

Josh Woolcock Structural Parfit / Geshwinder

# OVERALL EXISTING CONDITIONS SUMMARY

12 September 2002

### EXECUTIVE SUMMARY

The Following report summarizes the vital information pertaining to the design and construction of the Discovery Communications Headquarters in Silver Springs, Maryland. This information includes, but is not limited to: Project team, Costs, Pertaining Model Codes, and brief descriptions of the major building systems.

### PRIMARY PROJECT TEAM

Owner – Discovery Communications Inc. General Contractor - Clark Construction Construction Manager - Clark Construction Architect - SmithGroup Engineers Structural – KTLH Engineering MEP – Flack & Kurtz

Civil – VIKA Inc.

### CONSTRUCTION DATES

Start – January 2001 Finish – December 2002

### COSTS

Earthwork	\$2,295,000
Concrete	\$17,818,500
Metals	\$2,301,500
Stone	\$1,849,500
Metal Panels	\$1,852,600
Glass & Glazing	\$10,291,500
Roofing	\$489,900
Elevators	\$2,429,900
Mechanical	\$6,281,600
Fire Protection	\$1,131,700
Electrical	\$5,187,400

### **BUILDING FUNCTION**

Office Building – Discovery Communication World Headquarters BOCA Designation – Business Group B

### LOCATION

Silver Springs, MD Montgomery County



# ARCHITECTURE

This 600,00 sqft. building is comprised of two independent towers, one 10-stories the other 8-stories, located perpendicular to each other forming a L-pattern. These buildings are built above 3 levels or parking space. Used primarily for office space, the floor layouts offer vast amounts open space for this purpose. The exterior is comprised of an aluminum and glass curtainwall giving the building a modern appearance.

### NATIONAL MODEL CODES

Building	BOCA 1996 w/ Montgomery County Amendments	
Fire	NFPA 101 1997 w/ Montgomery County Amendments	
Mechanical	International Mechanical Code w/ Montgomery County	
Amendments		
Electrical	NFPA 70 1999 w/ Montgomery County Amendments	
Energy	BOCA Energy Code 1996	
Accessibility	COMAR 05.02.02 Maryland Accessibility Code	
Plumbing	WSSC Plumbing & Gas Regulations 1994	
Elevators	ASME A17.1	

### ZONING & HISTORICAL

Commercial Building Zone No Historical Aspects

### PROJECT DELIVERY

Design-Bid-Build GMP Contract

# **BUILDING ENVELOPE**

Aluminum and Glass Curtainwall

### ELECTRICAL

Electricity is provided by (3) 4000A 460Y/265V three-phase feeders, totaling 12000A of available power. Each feeder supplies its own switchboard, which in turn supply different zones of the building. A 1500KW/1875KVA diesel generator set supplies emergency power to the vital systems

### LIGHTING

Lighting systems for the fixed occupancy spaces, such as lobbies, bathrooms and stairs use a wide range of fixtures. Lobbies range from metal halide wall washers and down lights to recessed fluorescents. Bathrooms receive recessed fluorescents and surface mounted fluorescent strip lighting at the mirrors. Lighting in the stair towers is also provided b surface mounted strip fluorescent fixtures. Lighting in the main office spaces reserved for the tenant. Extensive outside lighting is used including recessed metal halide in the rooftop garden and trellis. Typical metal halide garage lights provide lighting throughout the parking levels.



### MECHANICAL

Three individual air-handling units on each floor of the building provide HVAC services. Chilled water is provided by three electric centrifugal water chillers and roof mounted cooling towers. Heat is provided by three gas-fires furnace systems. Separate air-cooled air conditioning units are located in telecommunication rooms. An independent AHU is used in the atrium to deal with smoke. Slab heating is provided for areas of the first floor by a 277V in-slab heating cable system. Fresh air is provided to the parking areas by five supply fans per level ranging in size from 15,000 cfm to 38,000 cfm. Two 72,000 cfm fans at each level remove exhaust air. All fans are equipped with sound attenuators.

### STRUCTURAL

A 2-way concrete slab and column system comprises the superstructure of this building. General column placement, locates 18"x24" columns along a 30' x 30' grid. These columns support a 9" slab with 7.5" drop panels at columns. All concrete is 4000psi except for girders, which use 10,000psi concrete.

#### FIRE PROTECTION

Each floor of the building, including underground parking, is fully sprinkled with quick response sprinkler heads. Four inch standpipes service the parking levels while six inch are used in the office levels.

#### TRANSPORTATION

This building contains thirteen elevators. Eleven of these are electric traction elevators equipped with 60hp motors and have a capacity of 4,000lbs. The remaining two elevators are hydraulic freight elevators rated at 4,500lbs and a speed of 200 fpm.

### TELECOMUNICATIONS

Building is wired for telephone and computer network services to be later determined by tenant. Telecommunication Pathways and grounding risers installation is extent of work.