concept Design** plans, details and designs the preliminary concepts and supervises the production of contract documents for all facilities and their sites.

**Sculpting** develops two-dimensional sketches into three-dimensional models, maquettes, and full-size figures expressing character and personality. Molds and castings are made from the full-size clay sculptures.

**Show Effects** insures the realistic qualities of movements in Audio-Animatronics figures, and works as a liaison between designer and Special Effects to assure a blending of concept and technique.

**Industrial Design** focuses on "future" designs, show space layouts from which models are made, and vehicle design.

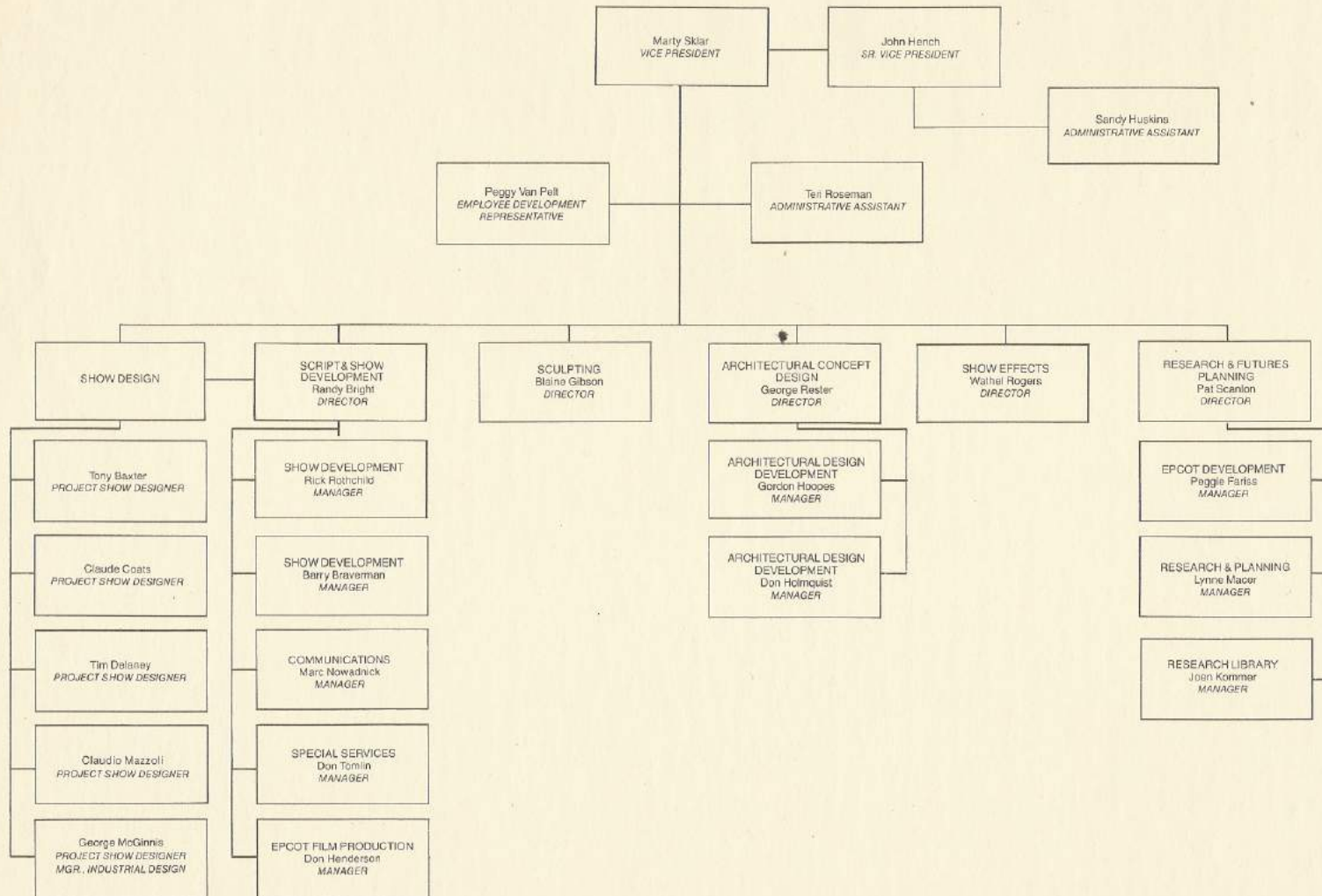
**Research and Futures Planning** Division is comprised of three departments: Research and Planning, EPCOT Development, and the Research Library. The division also plays an important role in the marketing and development effort for EPCOT Center and future projects.

**Research and Planning** supports the Creative Development division through research, concept development assistance, and management support. The department also assists in special market, business, and project planning activities.

**EPCOT Development** participates in marketing and other activities related to the continuing development of EPCOT Center, including overseeing the EPCOT Advisory program, planning and conducting EPCOT conferences and contributing to show development.

**The Research Library** provides reference service and in-depth research to support all WED and MAPO departments in fulfilling their information needs. The Library maintains a comprehensive collection of books, periodicals, and other research materials.

# Creative Development





## CREATIVE DEVELOPMENT



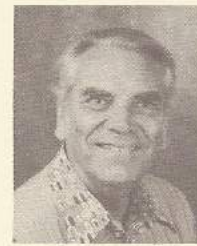
Tony Baxter



Barry Braverman



Randy Bright



Claude Coats



Tim Delaney



Peggie Fariss



Blaine Gibson



John Hench



Don Henderson



Don Holmquist



Gordon Hoopes



Sandy Huskins



Joen Kommer



Lynn Macer



Claudio Mazzoli



George McGinnis



Marc Nowadnick



George Rester



Wathel Rogers



Teri Roseman



Rick Rothchild



Pat Scanlon



Marty Sklar



Don Tomlin



Peggy Van Pelt



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## ENGINEERING

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The suffix of the term "**Imagineering**" belongs to the vital discipline of Engineering. Many of the technological achievements on the Walt Disney World property came from the creative Engineering staff at WED and MAPO. Some of the innovations include design of the underground utilidors, modular design and construction of the Contemporary and Polynesian Hotels, creation of the Central Energy Plant, and development of the Linear Induction Motor.

Engineering consists of the following: **Facilities Engineering, Show & Ride Engineering, Architectural Production Design, Research and Development, Store Planning Production Design and EPCOT Engineering.**

As a staff function to the Vice President, **Planning and Scheduling** aids in formulating and statusing departmental progress in achieving project goals.

**Facilities Engineering** supports all projects with Electrical, Structural, Mechanical, and Civil Engineering requirements.

**Electrical Engineering** determines all the electrical requirements for the entire project. It has the responsibility for all primary and secondary electrical distribution systems design, including interface between primary electrical utility distribution and facility electrical distribution system design.

**Civil Engineering** is responsible for the design of all site work, roads, utility alignment, and drainage.

**Mechanical Engineering** has the primary responsibility for the design of energy, gas, hot and cold water, air conditioning, heating, plumbing, and fire protection systems for all facilities.

**Specifications** is responsible for defining written standards for construction materials and the workmanship expected on a given project.

**Structural Engineering** has the primary responsibility for the design of facilities. Included are attractions as well as peripheral buildings (monorail, bridges, hotel, etc.).

**Data Control** reproduces, disseminates, and maintains vital documents, blueprints, and microfilms of engineering and design issued drawings. It insures that all personnel are up to date

on the latest changes to current projects. Data Control is also responsible for black and white color duplicators.

**CAD Center** provides computer aided drafting and design support for Mechanical and Electronics Engineering.

**Project Engineering** coordinates the efforts between Project Management and Facilities Engineering departments and recommends guidelines for project management functions.

**Show and Ride Engineering** has the responsibility of designing and developing the electronic and mechanical show and ride elements for all attractions.

**Mechanical Show and Ride Engineering** designs, tests, develops, and supports installation for vehicles, track, turntables, and many show elements.

**Electronic Show and Ride Engineering** is responsible for the electronic design and development of all ride and show control systems, subsystems, and components. Included in this function is hardware development of the PeopleMover systems.

**Document Control** provides microfilming and storage of drawings and blueprints. There are two separate departments; one reporting to Electronic Show and Ride Engineering, and the other to Mechanical Show and Ride Engineering.

**Technical Publications** documents the technical paperwork necessary for the development and maintenance of shows and rides. It publishes maintenance manuals, technical service information, performance specifications, technical photo reference files, and develops forms to assist maintenance procedures.

**Technical Standards** handles the companywide, computerized, 10-digit numbering system that allows the company to identify parts used through different facilities. This facilitates corporate purchasing and shipping from a central area.

**Quality Control** assures that the high standards of performance and maintenance are upheld on all projects. This is accomplished through careful



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planning of inspection procedures and maintenance schedules. Determination of inspection procedures is calculated through failure analysis and sound prediction methods. Quality Control interfaces with vendors to assure that the goods and services meet all safety and tolerance specifications.

**Architectural Production Design** coordinates its efforts with Engineering and the Show Design group. It supports the master planning and design of the facilities to the theme of the "land" or area (including the peripheral facilities). In addition, the actual preparation of contract documents for the construction of Disney facilities is done by Architectural Production Design. Within Architectural Production Design are the following departments:

**Show Set Design and Ride Layout** produces preliminary base maps to provide designers with options available for show and ride layout. Efforts are also coordinated with Engineering, Special Effects, Lighting, Audio-Visual, Animation, and other departments in the elementary stages of facility design.

**Graphics** designs, produces, and sometimes fabricates designs for two- and three-dimensional communications materials (signs, posters, brochures, menus, etc.) which are themed to the various shows. The department interfaces with Architectural and Interior Design to insure that all efforts are consistent. Major efforts are also devoted to Marketing, including designs to be presented to prospective lessees for the company.

**Architectural Drafting** prepares all the preliminary drawings and makes all the necessary changes during all phases of facility design. Architectural and Engineering Consulting firms then use Architectural Drafting's work as a basis to prepare final working drawings.

**Interior Design** develops and selects facility interior contrasts such as color schemes, wall and floor coverings, drapes, upholstery fabrics, props and dressings, and lighting fixtures.

**Landscape Design** has the overall responsibility for the landscape and irrigation design for all outdoor recreational facilities. It coordinates and designs

planting areas for area development (which includes areas between buildings, pedestrian areas, planters, etc.). It works closely with Civil Engineering and Land Use Planning for final touches.

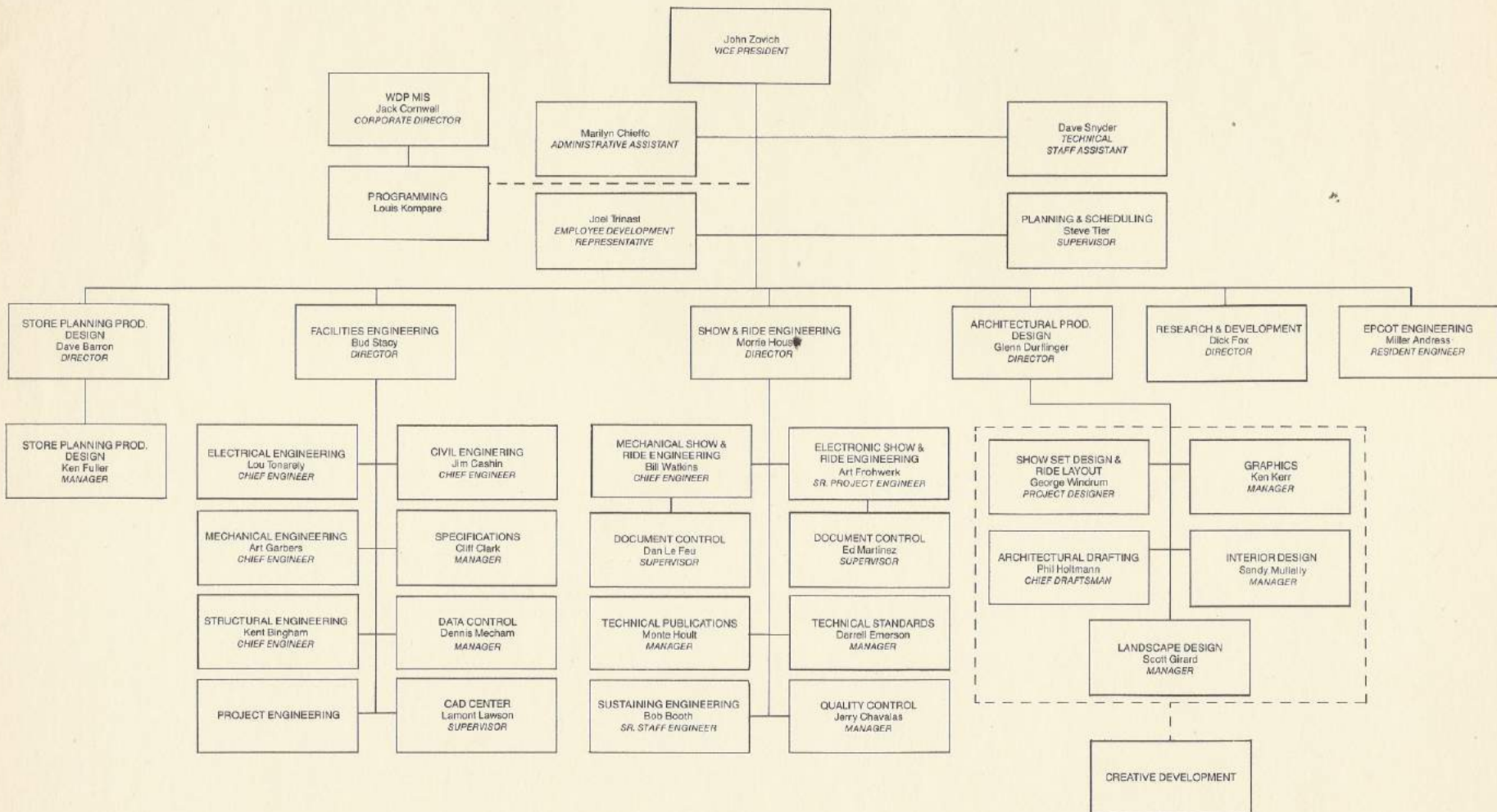
**Research & Development** investigates new technology and tests special concepts. It also functions in an administrative capacity in the development of budgets, manufacturing schedules, and monitors research activities within the organization.

**Store Planning Production Design** plans and designs complete working drawings on all stores within Walt Disney Productions and coordinates construction and rehabs of existing facilities.

**EPCOT Engineering** provides onsite engineering support for the EPCOT Center Project. It has the responsibility for quality assurance, resolution of all engineering problems, and coordination between WED, California and the prime contractor, Tishman Construction Company.

B-9

# Engineering





# ENGINEERING



Miller Andress



Dave Barron



Kent Bingham



Bob Booth



Jim Cashin



Jerry Chavalas



Marilyn Chieffo



Cliff Clark



Jack Cornwell



Glenn Durlinger



Darrell Emerson



Dick Fox



Art Frohwerk



Ken Fuller



Art Garbers



Scott Girard



Phil Holtmann



Monte Hoult



Morrie Houser



Ken Kerr



Louis Kompare



Lamont Lawson



Dan Le Feu



Ed Martinez



Dennis Mecham



Sandy Mullally



Dave Snyder



Bud Stacy



Steve Tier



Lou Tonarely

## ENGINEERING



Joel Trinast



Bill Watkins



George Windrum



John Zovich



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## MANUFACTURING AND PRODUCTION

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After designs and concepts have been finalized, and preliminary studies have been completed, Production and Manufacturing develops and produces all show aspects such as lighting, special effects, audio, etc. Production and Manufacturing is divided into three major activities: WED Production, PICO, and MAPO Manufacturing.

**Production Strategy**, a staff function to the Vice President, provides analysis of present and potential projects, assists in integrating and developing strategies for production efforts within the Production and Manufacturing Division, and makes recommendations on resource requirements and priorities.

**WED Production** consists of the following departments:

**Design Development** supports the creative process by fabricating three-dimensional models from two-dimensional designs. Models vary from rough study types to more finished, detailed models, varying in scope from 1/16" to full size, depending on the designers' needs.

**Show Production** involves figure finishing, fabrication of props, assistance in the production of scenics (painted backdrops), and in the fabrication of show sets. Show Production is also involved in supervising show installation.

**Sculpting** involves creation of three-dimensional figures from two-dimensional designs, particularly in character development, from early conceptual phase through production and show installation. Sculpting is also responsible for all ornamental pieces (statuary, etc.) for both interiors and exteriors of buildings, and monitors figure development through assembly, animation, application of skins, dressing, positioning and placement in sets.

**Architectural Ornamentation** is responsible for research and design of exterior facades and interiors resembling times and cultures of the theme design. These designs are then submitted for manufacture to inside and outside technicians.

**Lighting and Special Effects** is responsible for design development and production supervision of all Theme Park show lighting, show illustrations,

effects, and has the overall responsibility for updating and maintaining the integrity of lighting and special effects at present Disney attractions.

**Props and Dressing** is responsible for the decorative items placed within a show set. The need is established by the show designer, and is either purchased from outside vendors or manufactured in-house.

**Audio/Video** is involved in all phases of audio production for Theme Park attractions including pre-production design, track layouts, speaker locations, original recording, editing, mixing, installation, and quality control.

**PICO** stands for Project Installation Coordination Office and has the administrative responsibilities for Coordination, Inventory Tracking & Warehousing, and Technical Support during the installation phase of a project.

**Coordination** functions as a facility for interface between design, construction, fabrication, purchasing, shipping and installation, as well as the development of project inventories, and/or production and manufacturing responsibilities. Coordination also provides information for estimating and project planning.

**Inventory Tracking & Warehouse** is responsible for determining the location of installation materials and providing warehousing for materials once they reach the site.



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**Technical Support** assists coordination by providing onsite factory representatives for technical assistance during installation.

**MAPO Manufacturing** is the third activity within the division. It is made up of the following departments:

**Manufacturing Engineering's** main function is to insure the producability of parts to be manufactured, and provide technical support to Production Services in developing JRTC's (Job Routing Travel Cards).

**Plastic Fabrication** supplies plastic parts to Animation Manufacturing and Mechanical Manufacturing. Tooling is manufactured for vehicles from engineering drawings and for figures and props using molds developed from WED sculptures.

**Animation Manufacturing** is responsible for the assembly and testing of all figure and prop animation for shows, as well as rehab on these elements. The hydraulics shop is also part of this group.

**Electrical Manufacturing** produces ride and show control components. Research and design work is done in conjunction with electrical/electronic engineering in developing prototype equipment. Electrical testing, cycle testing, and mechanical/electrical assembly are within Electrical Manufacturing's area of responsibility.

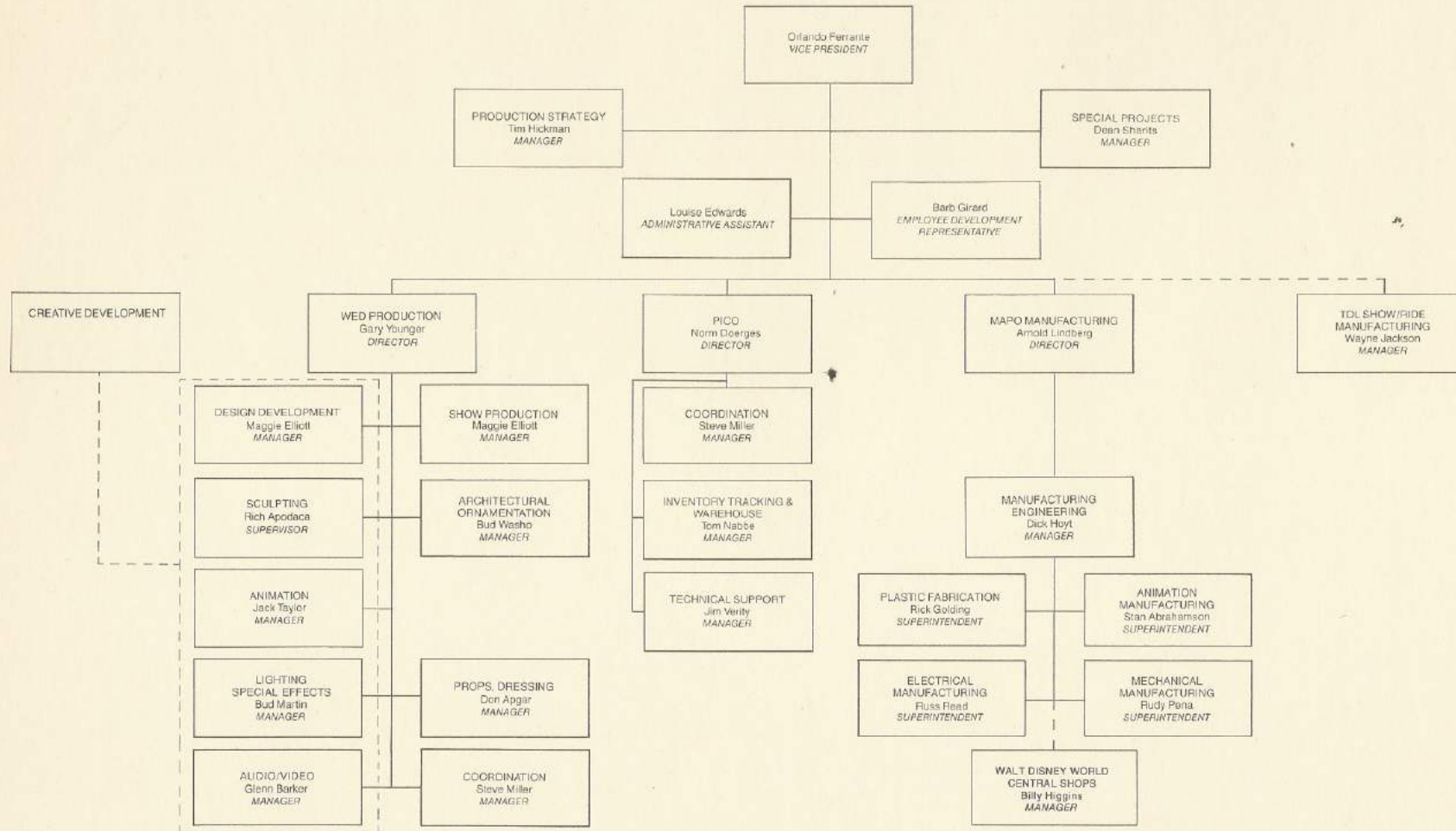
**Mechanical Manufacturing** is divided into three departments: the Machine Shop, Metal Fabrication and the Assembly Shop. These shops are responsible for the manufacture, assembly, and testing of all mechanical components; vehicle assembly and track fabrication.

**Walt Disney World Central Shops** is responsible for manufacturing ride systems, components and animation for EPCOT Center, Tokyo Disneyland and Walt Disney World. The Central Shops are also responsible for supporting maintenance and rehabs at Walt Disney World.

**Tokyo Disneyland Show/Ride Manufacturing** acts as a liaison between WED and MAPO and the Oriental Land Company in the areas of technical support for production and manufacturing.



# Manufacturing & Production



B-14

## MANUFACTURING & PRODUCTION



Stan Abrahamson



Don Apgar



Rich Apodaca



Norm Doerges



Louise Edwards



Maggie Elliott



Orlando Ferrante



Barb Girard



Rick Golding



Tim Hickman



Dick Hoyt



Wayne Jackson



Arnold Lindberg



Bud Martin



Steve Miller



Tom Nabbe



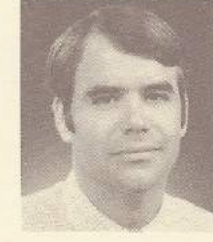
Lee Nesler



Rudy Pena



Russ Read



Billy Higgins



Dean Sharits



Jack Taylor



Jim Verity



Bud Washo



Gary Younger



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## MATERIALS

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The **Materials Division** is responsible for scheduling, procurement, timely delivery and quality of all materials required for manufacturing WED and MAPO's products.

**Production Services** is responsible for planning, scheduling, and tracking progress of fabricated items, purchased materials, and tooling to support overall project and manufacturing schedules. In addition, this department is responsible for following sequences of manufacturing operations.

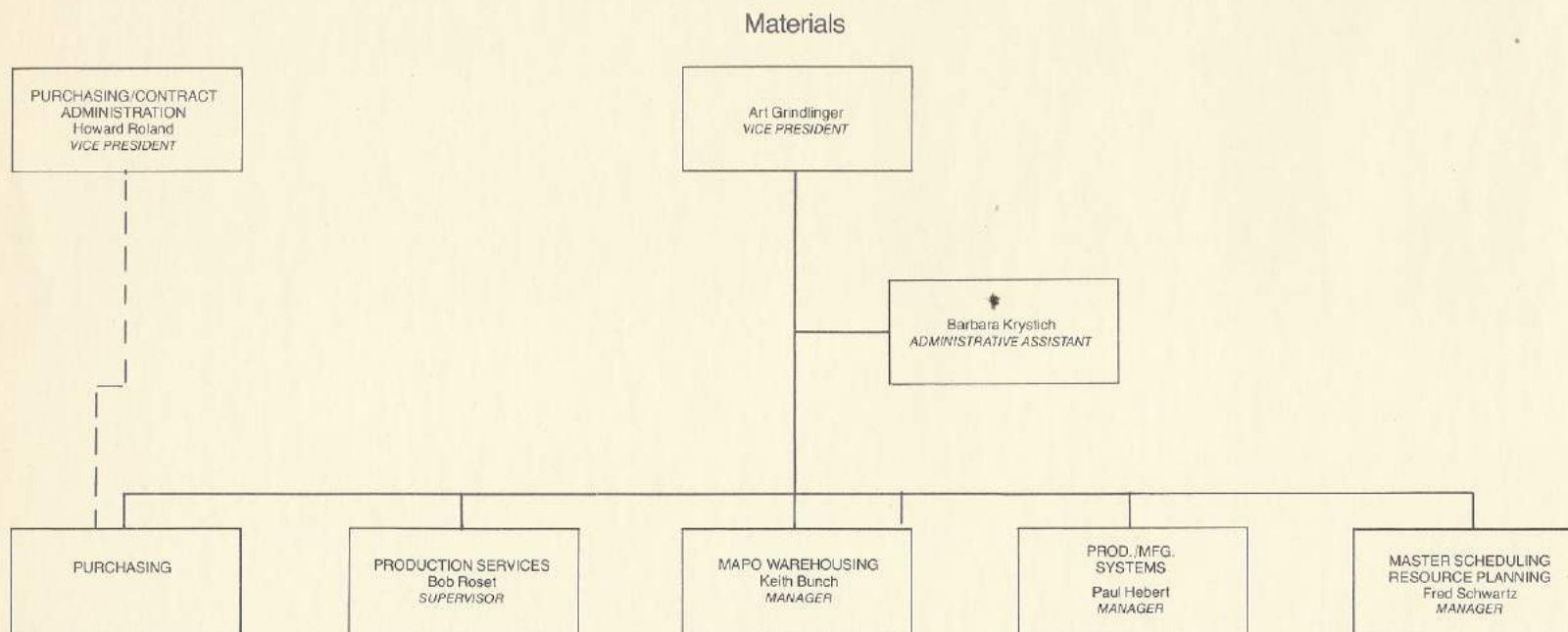
**Purchasing** is authorized to initiate, conduct and conclude negotiations leading to acquisition of goods and services. This department is responsible for performance within specified budget parameters while ensuring that quality specifications and delivery dates are met.

Purchasing has full authority to make recommendations and suggest alternatives to quality, quantity and specifications of materials requested to be purchased.

**Production/Manufacturing Systems** overall responsibilities include planning and scheduling for WED and MAPO materials procurement, specifications, production and manufacturing. Responsibilities include the integration of all systems with Data Processing, and interface between product groups.

**Company Master Scheduling** is responsible for resource planning and all company divisional interface and integration to ensure that project schedules are met.

**MAPO Warehouse** handles and controls MAPO manufacturing materials, Inventory Control, Shipping and Receiving, Tool Control, and Project Shipping.





## MATERIALS



Keith Bunch



Art Grindlinger



Paul Hebert



Barbara Krystich



Howard Roland



Bob Roset



Fred Schwartz

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## ADMINISTRATION

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The business side of Imagineering, that is, all matters relating to efficient and effective administration of operations is the responsibility of the Administration Division, made up of Finance/Services, Project Management Support, and Employee Relations.

**Finance/Services** provides support in the following areas: analysis of operating and capital budgets, current and future costs, general and project accounting support for all divisions.

**Contract Administration** serves as a mediator between WED departments and outside firms, and/or individuals whose expertise is required for specific WED projects. The department negotiates, develops, and processes binding contracts.

**Industrial Engineering** is responsible for capacity planning, manpower forecasting, methods engineering, and time and cost efficiency evaluations.

**Property Management and General Services** maintains all WED and MAPO properties as well as providing a variety of general services. The group includes Plant Maintenance and Construction, Janitorial, Plant Engineering, Word Processing, Telecommunications, Warehouse Services and Traffic.

**Security** protects company assets, investigates incidents, controls access, keys, and parking. It also administrates an employee identification system and operates a lost and found.

**Travel** is responsible for making travel arrangements for WED and MAPO personnel for business purposes.

**Project Management Support** involves the following areas:

**Scope Writing** assimilates all the predesign information required for the production of the different levels of project descriptions. From this information, schedules and budgets are developed.

**Estimating** estimates design concepts, working drawings, and Bid & Construction drawings. Estimating also interfaces with all levels of design and production to insure timely and accurate projections of cost.

**Employee Relations** maintains the integrity of the people side of Imagineering and contains the following areas:

**Employment** obtains capable employees for every job responsibility. It includes recruiting, proper placement and internal transfer and promotion programs.

**Compensation** ensures that all employees' wages, salaries and benefits are industry competitive and internally equitable.

**Career Planning and Employee Assistance** works with WED and MAPO employees to define and record skills, and to operate an internal skills bank for internal and external training opportunities.

**EO Programs** administers on-going affirmative action programs of fair and equitable treatment for all employees.

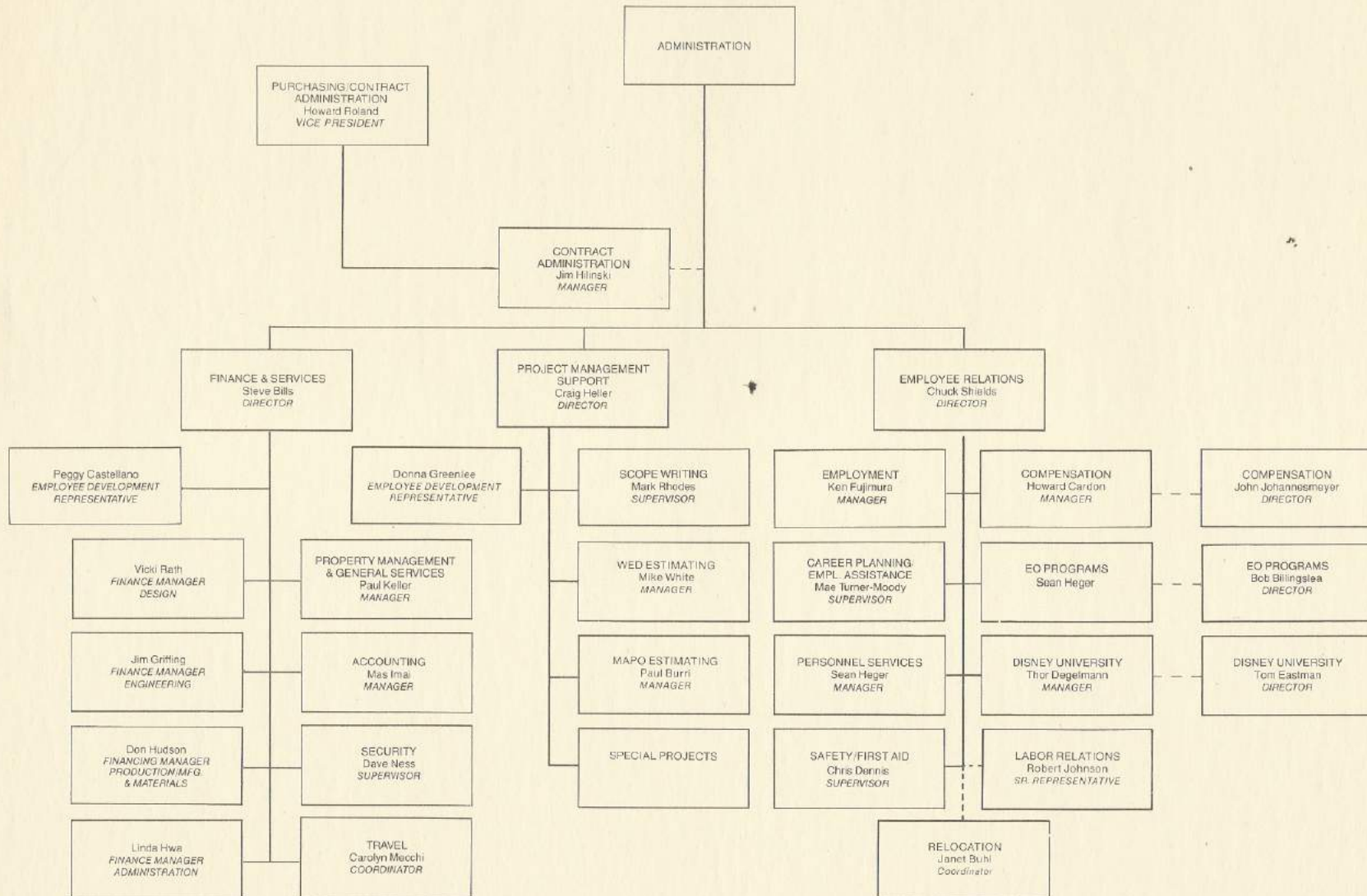
**Personnel Services** administers the employee benefits program, maintains all personnel files and processes all personnel changes.

**Disney University** provides training, education and development programs in addition to a broad employee communications program, and a diversified recreation, social and employee service program.

**Safety/First Aid** maintains employee safety through monitoring compliance with state, federal and company safety regulations, and conducting periodic programs in safety awareness. It also provides First Aid facilities for all WED and MAPO employees.



# Administration



# ADMINISTRATION



Bob Billingslea



Steve Bills



Janet Buhl



Paul Burri



Howard Cardon



Thor Degelmann



Chris Dennis



Tom Eastman



Ken Fujimura



Donna Greenlee



Jim Griffing



Sean Heger



Craig Heller



Jim Hilinski



Don Hudson



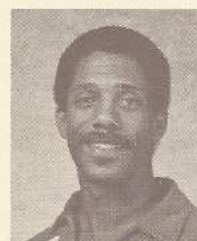
Linda Hwa



Mas Imai



John Johannesmeyer



Robert Johnson



Paul Keller



Carolyn Mecchi



Dave Ness



Vicki Rath



Mark Rhodes



Howard Roland



Chuck Shields



Mae Turner-Moody



Mike White



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## WED FLORIDA

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**WED Florida** is an extension of WED Enterprises in California and is responsible for providing creative design support to all areas of Walt Disney World Co.

Along with providing creative imagineering and technical know-how to support the planning and design of new facilities at Walt Disney World, WED Florida is responsible for insuring that Disney's high standards of quality are properly maintained on all existing facilities throughout the property.

WED Florida combines creative talent in the areas of **Administration, Architecture, Art and Design, Display, Industrial Engineering** and **Coordination**.

The WED Administration staff provides administrative and personnel support/services to all departments within WED Florida. Also included under WED Administration is the Project Planning Department, which monitors project schedules, status, and costs; the Employee Development Department; and the WED Library.

Several disciplines work together within the **Architectural Department** to provide a comprehensive approach to project design.

**Architectural** group develops and sets the scope of each project and prepares preliminary design and presentation drawings for approvals and estimated costs. Contract documents and working drawings are also prepared by this department.

**Graphics** designs visual communications for Walt Disney World, including signs design, exhibits, displays and electronic graphics.

**Interiors** creates functional and aesthetic interior designs for hotels, restaurants, shops and other guest areas. The Interiors staff designs and selects electrical and display fixtures, wall finishes, cabinetry, furniture, carpets and drapes.

**Land Planning and Landscape Design** participates in long-range land use planning for Walt Disney World by developing preliminary concepts for new projects and preparing detailed site plans. The staff is also responsible for landscape and irrigation design, field supervision during project installation and area development including

exterior lighting, circulation systems, paving and site drainage, steel furniture and recreation facilities.

**Art and Design Department** is responsible for creative art services for all Walt Disney World divisions.

**Art Administration Department** monitors the flow of all products, oversees quality control in production, and maintains records of all creative services.

**Advertising Design** provides promotional materials for advertising campaigns, conventions, and special events including the design of newspaper advertisements, magazine inserts, booklets, brochures, posters and tickets.

**Product Design** is responsible for design of character and souvenir merchandise for WDW and EPCOT.

**Graphic Design** is responsible for design of printed material supporting WDW Divisions, EPCOT, UNOCO, Vista-United Telecommunications, RCUC, WDW Village, RCID, WDW Travel Company. This support includes package and bag design, menu design, posters, maps, mailers, tickets, invitations, announcements, etc.

**Illustration** provides drawing and paintings of WDW and EPCOT related situations for support of Advertising and Graphic Design requirements, as well as create illustrations of Walt Disney Characters where needed for advertising, promotional, employee relations or merchandise requirements.

**Production Art** is responsible for all camera services, mechanical preparation and layouts for advertisements, brochures and printed materials.

**Display Department** supports the merchandise sales effort with themed merchandise presentation in the WALT DISNEY WORLD Theme Park, Resorts, Shopping Village, UNOCO, and DISNEYLAND. This support comes in the form of designing and constructing themed merchandise figures, repairing fixtures, and providing themed display props and animated character windows for many locations.



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**Visual Merchandising Department** provides three-dimensional point of purchase displays for WALT DISNEY WORLD merchandise locations in the Theme Park as well as hotels. These displays are changed several times each year to correspond to special events and seasons to assure the best in good show.

**Prop and Fixture Department** supports Visual Merchandise by designing and building, or acquiring items used in the creation of displays. The Prop and Fixture Department also works closely with WED Store Planning and assists in the design and production of casework and fixturing for merchandise locations.

**Theme Display Department** designs and constructs animated figures and scenes from Disney classics and current release films for placement in the Emporium window display areas and other merchandise locations.

**WED Industrial Engineering** is involved primarily in the following three areas:

**Division Support** — Industrial Engineers are assigned on a full-time basis to each of the major line divisions at Walt Disney World. Their primary efforts are directed toward the optimization of labor, equipment, and materials.

**Operations Research** — Operations Research involves the use of scientific methods to provide management with a quantitative basis for arriving at the optimal solutions to problems.

**Project Analysis** — provides an internal consulting team available to support comprehensive projects throughout WALT DISNEY WORLD where Industrial Engineering expertise is needed. Areas of expertise include systems analysis, labor productivity improvement, equipment optimization, functional layouts, and material handling.

WED Florida **Coordination Department** maintains the following areas of responsibility:

**Walk-Through Program** — Organize and coordinate a walk-through program for both rehabs and WED (Good Show/Bad Show) walk-throughs.

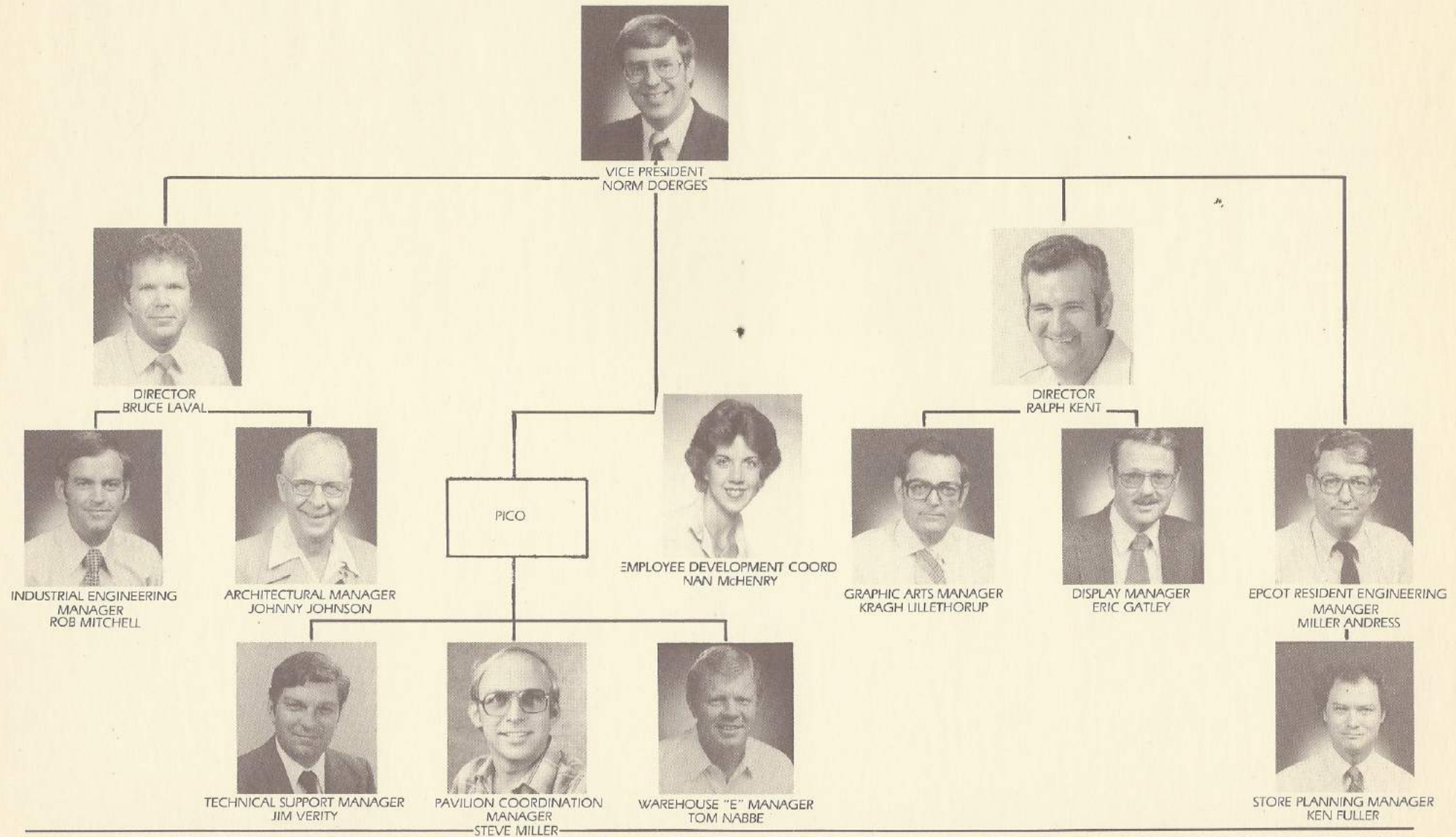
**Participant Support** — Coordinate the implementation of all participant-related modifications/additions occurring throughout Walt Disney World.

**WED Florida Support** — Provide coordination support for all internal WED requirements, including the set-up and dismantling of presentations, all shipping and receiving, and responsibility for all WED assets.

**California Liaison** — Coordinate requirements for WED California personnel while in Florida.



# WED FLORIDA ORGANIZATIONAL CHART



WALT DISNEY WORLD



FUTURE WORLD

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## COMMUNICORE

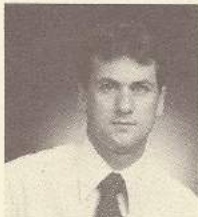
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GLENN PLUMB  
OVERALL  
PROJ. MGR. (FLA.)



PAUL NYLUND  
PROJ. MGR.  
SHOWS



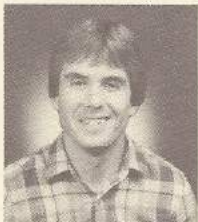
TOM TOSI  
RESIDENT ENGINEER



JERRY ALDRICH  
BVCC PROJECT MANAGER



GEORGE MADDOCKS  
TISHMAN PROJECT MANAGER



GARY LYDIC  
PICO COORDINATOR



DIRK VANDERLAAN  
PROJECT BUSINESS ADMINISTRATOR



MIKE PADIAN  
PROJECT PLANNER

GENERAL CONTRACTOR: R. E. DAILEY AND COMPANY



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## EAST RESTAURANT COMPLEX

---



BOB SMITH  
PROJECT MANAGER



CLIFF WRIGHT  
RESIDENT ENGINEER



DON VINSON  
BVCC PROJECT MANAGER



JOHN RYAN  
TISHMAN PROJECT MANAGER



CAROLE MITCHELL  
PICO COORDINATOR



JAMES SOBEY  
PROJECT BUSINESS ADMINISTRATOR



KATHY SWEET  
PROJECT PLANNER

GENERAL CONTRACTORS: R. E. DALEY & CO.

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## **FUTURE WORLD AREA DEVELOPMENT LANDSCAPING**

---



**DON HUGHES**  
PROJECT MANAGER



**BILL COAN**  
RESIDENT ENGINEER



**JOHN MANNING**  
TISHMAN PROJECT MANAGER



**JOHN PAYNE**  
PICO COORDINATOR



**JAMES SOBEY**  
PROJECT BUSINESS ADMINISTRATOR



**DAVE YANCHAR**  
PROJECT PLANNER

GENERAL CONTRACTORS: PALMER-SMITH CO.



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# HORIZONS

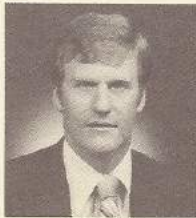
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DOUG STAPP  
PROJECT MANAGER



MIKE RENDELL  
ASST. PROJECT MANAGER



JON HINE  
RESIDENT ENGINEER



PETER BERTONASCHI  
BVCC PROJECT MANAGER



CHUCK MOSCATO  
TISHMAN PROJECT MANAGER



KATHY KNUTSON  
PICO COORDINATOR



DICK RIGGERT  
PROJECT BUSINESS ADMINISTRATOR



LINDA NATIONS  
PROJECT PLANNER

GENERAL CONTRACTORS: PALMER-SMITH CO.

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## JOURNEY INTO IMAGINATION

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ROGER DAY  
PROJECT MANAGER



KURT KOTZIN  
RESIDENT ENGINEER



PETER BERTONASCHI  
BVCC PROJECT MANAGER



JOE WILLBANKS  
TISHMAN PROJECT MANAGER



DAVID TODD  
PICO COORDINATOR



PHIL JORDAN  
PROJECT BUSINESS ADMINISTRATOR



MARIE KELLEY  
PROJECT PLANNER



VERNON MCGUGAN  
ASST. PICO COORDINATOR

GENERAL CONTRACTOR: INLAND CONSTRUCTION, INC.



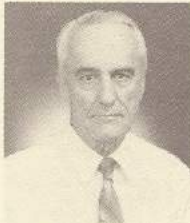
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# LAND

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JOHN DIEFENBACH  
PROJECT MANAGER



JOHN WARE  
RESIDENT ENGINEER



ROBERT KEMMER  
BVCC PROJECT MANAGER



GEORGE HUGHES  
TISHMAN PROJECT MANAGER



TOM TURLEY  
PICO COORDINATOR



MIKE DOGETT  
PROJECT BUSINESS ADMINISTRATOR



TOM LEE  
PROJECT PLANNER

GENERAL CONTRACTOR: FRANK J. ROONEY, INC.

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## THE LIVING SEAS

---



KYM MURPHY  
PROJECT MANAGER



ALLEN MOYER  
RESIDENT ENGINEER



ROBERT KEMMER  
BVCC PROJECT MANAGER



JAMES SOBEY  
PROJECT BUSINESS ADMINISTRATOR



LINDA NATIONS  
PROJECT PLANNER



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# SPACESHIP EARTH

---



DOUG STAPP  
PROJECT MANAGER



JON HINE  
RESIDENT ENGINEER



JERRY ERIKSON  
BVCC PROJECT MANAGER



FRANK MURPHY  
TISHMAN PROJECT MANAGER



VALERIE TODD  
PICO COORDINATOR



DICK RIGGERT  
PROJECT BUSINESS ADMINISTRATOR



MIKE PADIAN  
PROJECT PLANNER

GENERAL CONTRACTOR: DARIN & ARMSTRONG

## SUPPORT INVESTMENT



DON HUGHES  
PROJECT MANAGER

EPCOT CENTER DRIVE  
SITE DEVELOPMENT  
AREA DEVELOPMENT  
ON-SITE UTILITIES  
ON-SITE COMMUNICATIONS  
69 KV TRANSMISSION  
69 KV SUBSTATION



EPCOT CENTER DRIVE  
SITE DEVELOPMENT  
ON-SITE UTILITIES  
69 KV TRANSMISSION

JIM RICHARDS  
TISHMAN PROJECT MANAGER



JOHN MANNING  
TISHMAN PROJECT MANAGER

FUTURE WORLD  
AREA  
DEVELOPMENT



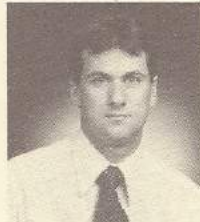
JEFF SHAPIRO  
TISHMAN PROJECT MANAGER

ON-SITE COMMUNICATIONS  
69 KV SUBSTATION



KURT KOTZIN  
RESIDENT ENGINEER

EPCOT CENTER DRIVE



TOM TOSI  
RESIDENT ENGINEER

SITE DEVELOPMENT



BILL COAN  
RESIDENT ENGINEER

AREA DEVELOPMENT



LEW NEWMAN  
RESIDENT ENGINEER

ON-SITE COMMUNICATIONS  
ON-SITE UTILITIES



ED KLEM  
RESIDENT ENGINEER

69 KV TRANSMISSION  
69 KV SUBSTATION



PALMER GRAHAM  
PROJECT MANAGER  
WDW CONSTRUCTION

EPCOT CENTER DRIVE  
SITE DEVELOPMENT  
FUTURE WORLD AREA DEVELOPMENT  
ON-SITE UTILITIES  
ON-SITE COMMUNICATIONS  
69 KV TRANSMISSION  
69 KV SUBSTATION

BERNARD FREETH  
PROJECT BUSINESS ADMINISTRATOR

JOANNE FERNHOLZ  
PROJECT BUSINESS ADMINISTRATOR

DAVE YANCHAR  
PROJECT PLANNER



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## SUPPORT INVESTMENT

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PAUL WEICKERT  
PROJECT MANAGER  
MONORAIL



JOHN MANNING  
TISHMAN PROJECT MANAGER  
MONORAIL



DAVE DOW  
RESIDENT ENGINEER  
MONORAIL



PALMER GRAHAM  
WDW CONSTRUCTION  
PROJECT MANAGER  
MONORAIL



GENE MULLINAX  
PROJECT MANAGER  
CEP  
CEMS



JOE LAPINSKI  
TISHMAN PROJECT MANAGER  
CEP  
CEMS



PETE HETHERMAN  
RESIDENT ENGINEER  
CEP



ED KLEM  
RESIDENT ENGINEER  
CEMS



PALMER GRAHAM  
WDW CONSTRUCTION  
PROJECT MANAGER  
CEP  
CEMS

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## UNIVERSE OF ENERGY

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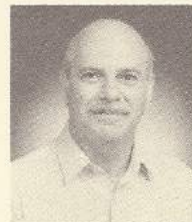
BILL DENNIS  
PROJECT MANAGER



HUGH GONZALEZ  
RESIDENT ENGINEER



PETER BERTONASCHI  
BVCC PROJECT MANAGER



CHUCK MOSCATO  
TISHMAN PROJECT MANAGER



BOB LAMB  
PICO COORDINATOR



JAMES SOBEY  
PROJECT BUSINESS ADMINISTRATOR



EDDIE NUNEZ  
PROJECT PLANNER

GENERAL CONTRACTOR: JOHN B. PIKE AND SON, INC.



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## WORLD OF MOTION

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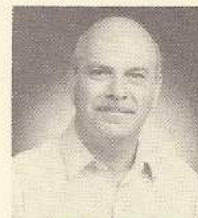
BILL DENNIS  
PROJECT MANAGER



HUGH GONZALEZ  
RESIDENT ENGINEER



PETER BERTONASCHI  
BVCC PROJECT MANAGER



CHUCK MOSCATO  
TISHMAN PROJECT MANAGER



BOB LAMB  
PICO COORDINATOR



PHIL JORDAN  
PROJECT BUSINESS ADMINISTRATOR



KATHY SWEET  
PROJECT PLANNER

GENERAL CONTRACTOR: JOHN B. PIKE AND SON, INC.





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## AMERICAN ADVENTURE

---



JANE JACKSON  
PROJECT MANAGER



SAL INTERRANTE  
RESIDENT ENGINEER



BRUCE MacDonald  
BVCC PROJECT MANAGER



ED ANNIN  
TISHMAN PROJECT MANAGER



NANCY GEE BUGMAN  
PICO COORDINATOR



SHIRLEY KOMOTO  
PROJECT BUSINESS ADMINISTRATOR



MELANIE VASS SIMON  
PROJECT PLANNER

GENERAL CONTRACTORS: DARIN & ARMSTRONG INC.

---

## CANADA

---



JOE NAVARRO  
PROJECT MANAGER



JIM BARRETT  
RESIDENT ENGINEER



JERRY HUNT  
BVCC PROJECT MANAGER



ROBBY BLACKMAN  
TISHMAN PROJECT MANAGER



ALAN BOURGEOIS  
PICO COORDINATOR



JOANNE FERNHOLZ  
PROJECT BUSINESS ADMINISTRATOR



DAVE YANCHAR  
PROJECT PLANNER

GENERAL CONTRACTOR: PEPPER CONSTRUCTION COMPANY



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# CHINA

---



JEFF BURTON  
PROJECT MANAGER



BILL MOY  
RESIDENT ENGINEER



DON VINSON  
BVCC PROJECT MANAGER



MIKE FLANAGAN  
TISHMAN PROJECT MANGER



PAUL EISENBROWN  
PICO COORDINATOR



JOANNE FERNHOLZ  
PROJECT BUSINESS ADMINISTRATOR



TOM LEE  
PROJECT PLANNER

# FRANCE

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JIM WOLFORD  
PROJECT MANAGER



ABE QUIBIN  
RESIDENT ENGINEER



JERRY HUNT  
BVCC PROJECT MANAGER



JOHN MOORE  
TISHMAN PROJECT MANAGER



ALAN BOURGEOIS  
PICO COORDINATOR



JOANNE FERNHOLZ  
PROJECT BUSINESS ADMINISTRATOR



DAVE YANCHAR  
PROJECT PLANNER

GENERAL CONTRACTOR: PALMER-SMITH COMPANY



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## GERMANY

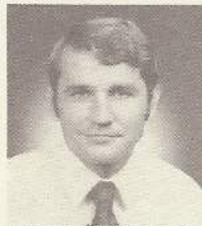
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BRUCE DUNFORD  
PROJECT MANAGER



BILL TYSON  
RESIDENT ENGINEER



BRUCE MacDonald  
BVCC PROJECT MANAGER



RON STAHLHUT  
TISHMAN PROJECT MANAGER



PETE RAHILL  
PICO COORDINATOR



DON GOLDE  
PROJECT BUSINESS ADMINISTRATOR

GENERAL CONTRACTOR: INLAND CONSTRUCTION, INC.

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## WALT DISNEY WORLD CO.

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DICK NUNIS  
PRESIDENT  
OUTDOOR RECREATION



BOB ALLEN  
VICE PRESIDENT  
WALT DISNEY WORLD



JIM ARMSTRONG  
VICE PRESIDENT  
RESORTS & FOOD ADMINISTRATION



TED CROWELL  
VICE PRESIDENT  
FACILITIES



TOM ELROD  
VICE PRESIDENT  
MARKETING



CHUCK LUTHIN  
VICE PRESIDENT  
FINANCE



BOB MATHEISON  
VICE PRESIDENT  
OPERATIONS



ED MORIARTY  
VICE PRESIDENT  
LAKE BUENA VISTA COMMUNITIES



JIM PASSILLA  
VICE PRESIDENT  
EMPLOYEE RELATIONS



HOWARD ROLAND  
VICE PRESIDENT  
CONSTRUCTION, CONTRACT ADMINISTRATION  
& PURCHASING



PHIL SMITH  
VICE PRESIDENT  
LEGAL



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## WALT DISNEY WORLD FACILITIES

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The **Facilities Division** assures that the Walt Disney World complex operates safely and efficiently and that the unique theme show maintains its freshness and beauty. The Facilities Division's responsibilities include coordinating the operations of the Buena Vista Construction Company, Central Shops, Engineering, Epcot Maintenance, Horticulture, Maintenance, Reedy Creek Utilities Company and Walt Disney World Construction.

### ENGINEERING

Walt Disney World **Engineering** includes: mechanical, structural, electrical, and civil engineering disciplines. In support of these disciplines are additional specialists such as the Survey team, Machine Design, and Special Systems. The As-Built and Reproduction Department brings all drawings to an updated status through completion or modification of a facility.

### EPCOT MAINTENANCE

The **Epcot Maintenance Division** is establishing its organization as the test and adjust periods are beginning for Epcot pavilions. Through test and adjust support and initial development of a preventive maintenance program, the division will help assure that the Epcot maintenance effort will be accomplished as smoothly as possible.

### HORTICULTURE DIVISION

The responsibilities of the **Horticulture Division** include maintaining existing landscapes, coordinating new landscape construction, and planning and preparing for future landscape needs. The Landscape Maintenance Department is responsible for providing guests with a horticultural theme show for each of the areas at WALT DISNEY WORLD. The 120-acre Tree Farm/Nursery serves as a backstage "warehouse," supplying the growing needs of the Horticulture Division. The Pest Control Department provides ornamental pest control, aquatic pest control, flying insect control, and structural pest control. Landscape Construction handles landscape installation for new construction projects.

### MAINTENANCE

The **Maintenance Division** is comprised of specialized departments which include the following:

**Magic Kingdom Maintenance** — made up of six departments with crew members of various crafts such as painters, plumbers, carpenters, and electricians to handle all problems and preventive maintenance work.

**Electrical Shop and Plumbing and Air-Conditioning Shops.**

**Transportation Maintenance**, which includes the Service Garage, Guest Transportation, Boat Department, Steam Train and Monorail Shops.

**Furnishings and Decorating** — which includes Drapery/Upholstery, Decorating and Entertainment.

**Audio-Animatronics and Computers Department** — including Audio/Electronics, Animation, Arcade and Computers.

**Planning** — which includes an annual Planned Work Program, Capital Projects Master Plan, and Ten-Year Maintenance Planned Work Master Plan.

**Environmental Protection.**

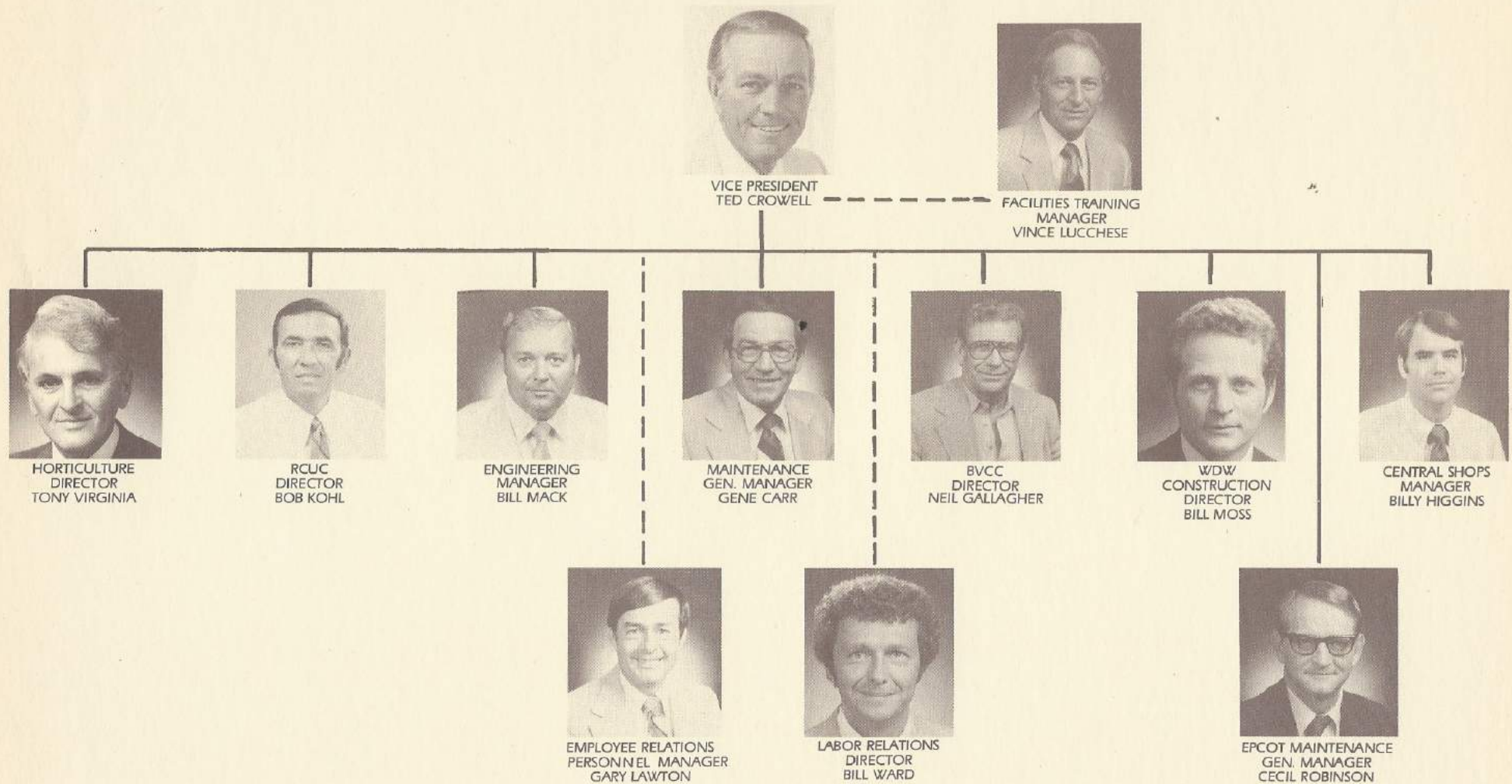
### REEDY CREEK UTILITIES COMPANY

**Reedy Creek Utilities Co., Inc.**, is a subsidiary of Walt Disney Productions, created to operate the 10 utility systems in the WALT DISNEY WORLD Resort Complex, namely electric power, high temperature hot water, chilled water, domestic water, wastewater, natural gas, solid waste, compressed air, fuel oil, and surface water control.

The Company is comprised of four departments: Engineering and Construction, Environmental Programs, Energy Production, and Water and Waste.



## W.D.W. FACILITIES DIVISION





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## WALT DISNEY WORLD CENTRAL SHOPS

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**Walt Disney World Central Shops** support MAPO with construction manufacturing for EPCOT Center, Tokyo Disneyland and Walt Disney World, including production and manufacturing of ride systems, components and animation.

**Machine Shop** fabricates or repairs any machined components.

**Metal Shop** provides expertise in all structural steel, welding, ornamental ironwork, and sheet metal items.

**Maintenance Services** area provides the manpower to move trailers and furniture, maintain roadways, install road signs and fences, clean waterways, and provide labor support to Central Shops and for rehabs in WALT DISNEY WORLD.

**Staff Shop** is responsible for all concrete, plaster, fiberglass, brick and concrete block work.

**Mill Shop** is comprised of craftsmen skilled in wood carving, wood trimming, cabinet fabrication, wood construction, and formica work.

**Paint Shop** is responsible for conventional brush, spray and roller painting, sandblasting and wallpapering. All roadways and parking lots are striped periodically by this Department.

**Sign Shop** fabricates all work orders and new construction signs, including glass window signing, menus, silk-screening, and general informational signs.

# WALT DISNEY WORLD CENTRAL SHOPS



VINCE LUCCHESI  
TRAINING MANAGER



BILLY HIGGINS  
MANAGER



BILLY HIGGINS  
MANAGER  
BUILDING TRADES



JEANETTE MINOR  
MANAGER



FRANK CORNELIS  
MANAGER  
SHOW/MECHANICAL



ED RALPH  
MANAGER  
RIDE/WELD



JIM GORDON  
STAFF SHOP  
SUPERINTENDENT



CARL COLLINS  
SCHEDULING & COORDINATION  
SUPERINTENDENT



DICK DAYER  
ELECTRICAL  
SUPERINTENDENT



BOB HARPUR  
MACHINE SHOP  
SUPERINTENDENT



JIM FISHER  
MILL SHOP  
SUPERINTENDENT



FRED ARMAGOST  
PLANNING SUPERVISOR



BILL BALYA  
SHOW ASSEMBLY MECHANICAL  
SUPERINTENDENT



CHARLES LOWERY  
MANUFACTURING  
SUPERINTENDENT



LONNIE LINDLEY  
PAINT-SIGN SHOP  
SUPERINTENDENT



DELBERT PEAVEY  
MAINTENANCE  
SUPERINTENDENT



RALPH KALESHEFSKI  
SHOW FINISHING  
SUPERINTENDENT



DON MOORE  
VEHICLE MANUFACTURE  
SUPERINTENDENT



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## REEDY CREEK UTILITIES CO., INC.

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REEDY CREEK UTILITIES CO., INC.  
DIRECTOR  
BOB KOHL



MANAGER  
ENGINEERING  
AND  
CONSTRUCTION  
WILLARD SMITH



MANAGER  
ENERGY  
PRODUCTION  
FRANK JONES

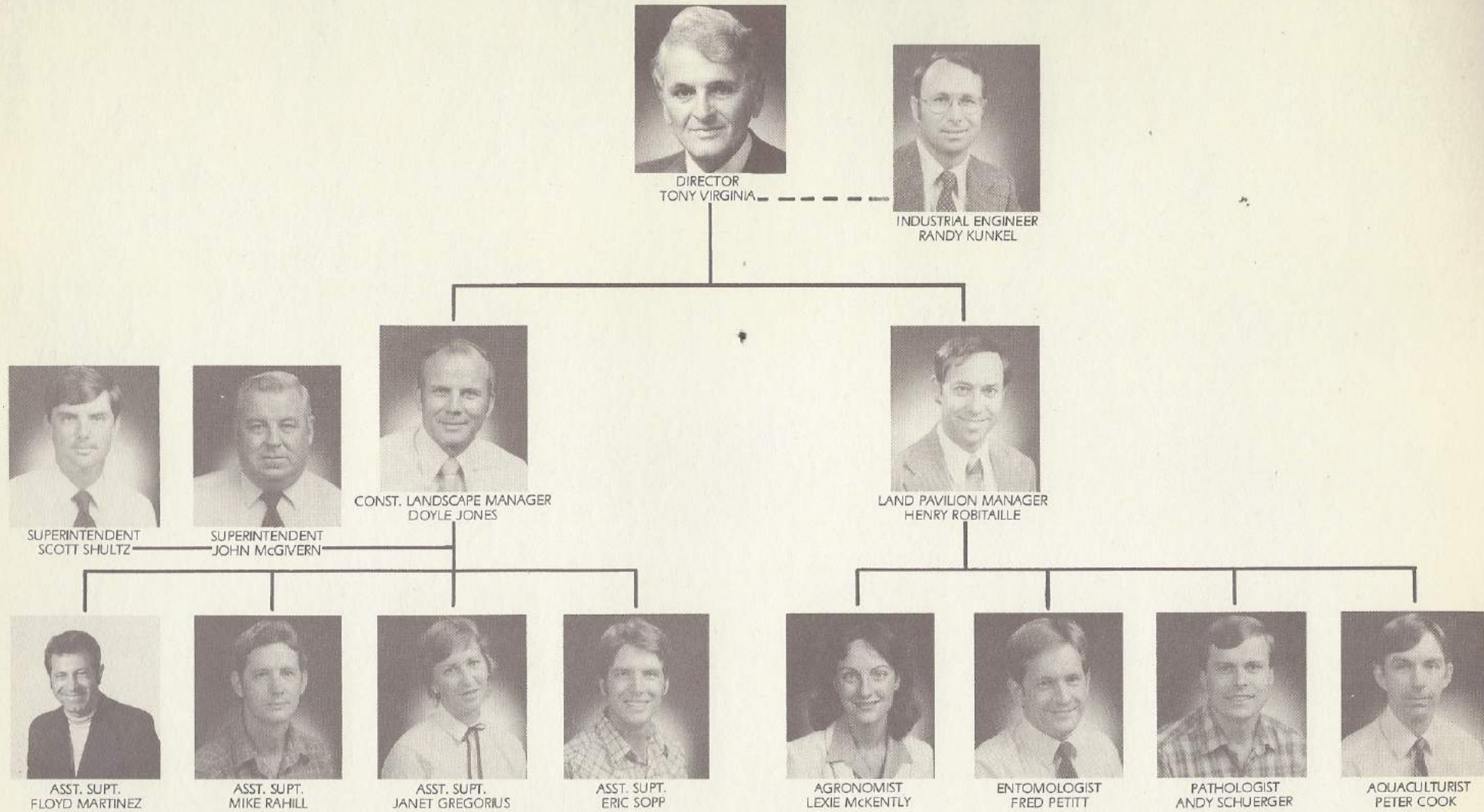


MANAGER  
WATER AND WASTE  
CHUCK BURDICK



MANAGER  
ENVIRONMENTAL  
PROGRAMS  
FRED HARDEN

# HORTICULTURE DIVISION





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## REEDY CREEK IMPROVEMENT DISTRICT

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**The Reedy Creek Improvement District** was created by the Florida Legislature in 1967 to provide those essential public services necessary for WALT DISNEY WORLD, and to create the legislative and regulatory environment necessary for private industry to innovate and build a community of the future.

**Administration** — A Board of Supervisors, elected by District landowners, is the governing body of the District and has the responsibility and the authority to carry out the business of the District, manage the expenditure of funds, employ personnel and adopt rules and regulations.

**Environmental Protection** — The R.C.I.D. Environmental Protection Department monitors surface and potable water at numerous points, and collects air samples at several locations within the District on a regularly scheduled basis. Their findings, tests, and evaluations enable the District to identify and evaluate potential problems and to implement necessary corrective measures and programs.

**Codes** — The EPCOT building, electrical, mechanical and plumbing codes are essential in order to promote uniformity of design, construction, materials, and systems within the District. Acceptance of these codes has assured safe, efficient building construction and providing for the use of modern technology.

**Water Control** — A system of canals, water control structures, and levees were developed in accordance with State laws governing water control plans to help maintain natural ground and surface water levels, and provide protection against floods during periods of extreme rainfall.

**Fire Protection and Safety** — The District maintains a 24-hour fire protection and prevention program staffed by full-time, professionally trained personnel and equipped to extinguish both structural and forest fires. Additionally, the department maintains 24-hour ambulance and paramedic service to provide a maximum degree of safety within seconds from guests and employees.

**Waste Water Treatment** — The District's Waste Water Treatment Plant exceeds the sewage treatment standards of the Florida Department of

Environmental Regulation. Harmful bacteria are removed and a significant portion of nutrients from reclaimed water to be used for irrigation of the Experimental Tree Farm.

**Waste Reduction** — Solid waste is collected and transferred to a central collection point for disposal, utilizing mechanized equipment to the maximum extent possible in the handling and transporting of waste material and residue.

**Land Use Planning** — The District has adopted the R.C.I.D. Comprehensive Plan that prescribes goals, policies, standards and procedures that continue to guide and insure orderly and balanced future growth and land use that are feasible and practical from an environmental, economic, social, physical, fiscal and engineering standpoint.

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## REEDY CREEK IMPROVEMENT DISTRICT

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DIRECTOR  
GENERAL MANAGER  
THOMAS M. MOSES



MANAGER BUILDING  
AND SAFETY  
STANLEY FLETCHER



DEPUTY MANAGER  
ROBERT DUNCAN



MANAGER  
FIRE SERVICES  
OTIS CASTO



DEPUTY MANAGER  
LEE WILSON



MANAGER  
ENVIRONMENTAL  
PROTECTION  
GARY GORNITO



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## VISTA-UNITED TELECOMMUNICATIONS

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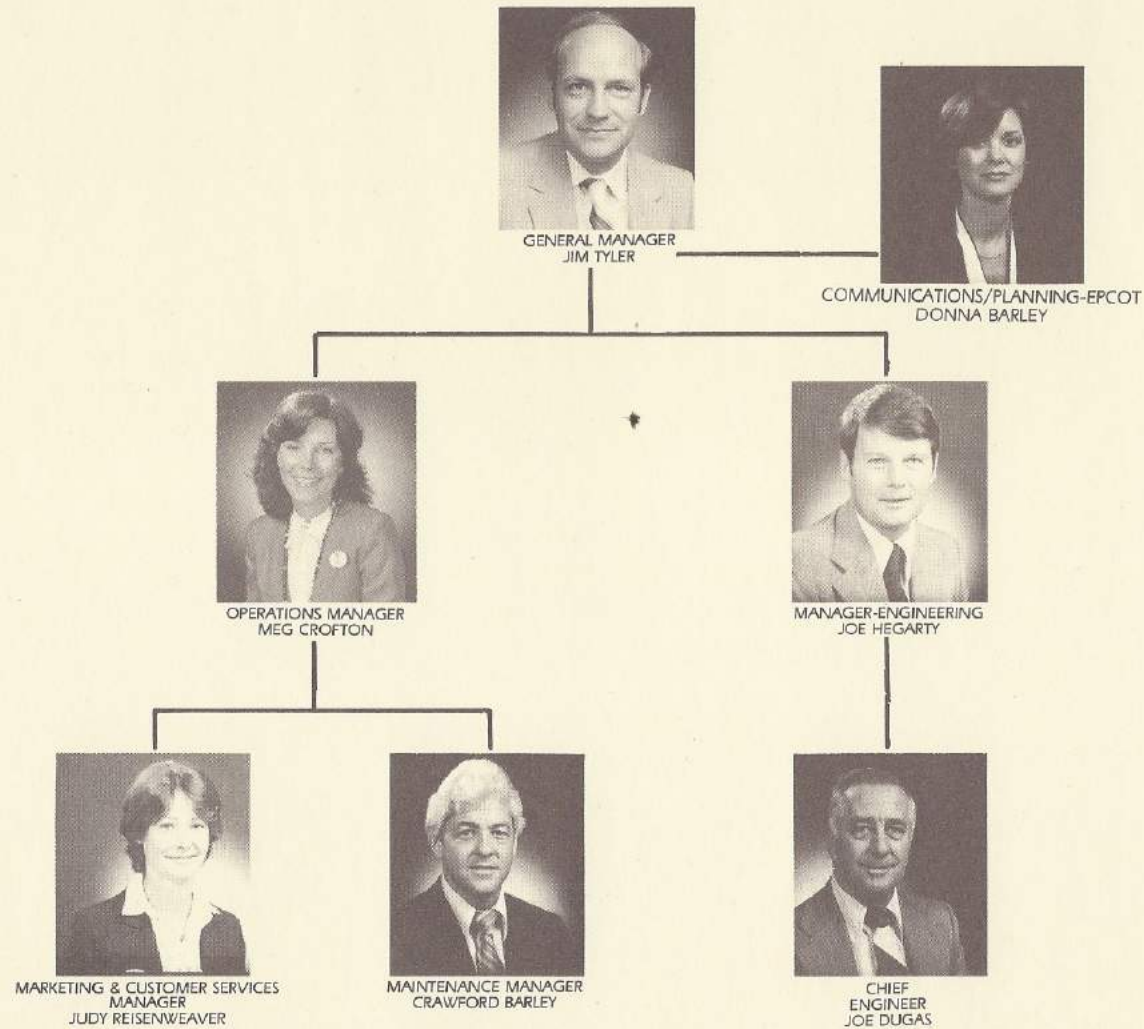
**Vista-United Telecommunications** was formed as a partnership between Walt Disney Productions and Florida Telephone Corporation, as subsidiary of the United Telecommunications, Incorporated. Vista's services to the Walt Disney World complex include a total electronic switching network, digital computer telephone system, and the first commercial fiber optic system and first video display long distance operator system in the Continental United States.

The World Communications Center serves as company headquarters for Vista-United Telecommunications, which is comprised of the following departments: Maintenance Services, Revenue and Administrative Services, Marketing and Customer Services, Training and Personnel, and Engineering.

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# VISTA-UNITED TELECOMMUNICATIONS

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# ITALY

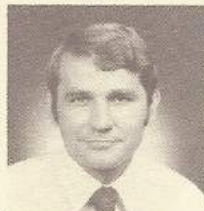
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JEFF BURTON  
PROJECT MANAGER



BILL TYSON  
RESIDENT ENGINEER



BRUCE MacDonald  
BVCC PROJECT MANAGER



RON STAHLHUT  
TISHMAN PROJECT MANAGER



PETE RAHILL  
PICO COORDINATOR



DON GOLDE  
PROJECT BUSINESS ADMINISTRATOR



DAVE YANCHAR  
PROJECT PLANNER

GENERAL CONTRACTOR: INLAND CONSTRUCTION COMPANY



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# JAPAN

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JIM WOLFORD  
PROJECT MANAGER



ALLEN MOYER  
RESIDENT ENGINEER



JERRY HUNT  
BVCC PROJECT MANAGER



JOHN MOORE  
TISHMAN PROJECT MANAGER



PETE RAHILL  
PICO COORDINATOR



JOANNE FERNHOLZ  
PROJECT BUSINESS ADMINISTRATOR



LINDA NATIONS  
PROJECT PLANNER

GENERAL CONTRACTOR: PALMER-SMITH COMPANY

# MEXICO

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BRUCE DUNFORD  
PROJECT MANAGER



JOHN PIECHALAK  
RESIDENT ENGINEER



DON VINSON  
BVCC PROJECT MANAGER



JOHN RYAN  
TISHMAN PROJECT MANAGER



CAROLE MITCHELL  
PICO COORDINATOR



DON GOLDE  
PROJECT BUSINESS ADMINISTRATOR



TOM LEE  
PROJECT PLANNER

GENERAL CONTRACTOR: R. E. DAILEY AND COMPANY



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## SHOWCASE AREA DEVELOPMENT LANDSCAPING

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DON HUGHES  
PROJECT MANAGER



BILL COAN  
RESIDENT ENGINEER



JIM FRANKLIN  
BVCC PROJECT MANAGER



JOHN PAYNE  
PICO COORDINATOR



JOANNE FERNHOLZ  
PROJECT BUSINESS ADMINISTRATOR



DAVE YANCHAR  
PROJECT PLANNER

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## UNITED KINGDOM

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JOE NAVARRO  
PROJECT MANAGER



JIM BARRETT  
RESIDENT ENGINEER



JERRY HUNT  
BVCC PROJECT MANAGER



ROBBY BLACKMAN  
TISHMAN PROJECT MANAGER



ALAN BOURGEOIS  
PICO COORDINATOR



JOANNE FERNHOLZ  
PROJECT BUSINESS ADMINISTRATOR



DAVE YANCHAR  
PROJECT PLANNER

GENERAL CONTRACTOR: PEPPER CONSTRUCTION COMPANY