RSMeans.

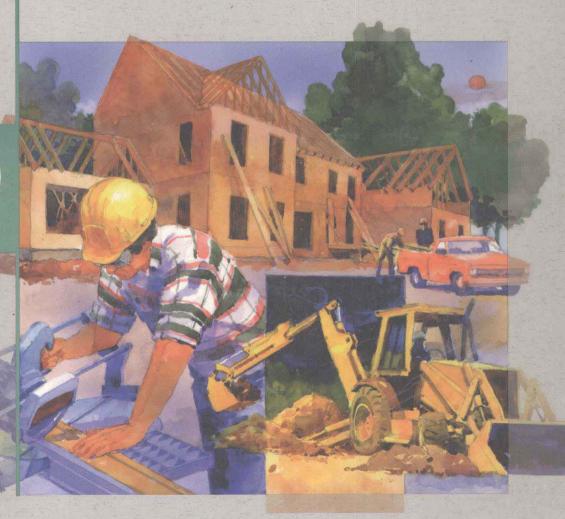
Residential Cost Data

18th Annual Edition

1999



R.S. Means 1998 Industrial Appreciation Award Recipient



RSMeans_®

Residential Cost Data

18th Annual Edition

- Square Foot Costs
- Systems Costs
- Unit Costs

1999

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First Printing

Foreword

R.S. Means Co., Inc. is owned by CMD Group, a leading worldwide provider of proprietary construction information. CMD Group is comprised of three synergistic product groups crafted to be the complete resource for reliable, timely and actionable construction market data. In North America, CMD Group encompasses: Architects' First Source, an innovative product selection and specification solution in print and on the Internet; Construction Market Data (CMD), the source for construction activity information, as well as early planning reports for the design community; Associated Construction Publications, with 14 magazines, one of the largest editorial networks dedicated to U.S. highway and heavy construction coverage; Manufacturer's Survey Associates (MSA), a leading estimating and quantity survey firm in the U.S.; R.S. Means, the authority on construction cost data in North America; CMD Canada, the leading supplier of project information, industry news and forecasting data products for the Canadian construction industry; and BIMSA/Mexico, the dominant distributor of information on building projects and construction throughout Mexico. Worldwide, CMD Group includes Byggfakta Scandinavia, providing construction market data to Denmark, Estonia, Finland, Norway and Sweden; and Cordell Building Information Services, the market leader for construction and cost information in Australia.

Our Mission

Since 1942, R.S. Means Company, Inc. has been actively engaged in construction cost publishing and consulting throughout North America.

Today, over fifty years after the company began, our primary objective remains the same: to provide you, the construction and facilities professional, with the most current and comprehensive construction cost data possible.

Whether you are a contractor, an owner, an architect, an engineer, a facilities manager, or anyone else who needs a quick construction cost estimate, you'll find this publication to be a highly useful and necessary tool.

Today, with the constant flow of new construction methods and materials, it's difficult to find the time to look at and evaluate all the different construction cost possibilities. In addition, because labor and material costs keep changing, last year's cost information is not a reliable basis for today's estimate or budget.

That's why so many construction professionals turn to R.S. Means. We keep track of the costs for you, along with a wide range of other key information, from city cost indexes . . . to productivity rates . . . to crew composition . . . to contractor's overhead and profit rates.

R.S. Means performs these functions by collecting data from all facets of the industry, and organizing it in a format that is instantly accessible to you. From the preliminary budget to the detailed unit price estimate, you'll find the data in this book useful for all phases of construction cost determination.

The Staff, the Organization, and Our Services

When you purchase one of R.S. Means' publications, you are in effect hiring the services of a full-time staff of construction and engineering professionals.

Our thoroughly experienced and highly qualified staff works daily at collecting, analyzing, and disseminating comprehensive cost information for your needs. These staff members have years of practical construction experience and engineering training prior to joining the firm. As a result, you can count on them not only for the cost figures, but also for additional background reference information that will help you create a realistic estimate.

The Means organization is always prepared to help you solve construction problems through its five major divisions: Construction and Cost Data Publishing, Electronic Products and Services, Consulting Services, Insurance Division, and Educational Services. Besides a full array of construction cost estimating books, Means also publishes a number of other reference works for the construction industry. Subjects include construction estimating and project and business management; special topics such as HVAC, roofing, plumbing, and hazardous waste remediation; and a library of facility management references.

In addition, you can access all of our construction cost data through your computer with Means CostWorks '99 CD-ROM, an electronic tool that offers over 50,000 lines of Means construction cost data.

What's more, you can increase your knowledge and improve your construction estimating and management performance with a Means Construction Seminar or In-House Training Program. These two-day seminar programs offer unparalleled opportunities for everyone in your organization to get updated on a wide variety of construction-related issues.

Means also is a worldwide provider of construction cost management and analysis services for commercial and government owners and of claims and valuation services for insurers.

In short, R.S. Means can provide you with the tools and expertise for constructing accurate and dependable construction estimates and budgets in a variety of ways.

Robert Snow Means Established a Tradition of Quality That Continues Today

Robert Snow Means spent years building his company, making certain he always delivered a quality product.

Today, at R.S. Means, we do more than talk about the quality of our data and the usefulness of our books. We stand behind all of our data, from historical cost indexes... to construction materials and techniques... to current costs

If you have any questions about our products or services, please call us toll-free at 1-800-334-3509. Our customer service representatives will be happy to assist you.

How the Book Is Built: An Overview

A Powerful Construction Tool

You have in your hands one of the most powerful construction tools available today. A successful project is built on the foundation of an accurate and dependable estimate. This book will enable you to construct just such an estimate.

For the casual user the book is designed to be:

- quickly and easily understood so you can get right to your estimate
- filled with valuable information so you can understand the necessary factors that go into the cost estimate

For the regular user, the book is designed to be:

- a handy desk reference that can be quickly referred to for key costs
- a comprehensive, fully reliable source of current construction costs and productivity rates, so you'll be prepared to estimate any project
- a source book for preliminary project cost, product selections, and alternate materials and methods

To meet all of these requirements we have organized the book into the following clearly defined sections.

Square Foot Cost Section

This section lists Square Foot costs for typical residential construction projects. The organizational format used divides the projects into basic building classes. These classes are defined at the beginning of the section. The individual projects are further divided into ten common components of construction. An outline of a typical page layout, an explanation of Square Foot prices, and a Table of Contents are located at the beginning of the section.

Assemblies Cost Section

This section uses an "Assemblies" (sometimes referred to as "systems") format grouping all the functional elements of a building into 9 construction divisions.

At the top of each "Assembly" cost table is an illustration, a brief description, and the design criteria used to develop the cost. Each of the components and its contributing cost to the system is shown.

Material: These cost figures include a standard 10% markup for "handling". They are national average material costs as of January of the current year and include delivery to the job site.

Installation: The installation costs include labor and equipment, plus a markup for the installing contractor's overhead and profit. For a complete breakdown and explanation of a typical "Assemblies" page, see "How To Use Assemblies Cost Tables" at the beginning of the Assembly Section.

Unit Price Section

All cost data has been divided into the 16 divisions according to the MasterFormat system of classification and numbering as developed by the Construction Specifications Institute (CSI) and Construction Specifications Canada (CSC). For a listing of these divisions and an outline of their subdivisions, see the Unit Price Section Table of Contents.

Estimating tips are included at the beginning of each division.

Reference Section

This section includes information on Reference Numbers, Crew Listings, Location Factors, and a listing of Abbreviations. It is visually identified by a vertical gray bar on the edge of pages.

Reference Numbers: At the beginning of selected major classifications in the Unit Price Section are "reference numbers" shown in bold squares. These numbers refer you to related information in the Reference Section. In this section, you'll find reference tables, explanations, and estimating information that support how we develop the unit price data. Also included are alternate pricing methods, technical data, and estimating procedures, along with information on design and economy in construction. You'll also find helpful tips on what to expect and what to avoid when estimating and constructing your project.

It is recommended that you refer to the Reference Section if a "reference number" appears within the major classification you are estimating. Crew Listings: This section lists all the crews referenced in the book. For the purposes of this book, a crew is composed of more than one trade classification and/or the addition of power equipment to any trade classification. Power equipment is included in the cost of the crew. Costs are shown both with bare labor rates and with the installing contractor's overhead and profit added. For each, the total crew cost per eight-hour day and the composite cost per labor-hour are listed.

Location Factors: Costs vary depending upon regional economy. You can adjust the "national average" costs in this book to over 930 major cities throughout the U.S. and Canada by using the data in this section.

Abbreviations: A listing of the abbreviations used throughout this book, along with the terms they represent, is included.

Index

A comprehensive listing of all terms and subjects in this book to help you find what you need quickly when you are not sure where it falls in MasterFormat.

The Scope of This Book

This book is designed to be as comprehensive and as easy to use as possible. To that end we have made certain assumptions and limited its scope in three key ways:

- We have established material prices based on a "national average."
- We have computed labor costs based on a 7 major region average of open shop wage rates.
- 3. We have targeted the data for projects of a certain size range.

Project Size

This book is intended for use by those involved primarily in Residential construction costing less than \$750,000. This includes the construction of homes, row houses, townhouses, condominiums and apartments.

With reasonable exercise of judgment the figures can be used for any building work. For other types of projects, such as repair and remodeling or commercial buildings, consult the appropriate MEANS publication for more information.

How to Use the Book: The Details

What's Behind the Numbers? The Development of Cost Data

The staff at R.S. Means continuously monitors developments in the construction industry in order to ensure reliable, thorough and up-to-date cost information.

While *overall* construction costs may vary relative to general economic conditions, price fluctuations within the industry are dependent upon many factors. Individual price variations may, in fact, be opposite to overall economic trends. Therefore, costs are continually monitored and complete updates are published yearly. Also, new items are frequently added in response to changes in materials and methods.

Costs—\$ (U.S.)

All costs represent U.S. national averages and are given in U.S. dollars. The Means Location Factors can be used to adjust costs to a particular location. The Location Factors for Canada can be used to adjust U.S. national averages to local costs in Canadian dollars.

Material Costs

The R.S. Means staff contacts manufacturers, dealers, distributors, and contractors all across the U.S. and Canada to determine national average material costs. If you have access to current material costs for your specific location, you may wish to make adjustments to reflect differences from the national average. Included within material costs are fasteners for a normal installation. R.S. Means engineers use manufacturers' recommendations, written specifications and/or standard construction practice for size and spacing of fasteners. Adjustments to material costs may be required for your specific application or location. Material costs do not include sales tax.

Labor Costs

Labor costs are based on the average of open shop wages from across the U.S. for the current year. Rates along with overhead and profit markups are listed on the inside back cover of this book.

 If wage rates in your area vary from those used in this book, or if rate increases are expected within a given year, labor costs should be adjusted accordingly.

Labor costs reflect productivity based on actual working conditions. These figures include time spent during a normal workday on tasks other than actual installation, such as material receiving and handling, mobilization at site, site movement, breaks, and cleanup.

Productivity data is developed over an extended period so as not to be influenced by abnormal variations and reflects a typical average.

Equipment Costs

Equipment costs include not only rental, but also operating costs for equipment under normal use. The operating costs include parts and labor for routine servicing such as repair and replacement of pumps, filters and worn lines. Normal operating expendables such as fuel, lubricants, tires and electricity (where applicable) are also included. Extaordinary operating expendables with highly variable wear patterns such as diamond bits and blades are excluded. These costs are included under materials. Equipment rental rates are obtained from industry sources throughout North America—contractors, suppliers, dealers, manufacturers, and distributors.

Crew Equipment Cost/Day—The power equipment required for each crew is included in the crew cost. The daily cost for crew equipment is based on dividing the weekly bare rental rate by 5 (number of working days per week), and then adding the hourly operating cost times 8 (hours per day). This "Crew Equipment Cost/Day" is listed in Subdivision 016.

Factors Affecting Costs

Costs can vary depending upon a number of variables. Here's how we have handled the main factors affecting costs.

Quality—The prices for materials and the workmanship upon which productivity is based represent sound construction work. They are also in line with U.S. government specifications.

Overtime—We have made no allowance for overtime. If you anticipate premium time or work beyond normal working hours, be sure to make an appropriate adjustment to your labor costs.

Productivity—The productivity, daily output, and labor-hour figures for each line item are based on working an eight-hour day in daylight hours in moderate temperatures. For work that extends beyond normal work hours or is performed under adverse conditions, productivity may decrease. (See the section in "How To Use the Unit Price Pages" for more on productivity.)

Size of Project—The size, scope of work, and type of construction project will have a significant impact on cost. Economies of scale can reduce costs for large projects. Unit costs can often run higher for small projects. Costs in this book are intended for the size and type of project as previously described in "How the Book Is Built: An Overview." Costs for projects of a significantly different size or type should be adjusted accordingly.

Location—Material prices in this book are for metropolitan areas. However, in dense urban areas, traffic and site storage limitations may increase costs. Beyond a 20-mile radius of large cities, extra trucking or transportation charges may also increase the material costs slightly. On the other hand, lower wage rates may be in effect. Be sure to consider both these factors when preparing an estimate, particularly if the job site is located in a central city or remote rural location.

In addition, highly specialized subcontract items may require travel and per diem expenses for mechanics.

Other factors-

- · season of year
- · contractor management
- · weather conditions
- · local union restrictions
- · building code requirements
- · availability of:
 - · adequate energy
 - · skilled labor
 - · building materials
- · owner's special requirements/restrictions
- · safety requirements
- · environmental considerations

General Conditions-The "Square Foot" and "Assemblies" sections of this book use costs that include the installing contractor's overhead and profit (O&P). The Unit Price Section presents cost data in two ways: Bare Costs and Total Cost including O&P (Overhead and Profit). General Conditions, when applicable, should also be added to the Total Cost including O&P. The costs for General Conditions are listed in Division 1 of the Unit Price Section and the Reference Section of this book. General Conditions for the Installing Contractor may range from 0% to 10% of the Total Cost including O&P. For the General or Prime Contractor, costs for General Conditions may range from 5% to 15% of the Total Cost including O&P, with a figure of 10% as the most typical allowance.

Overhead & Profit—Total Cost including O&P for the *Installing Contractor* is shown in the last column on both the Unit Price and the Assemblies pages of this book. This figure is the sum of the bare material cost plus 10% for profit, the base labor cost plus overhead and profit, and the bare equipment cost plus 10% for profit. Details for the calculation of Overhead and Profit on labor are shown on the inside back cover and in the Reference Section of this book. (See the "How to Use the Unit Price Pages" for an example of this calculation.)

Unpredictable Factors—General business conditions influence "in-place" costs of all items. Substitute materials and construction methods may have to be employed. These may affect the installed cost and/or life cycle costs. Such factors may be difficult to evaluate and cannot necessarily be predicted on the basis of the job's location in a particular section of the country. Thus, where these factors apply, you may find significant, but unavoidable cost variations for which you will have to apply a measure of judgment to your estimate.

Rounding of Costs

In general, all unit prices in excess of \$5.00 have been rounded to make them easier to use and still maintain adequate precision of the results. The rounding rules we have chosen are in the following table.

| Prices from | Rounded to the nearest |
|----------------------------|------------------------------|
| \$.01 to \$5.00 | \$.01 |
| \$5.01 to \$20.00 | \$.05 |
| \$20.01 to \$100.00 | \$.50 |
| \$100.01 to \$300.00 | \$1.00 |
| \$300.01 to \$1,000.00 | \$5.00 |
| \$1,000.01 to \$10,000.00 | \$25.00 |
| \$10,000.01 to \$50,000.00 | \$100.00 |
| \$50,000.01 and above | \$500.00 |

Final Checklist

Estimating can be a straightforward process provided you remember the basics. Here's a checklist of some of the items you should remember to do before completing your estimate.

Did you remember to . . .

- · factor in the Location Factor for your locale
- take into consideration which items have been marked up and by how much
- mark up the entire estimate sufficiently for your purposes
- read the background information on techniques and technical matters that could impact your project time span and cost
- include all components of your project in the final estimate
- double check your figures to be sure of your accuracy
- call R.S. Means if you have any questions about your estimate or the data you've found in our publications

Remember, R.S. Means stands behind its publications. If you have any questions about your estimate . . . about the costs you've used from our books . . . or even about the technical aspects of the job that may affect your estimate, feel free to call the R.S. Means editors at 1-781-585-7898 or 1-800-448-8182.

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| Installing Contractor's Overhead & Profit | Inside Back Cover |

RESIDENTIAL SQUARE FOOT COSTS

| UNIT PRICES | |
|-------------------------------|----|
| GENERAL REQUIREMENTS | |
| SITE WORK | 2 |
| CONCRETE | 3 |
| MASONRY | 4 |
| METALS | 5 |
| WOOD & PLASTICS | 6 |
| THERMAL & MOISTURE PROTECTION | 7 |
| DOORS & WINDOWS | 8 |
| FINISHES | 9 |
| SPECIALTIES | 10 |
| EQUIPMENT | |
| FURNISHINGS | 12 |
| SPECIAL CONSTRUCTION | 13 |
| CONVEYING SYSTEMS | 14 |
| MECHANICAL | 15 |
| ELECTRICAL | 16 |

ASSEMBLIES

CREWS

INDEX

LOCATION FACTORS

| SITE WORK | |
|-----------------------|---|
| FOUNDATIONS | 2 |
| FRAMING | 3 |
| EXTERIOR WALLS | 4 |
| ROOFING | 5 |
| INTERIOR CONSTRUCTION | 6 |
| SPECIALTIES | 7 |
| MECHANICAL | 8 |
| ELECTRICAL | 9 |
| REFERENCE INFORMATION | |
| REFERENCE NUMBERS | |

| | 20 Subsurface Investigation 20 700 Selective Demolition | | | LABOR- | | 1999 R | ARE COSTS | | TOTAL |
|--------------|--|--------|----------|---------|---------|--------------|---------------------------------------|--------------|-------------------|
| | | CREW | | HOURS | UNIT | MAT. LABOR | EQUIP. | TOTAL | TOTAL |
| 2380 | 8' long, 2 lamp | 2 Elec | | .400 | Ea. | 8.55 | The second second | 8.55 | INCL 0&P 13.95 |
| 2460 | Interior incandescent, surface, ceiling | | | 1100 | Lu. | 0.50 | <u> </u> | 0.33 | 15.90 |
| 2470 | | _ | | | | | | | |
| 2480 | The state of the s | 2 Elec | 62 | .258 | Ea. | 5.50 | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | 5.50 | 0 |
| 2600 | The sympon sype, is that | 2 LIEC | 02 | .230 | La. | 3.30 |) | 5.50 | 9 |
| 2620 | - The second of | 2 Elec | 50 | .320 | Γ. | 6.00 | | 6.05 | |
| 3000 | The state of the s | 1 Elec | 18 | .320 | Ea. | 6.85 | | 6.85 | 11.15 |
| 9000 | and ten out and tenote | 1 Elec | | | | 9.50 | 1 1 | 9.50 | 15.50 |
| | , | | 4 | 2 | Job | 42.50 | | 42.50 | 70 |
| 0010 | The state of the s | 0.011 | | | | 1-700 | | - | |
| | Management Comment of the Comment of | 2 Clab | 475 | .034 | S.F. | .47 | | .47 | .81 |
| 0400 | | | 2,000 | .008 | | .11 | | .11 | .19 |
| 0480 | | | 9,000 | .002 | | .02 | | .02 | .04 |
| 0800 | , | | 1,400 | .011 | | .16 | 1 1 | .16 | .27 |
| 0900 | , | | 1,000 | .016 | | .22 | | .22 | .38 |
| 2000 | , | | 675 | .024 | | .33 | | .33 | .57 |
| 2020 | | ↓ | 625 | .026 | | .36 | | .36 | .61 |
| 3000 | PROPERTY OF THE PROPERTY OF TH | 1 Carp | 400 | .020 | | .38 | | .38 | .65 |
| 3200 | Parquet | | 450 | .018 | | .34 | | .34 | .58 |
| 3400 | Strip flooring, interior, 2-1/4" x 25/32" thick | | 325 | .025 | | .47 | | .47 | .81 |
| 3500 | Exterior, porch flooring, 1" x 4" | | 220 | .036 | | .69 | | .69 | 1.19 |
| 3800 | Subfloor, tongue and groove, 1" x 6" | | 325 | .025 | | .47 | | .47 | .81 |
| 3820 | 1" x 8" | | 430 | .019 | | .36 | | .36 | .61 |
| 3840 | 1" x 10" | | 520 | .015 | | .29 | | .29 | .50 |
| 4000 | Plywood, nailed | | 600 | .013 | | .25 | 1 | .25 | .44 |
| 4100 | Glued and nailed | | 400 | .020 | | .38 | | .38 | .65 |
| | | , | | | • | | | | 99,000 |
| | FRAMING DEMOLITION | | | | | | | | |
| 3000 | Wood framing, beams, 6" x 8" | B-2 | 275 | .145 | L.F. | 2.09 | | 2.09 | 3.58 |
| 3040 | 6" x 10" | | 220 | .182 | | 2.61 | | 2.61 | 4.47 |
| 3080 | 6" x 12" | | 185 | .216 | | 3.10 | | 3.10 | 5.30 |
| 3120 | 8" x 12" | | 140 | .286 | | 4.10 | | 4.10 | 7.05 |
| 3160 | 10" x 12" | ₩ | 110 | .364 | | 5.20 | | 5.20 | 8.95 |
| 3400 | Fascia boards, 1" x 6" | 1 Clab | 500 | .016 | | .22 | | .22 | .38 |
| 3440 | 1" x 8" | | 450 | .018 | | .25 | | .25 | .42 |
| 3480 | 1" x 10" | | 400 | .020 | | .28 | | .28 | .48 |
| 3800 | Headers over openings, 2 @ 2" x 6" | | 110 | .073 | | 1.01 | | 1.01 | 1.74 |
| 3840 | | | 100 | .080 | | 1.12 | | 1.12 | 1.91 |
| 3880 | and the second second | - ↓ | 90 | .089 | | 1.24 | 1 | 1.24 | 2.12 |
| 4230 | | 2 Clab | 970 | .016 | | .23 | | .23 | .39 |
| 4240 | * 0000-0000-000 - 0000 - 0000 - 0000 | | 940 | .017 | | .24 | 1 1 | .24 | .41 |
| 4250 | | | 910 | .017 | | .25 | | .25 | .42 |
| 4280 | | | 880 | .018 | | .25 | . 1 | .25 | .42 |
| | | | 800 | .020 | | .28 | | .28 | .43 |
| 5400 | | | 515255 | .040 | | .28 | .1 | .56 | .40 |
| 5440 | | | 400 | NYS 000 | | .30 | | .74 | 1.27 |
| 5480 | | | 300 | .053 | | | II II | | |
| 5500 | | - | 240 | .067 | \perp | .93 | | .93 | 1.59 |
| 5800 | 0 20 34 1 | | 850 | .019 | | .26 | 1 | .26 | .45 |
| 5840 | | | 837 | .019 | • | .27 | | .27 | .46 |
| 6200 | | | 40 | .400 | Riser | 5.60 | 1 | 5.60 | 9.55 |
| 6240 | | | 26 | .615 | " | 8.60 | | 8.60 | 14.70 |
| 6600 | Studs, 2" x 4" | | 2,000 | .008 | L.F. | .11 | | .11 | .19 |
| | | ↓ | 1,600 | .010 | " | .14 | | .14 | .24 |
| 6640 | | | | | | | | | |
| | Trusses, Z" x 4" flat wood construction | | 1 | | | | | | |
| 7000 7050 | | 2 Clab | 74 | .216 | Ea. | 3.02 | | 3.02 | 5.15 |
| | 12' span | 2 Clab | 74 66 | .216 | Ea. | 3.02 3.38 | | 3.02 3.38 | 5.15 5.80 |

| | 20 Subsurface Investigation & | 1 | | LABOR- | | | 1999 BAR | E COSTS | | TATE |
|--------|---|----------|-------|--------|-----------------|------|----------|---------|-------------------|----------|
| U | 20 700 Selective Demolition | CREW | | HOURS | | MAT. | LABOR | 10 | TOTAL | TOTAL |
| 7250 | 28' span | 2 Clab | | .258 | Ea. | MAI. | 3.60 | EQUIP. | TOTAL 3.60 | INCL 0&P |
| 7301 | 30' span | L Olub | 56 | .286 | La. | | 3.99 | | 950-0404 | 6.1 |
| 7350 | 32' span | + | 56 | .286 | | | 5 | | 3.99 | 6.8 |
| 7400 | 34' span | | 54 | .296 | | | 3.99 | | 3.99 | 6.8 |
| 7450 | 36' span | + | | | | | 4.13 | | 4.13 | 7.1 |
| 9000 | | ▼ | 52 | .308 | * | | 4.29 | | 4.29 | 7.3 |
| | Minimum labor/equipment charge | 1 Clab | 4 | 2 | Job | | 28 | | 28 | 48 |
| 9500 | See Div. 020-620 for rubbish handling | | | | | | | | | |
| 2010 | CUTTING D. A.C | | | | | | | | | |
| | GUTTING Building interior, including disposal, dumpster fees not included | | | | | | | | | |
| 0500 | Residential building | | | | | | | | | |
| 0560 | Minimum | B-16 | 400 | .080 | SF Flr. | | 1.19 | 1.11 | 2.30 | 3.25 |
|)580 | Maximum | | 360 | .089 | ** | | 1.32 | 1.23 | 2.55 | 3.60 |
| 900 | Commercial building | | | | | | | | | |
| 1000 | Minimum | B-16 | 350 | .091 | SF Flr. | | 1.36 | 1.26 | 2.62 | 3.7 |
| 1020 | Maximum | " | 250 | .128 | (4) | | 1.91 | 1.77 | 3.68 | 5.20 |
| | | | | | | | | | | |
| 010 | HVAC DEMOLITION | | | | | | | | | |
| 0100 | Air conditioner, split unit, 3 ton | Q-5 | 2 | 8 | Ea. | | 156 | | 156 | 258 |
| 150 | Package unit, 3 ton | Q-6 | 3 | 8 | | | 150 | | 150 | 248 |
| 260 | Baseboard, hydronic fin tube, 1/2" | Q-5 | 117 | .137 | L.F. | | 2.66 | | 2.66 | 4.40 |
| 300 | Boiler, electric | Q-19 | 2 | 12 | Ea. | | 241 | | 241 | 395 |
| 340 | Gas or oil, steel, under 150 MBH | Q-6 | 3 | 8 | //u | | 150 | | 150 | 248 |
| 000 | Ductwork, 4" high, 8" wide | 1 Clab | 200 | .040 | L.F. | | .56 | | .56 | .91 |
| 100 | | I Clab | | .048 | L.F. | | | | | |
| | 6" high, 8" wide | | 165 | | | | .68 | | .68 | 1.1 |
| 200 | 10" high, 12" wide | | 125 | .064 | | | .89 | | .89 | 1.5 |
| 300 | 12"-14" high, 16"-18" wide | | 85 | .094 | | | 1.31 | | 1.31 | 2.2 |
| 500 | 30" high, 36" wide | ♦ | 56 | .143 | ♦ | | 1.99 | | 1.99 | 3.4 |
| 2200 | Furnace, electric | Q-20 | 2 | 10 | Ea. | | 194 | | 194 | 325 |
| 2300 | Gas or oil, under 120 MBH | Q-9 | 4 | 4 | | | 75.50 | | 75.50 | 128 |
| 340 | Over 120 MBH | | 3 | 5.333 | | | 101 | | 101 | 170 |
| 800 | Heat pump, package unit, 3 ton | Q-5 | 2.40 | 6.667 | | | 130 | | 130 | 215 |
| 2840 | Split unit, 3 ton | | 2 | 8 | | 1 | 156 | | 156 | 258 |
| 950 | Tank, steel, oil, 275 gal., above ground | | 10 | 1.600 | | | 31 | | 31 | 51.50 |
| 960 | Remove and reset | ↓ | 3 | 5.333 | ↓ | | 104 | | 104 | 172 |
| 9000 | Minimum labor/equipment charge | Q-6 | 3 | 8 | Job | | 150 | | 150 | 248 |
| | | | | | | | | | | |
| 010 | MILLWORK AND TRIM DEMOLITION | \vdash | | | | | | | | |
| .000 | Cabinets, wood, base cabinets | 2 Clab | 80 | .200 | L.F. | | 2.79 | | 2.79 | 4.78 |
| 020 | Wall cabinets | | 80 | .200 | | | 2.79 | | 2.79 | 4.7 |
| 100 | Steel, painted, base cabinets | | 60 | .267 | | | 3.72 | | 3.72 | 6.3 |
| 500 | Counter top, minimum | | 200 | .080 | \vdash | - | 1.12 | | 1.12 | 1.9 |
| 510 | Counter top, minimum Maximum | | 120 | .133 | | | 1.86 | | 1.12 | 3.1 |
| | 0000 P00000000000000000000000000000000 | | | | ▼ | | | | .11 | .1 |
| 2000 | Paneling, 4' x 8' sheets, 1/4" thick | | 2,000 | .008 | S.F. | | .11 | | | |
| 100 | Boards, 1" x 4" | | 700 | .023 | $\sqcup \sqcup$ | | .32 | | .32 | .5 |
| 2120 | 1" x 6" | | 750 | .021 | | | .30 | | .30 | .5 |
| 140 | 1" x 8" | | 800 | .020 | * | | .28 | | .28 | .4 |
| 000 | Trim, baseboard, to 6" wide | | 1,200 | .013 | L.F. | | .19 | | .19 | .3 |
| 040 | 12" wide | | 1,000 | .016 | | | .22 | | .22 | .3 |
| 100 | Ceiling trim | | 1,000 | .016 | | | .22 | | .22 | .3 |
| 3120 | Chair rail | | 1,200 | .013 | | | .19 | | .19 | .3 |
| 3140 | Railings with balusters | | 240 | .067 | * | | .93 | | .93 | 1.5 |
| 3160 | Wainscoting | | 700 | .023 | S.F. | | .32 | | .32 | .5 |
| 1000 | Curtain rod | 1 Clab | 80 | .100 | L.F. | | 1.39 | | 1.39 | 2.3 |
| | | " | 4 | 2 | Job | | 28 | | 28 | 48 |
| 0000 | Minimum labor/equipment charge | + | 7 | | 300 | | | | | |
| 1/11/0 | PLUMBING DEMOLITION | 1 | I | 1 | | 1 | | 1 | | |

| | A TAA C. | | DAILA | LABOR- | | | 1999 BAR | COCTC | | TAT:: |
|---------------|---|--------|--------|-----------|-----------------|------|-------------|--------|-------------|----------|
| 02 | 20 700 Selective Demolition | CREW | OUTPUT | | UNIT | MAT. | | | TOTAL | TOTAL |
| 1100 | Bath tubs, cast iron | 1 Plum | - | 2 | Ea. | MAI. | LABOR 43 | EQUIP. | TOTAL 43 | INCL 0&P |
| 1120 | Fiberglass | | 6 | 1.333 | La. | | 28.50 | | 28.50 | 71 |
| 1140 | Steel | | 5 | 1.600 | \vdash | | 34.50 | | 34.50 | 47.5 |
| 1200 | Lavatory, wall hung | | 10 | .800 | | | 17.20 | | | 57 |
| 1220 | Counter top | | 8 | 1 | \vdash | | | | 17.20 | 28.5 |
| 1300 | Sink, steel or cast iron, single | | | 1 | | | 21.50 | | 21.50 | 35.5 |
| 1320 | Double | | 8 | 1 1 1 1 2 | $\sqcup \sqcup$ | | 21.50 | | 21.50 | 35.5 |
| | | | 7 | 1.143 | | | 24.50 | | 24.50 | 40.5 |
| 1400 | Water closet, floor mounted | | 8 | 1 | | | 21.50 | | 21.50 | 35.5 |
| 1420 | Wall mounted | 11 | 7 | 1.143 | * | | 24.50 | | 24.50 | 40.5 |
| 2000 | Piping, metal, to 2" diameter | | 200 | .040 | L.F. | | .86 | | .86 | 1.4 |
| 2050 | 2" to 4" diameter | ♦ | 150 | .053 | | | 1.15 | | 1.15 | 1.9 |
| 2100 | 4" to 8" diameter | 2 Plum | 100 | .160 | V | | 3.44 | | 3.44 | 5.7 |
| 2250 | Water heater, 40 gal. | 1 Plum | 6 | 1.333 | Ea. | | 28.50 | | 28.50 | 47.5 |
| 3000 | Submersible sump pump | | 24 | .333 | | | 7.15 | | 7.15 | 11.8 |
| 6000 | Remove and reset fixtures, minimum | | 6 | 1.333 | | | 28.50 | | 28.50 | 47.5 |
| 6100 | Maximum | | 4 | 2 | 1 | | 43 | | 43 | 71 |
| 9000 | Minimum labor/equipment charge | | 2 | 4 | Job | | 86 | | 86 | 142 |
| | | ' | | | | | | | | |
| 0010 F | ROOFING AND SIDING DEMOLITION | | | | | | | | | |
| 1200 | Wood, boards, tongue and groove, 2" x 6" | 2 Clab | 960 | .017 | S.F. | | .23 | | .23 | .4 |
| 1220 | 2" x 10" | | 1.040 | .015 | | | .21 | | .21 | .3 |
| 1280 | Standard planks, 1" x 6" | | 1,080 | .015 | | | .21 | | .21 | .3 |
| 1320 | 1" x 8" | | 1,160 | .014 | \rightarrow | | .19 | | .19 | .3 |
| 1340 | 1" x 12" | | 1,200 | .013 | | | .19 | | .19 | |
| 1350 | Plywood, to 1" thick | | 2,000 | .008 | ++ | | .11 | | .11 | .1 |
| 1360 | Flashing, aluminum | 1 Clab | 290 | .028 | | | .38 | | .38 | .6 |
| 2000 | Gutters, aluminum or wood, edge hung | 1 Clab | 240 | .033 | L.F. | | .36 | | .46 | 3. |
| 2010 | | 1 0 | | | L.F. | | | | | |
| | Remove and reset, aluminum | 1 Shee | 125 | .064 | | | 1.34 | | 1.34 | 2.2 |
| 2020 | Remove and reset, vinyl | 1 Carp | 125 | .064 | | | 1.22 | | 1.22 | 2.1 |
| 2100 | Built-in | 1 Clab | 100 | .080 | * | | 1.12 | | 1.12 | 1.9 |
| 2500 | Roof accessories, plumbing vent flashing | | 14 | .571 | Ea. | | 7.95 | | 7.95 | 13.6 |
| 2600 | Adjustable metal chimney flashing | | 9 | .889 | | | 12.40 | | 12.40 | 21 |
| 2650 | Coping, sheet metal, up to 12" wide | ♦ | 240 | .033 | L.F. | | .46 | | .46 | 3. |
| 2660 | Concrete, up to 12" wide | 2 Clab | 160 | .100 | " | | 1.39 | | 1.39 | 2.3 |
| 3000 | Roofing, built-up, 5 ply roof, no gravel | B-2 | 1,600 | .025 | S.F. | | .36 | | .36 | .6 |
| 3100 | Gravel removal, minimum | | 5,000 | .008 | | | .11 | | .11 | .2 |
| 3120 | Maximum | | 2,000 | .020 | | | .29 | | .29 | .4 |
| 3400 | Roof insulation board, up to 2" thick | ↓ | 3,900 | .010 | V | | .15 | | .15 | .2 |
| 3450 | Roll roofing, cold adhesive | 1 Clab | 12 | .667 | Sq. | | 9.30 | | 9.30 | 15.9 |
| 4000 | Shingles, asphalt strip, 1 layer | B-2 | 3,500 | .011 | S.F. | | .16 | | .16 | .2 |
| 4100 | Slate | | 2,500 | .016 | | | .23 | | .23 | .3 |
| 4300 | Wood | ↓ | 2,200 | .018 | | | .26 | | .26 | .4 |
| 4500 | Skylight to 10 S.F. | 1 Clab | 8 | 1 | Ea. | | 13.95 | | 13.95 | 24 |
| 5000 | Siding, metal, horizontal | | 444 | .018 | S.F. | | .25 | | .25 | .2 |
| 5020 | Vertical | | 400 | .020 | | | .28 | | .28 | .4 |
| 5200 | Wood, boards, vertical | | 400 | .020 | | | .28 | | .28 | .4 |
| 5220 | Clapboards, horizontal | | 380 | .021 | ++ | | .29 | | .29 | .5 |
| 5240 | Shingles | | 350 | .023 | | | .32 | | .32 | .5 |
| 5260 | Textured plywood | + | 725 | .011 | + | | .15 | | .15 | .2 |
| 0010 | WALLS AND PARTITIONS DEMOLITION | | | | | | - | | | |
| 0010 V | Drywall, nailed | 1 Clab | 1,000 | .008 | S.F. | | .11 | | .11 | .1 |
| 1500 | Fiberboard, nailed | , | 900 | .009 | | - | .12 | | .12 | .2 |
| 2200 | Metal or wood studs, finish 2 sides, fiberboard | B-1 | 520 | .046 | | | .67 | | .67 | 1.1 |
| 2250 | Lath and plaster | | 260 | .092 | | | 1.35 | | 1.35 | 2.3 |
| | | | 520 | .046 | | | .67 | | .67 | 1.1 |
| 2300 | Plasterboard (drywall) | | 1 520 | 0.46 | 1 1 1 | | 67 | 1 | 67 | |

| ^ | 20 700 Selective Demolition | | DAILA | LABOR- | | 10 | 99 PAD | E COSTS | | TOTAL |
|------|---|----------|-------|--------|---------------------|---------|--------|---------|------------------|-------------------|
| | 20 700 Selective Demolition | CREW | | HOURS | | | BOR | EQUIP. | TOTAL | TOTAL INCL 0&P |
| 2350 | Plywood | B-1 | 450 | .053 | S.F. | mai. LA | .78 | EQUIF. | .78 | 1.3 |
| 3000 | Plaster, lime and horsehair, on wood lath | 1 Clab | 400 | .020 | 1 | | .28 | | .28 | .4 |
| 3020 | On metal lath | <i>n</i> | 335 | .024 | + | | .33 | | .33 | .5 |
| 0010 | WINDOW DEMOLITION | | | | | | | | | |
| 0200 | Aluminum, including trim, to 12 S.F. | 1 Clab | 16 | .500 | Ea. | | 6.95 | | 6.05 | 11.0 |
| 0240 | To 25 S.F. | 1 Clab | 11 | .727 | La. | | 10.15 | | 6.95 | 11.9 |
| 0280 | To 50 S.F. | | 5 | 1.600 | | l l | 22.50 | | 10.15 | 17.4 |
| 0320 | Storm windows, to 12 S.F. | | 27 | .296 | | | | | 22.50 | 38 |
| 0360 | To 25 S.F. | | 21 | | | | 4.13 | | 4.13 | 7.1 |
| 0400 | To 50 S.F. | | | .381 | | | 5.30 | | 5.30 | 9.1 |
| 0500 | Screens, incl. aluminum frame, small | | 16 | .500 | | | 6.95 | | 6.95 | 11.9 |
| 0510 | | | 20 | .400 | \Box | | 5.60 | | 5.60 | 9.5 |
| 0600 | Large | | 16 | .500 | * | | 6.95 | | 6.95 | 11.9 |
| 0620 | Glass, minimum | | 200 | .040 | S.F. | | .56 | | .56 | .96 |
| | Maximum No. 10.05 | | 150 | .053 | | | .74 | | .74 | 1.27 |
| 2000 | Wood, including trim, to 12 S.F. | | 22 | .364 | Ea. | | 5.05 | | 5.05 | 8.70 |
| 2020 | To 25 S.F. | | 18 | .444 | | | 6.20 | | 6.20 | 10.60 |
| 2060 | To 50 S.F. | ▼ | 13 | .615 | | | 8.60 | | 8.60 | 14.70 |
| 5020 | Remove and reset window, minimum | 1 Carp | 6 | 1.333 | | | 25.50 | | 25.50 | 43.50 |
| 5040 | Average | | 4 | 2 | | | 38 | | 38 | 65.50 |
| 5080 | Maximum | ₩ | 2 | 4 | V | | 76.50 | | 76.50 | 131 |
| 9100 | Window awning, residential | 1 Clab | 80 | .100 | L.F. | | 1.39 | | 1.39 | 2.39 |
| | FOOTINGS AND FOUNDATIONS DEMOLITION | | | | | | | | Ĭ | |
|)200 | Floors, concrete slab on grade, | | | | | | | | | |
|)240 | 4" thick, plain concrete | B-9C | 500 | .080 | S.F. | | 1.15 | .36 | 1.51 | 2.37 |
| 280 | Reinforced, wire mesh | | 470 | .085 | | | 1.22 | .38 | 1.60 | 2.51 |
| 300 | Rods | | 400 | .100 | | | 1.44 | .45 | 1.89 | 2.96 |
|)400 | 6" thick, plain concrete | | 375 | .107 | | | 1.53 | .48 | 2.01 | 3.15 |
|)420 | Reinforced, wire mesh | | 340 | .118 | | | 1.69 | .53 | 2.22 | 3.47 |
|)440 | Rods | ↓ | 300 | .133 | + | | 1.91 | .60 | 2.51 | 3.94 |
| .000 | Footings, concrete, 1' thick, 2' wide | B-5 | 300 | .133 | L.F. | | 2.06 | 3.49 | 5.55 | 7.35 |
| 080 | 1'-6" thick, 2' wide | | 250 | .160 | | | 2.48 | 4.18 | 6.66 | 8.80 |
| 120 | 3' wide | • | 200 | .200 | | | 3.10 | 5.25 | 8.35 | 11 |
| 200 | Average reinforcing, add | | | | . ↓ | | | | 10% | 10% |
| 2000 | Walls, block, 4" thick | 1 Clab | 180 | .044 | S.F. | | .62 | | .62 | 1.06 |
| 2040 | 6" thick | | 170 | .047 | | | .66 | | .66 | 1.12 |
| 2080 | 8" thick | | 150 | .053 | | | .74 | | .74 | 1.27 |
| 2100 | 12" thick | ↓ | 150 | .053 | | | .74 | | .74 | 1.27 |
| 400 | Concrete, plain concrete, 6" thick | B-9 | 160 | .250 | | | 3.59 | 1.13 | 4.72 | 7.40 |
| 2420 | 8" thick | | 140 | .286 | | | 4.10 | 1.29 | 5.39 | 8.45 |
| 2440 | 10" thick | | 120 | .333 | | | 4.78 | 1.50 | 6.28 | 9.85 |
| 2500 | 12" thick | | 100 | .400 | | | 5.75 | 1.80 | 7.55 | 11.85 |
| 2600 | For average reinforcing, add | | 100 | .100 | | | 0.70 | 1.00 | 10% | 10% |
| 1000 | For congested sites or small quantities, add up to | | | | | | | | 200% | 200% |
| 1200 | Add for disposal, on site | B-11A | 232 | .069 | C.Y. | | 1.16 | 3.62 | 4.78 | 5.95 |
| 250 | To five miles | B-30 | 220 | .109 | U.1. | | 1.85 | 7.25 | 9.10 | 11.10 |
| | | 0-30 | LLU | .103 | | | 1.00 | 1.23 | 2.10 | 11.10 |
| | MASONRY DEMOLITION Chimpey 16" v 16" soft old morter | ۸ 1 | 24 | .333 | V.L.F. | | 4.65 | 2.86 | 7.51 | 11.10 |
| .000 | Chimney, 16" x 16", soft old mortar | A-1 | | .333 | ٧.١.٢. | | 6.20 | 3.81 | 10.01 | 14.80 |
| 020 | Hard mortar | | 18 | | | | | 5.70 | 1-03-03-03-03-03 | 22.50 |
| 080 | 20" x 20", soft old mortar | | 12 | .667 | | | 9.30 | | 15 | |
| 100 | Hard mortar | | 10 | .800 | | | 11.15 | 6.85 | 18 | 26.50 |
| 140 | 20" x 32", soft old mortar | | 10 | .800 | $\perp \perp \perp$ | | 11.15 | 6.85 | 18 | 26.50 |
| 160 | Hard mortar | | 8 | 1 | | | 13.95 | 8.60 | 22.55 | 33.50 |
| 1200 | 48" x 48", soft old mortar | | 5 | 1.600 | | | 22.50 | 13.75 | 36.25 | 53 |
| 1220 | Hard mortar | | 4 | 2 | | | 28 | 17.15 | 45.15 | 67 |
| 2000 | Columns, 8" x 8", soft old mortar | ↓ | 48 | .167 | 1 | | 2.33 | 1.43 | 3.76 | 5.5 |

| 020 | 0 700 Selective Demolition | | DAILY | LABOR- | | | 1999 BAR | E COSTS | | TOTAL |
|------|---|----------|-------|--------|--------|------|----------|---------|--------|----------|
| | | CREV | OUTPU | HOURS | UNIT | MAT. | LABOR | EQUIP. | TOTAL | INCL 0&P |
| 2020 | Hard mortar | A-1 | 40 | .200 | V.L.F. | | 2.79 | 1.72 | 4.51 | 6.65 |
| 2060 | 16" x 16", soft old mortar | | 16 | .500 | | | 6.95 | 4.29 | 11.24 | 16.65 |
| 2100 | Hard mortar | | 14 | .571 | | | 7.95 | 4.90 | 12.85 | 19.05 |
| 2140 | 24" x 24", soft old mortar | | 8 | 1 | | | 13.95 | 8.60 | 22.55 | 33.50 |
| 2160 | Hard mortar | | 6 | 1.333 | | | 18.60 | 11.45 | 30.05 | 44.50 |
| 2200 | 36" x 36", soft old mortar | | 4 | 2 | | | 28 | 17.15 | 45.15 | 67 |
| 2220 | Hard mortar | * | 3 | 2.667 | • | | 37 | 23 | 60 | 88.50 |
| 3000 | Copings, precast or masonry, to 8" wide | | | | | | | | | |
| 3020 | Soft old mortar | A-1 | 180 | .044 | L.F. | | .62 | .38 | 1 | 1.48 |
| 3040 | Hard mortar | " | 160 | .050 | " | | .70 | .43 | 1.13 | 1.67 |
| 3100 | To 12" wide | | | | | | | | | |
| 3120 | Soft old mortar | A-1 | 160 | .050 | L.F. | | .70 | .43 | 1.13 | 1.67 |
| 3140 | Hard mortar | n | 140 | .057 | " | | .80 | .49 | 1.29 | 1.91 |
| 4000 | Fireplace, brick, 30" x 24" opening | | | | | | | | | |
| 4020 | Soft old mortar | A-1 | 2 | 4 | Ea. | | 56 | 34.50 | 90.50 | 134 |
| 4040 | Hard mortar | | 1.25 | 6.400 | | | 89.50 | 55 | 144.50 | 214 |
| 4100 | Stone, soft old mortar | | 1.50 | 5.333 | | | 74.50 | 46 | 120.50 | 178 |
| 4120 | Hard mortar | | 1 | 8 | • | | 112 | 68.50 | 180.50 | 267 |
| 5000 | Veneers, brick, soft old mortar | | 140 | .057 | S.F. | | .80 | .49 | 1.29 | 1.91 |
| 5020 | Hard mortar | 1 | 125 | .064 | | | .89 | .55 | 1.44 | 2.13 |
| 5100 | Granite and marble, 2" thick | | 180 | .044 | | | .62 | .38 | 1 | 1.48 |
| 5120 | 4" thick | | 170 | .047 | | | .66 | .40 | 1.06 | 1.56 |
| 5140 | Stone, 4" thick | | 180 | .044 | | | .62 | .38 | 1 | 1.48 |
| 5160 | 8" thick | | 175 | .046 | • | | .64 | .39 | 1.03 | 1.52 |
| 5400 | Alternate pricing method, stone, 4" thick | | 60 | .133 | C.F. | | 1.86 | 1.14 | 3 | 4.45 |
| 5420 | 8" thick | ↓ | 85 | .094 | " | | 1.31 | .81 | 2.12 | 3.14 |

| 021 100 Site Clearing | | DAILY | LABOR- | | | 1999 BAR | E COSTS | | TOTAL |
|---|-------|--------|--------|----------|------|----------|---------|-------|----------|
| 021 100 Site Clearing | CREW | OUTPUT | HOURS | UNIT | MAT. | LABOR | EQUIP. | TOTAL | INCL 0&P |
| 0010 CLEAR AND GRUB Cut & chip light, trees to 6" diam. | B-7 | 1 | 48 | Acre | | 730 | 1,175 | 1,905 | 2,550 |
| 0150 Grub stumps and remove | B-30 | 2 | 12 | | | 204 | 800 | 1,004 | 1,225 |
| 0200 Cut & chip medium, trees to 12" diam. | B-7 | .70 | 68.571 | | | 1,050 | 1,700 | 2,750 | 3,625 |
| 0250 Grub stumps and remove | B-30 | 1 | 24 | | | 410 | 1,600 | 2,010 | 2,425 |
| 0300 Cut & chip heavy, trees to 24" diam. | B-7 | .30 | 160 | | | 2,425 | 3,950 | 6,375 | 8,500 |
| 0350 Grub stumps and remove | B-30 | .50 | 48 | | | 815 | 3,200 | 4,015 | 4,875 |
| 0400 If burning is allowed, reduce cut & chip | | | | * | | | | | 40% |
| 0010 CLEARING Brush with brush saw | A-1 | .25 | 32 | Acre | | 445 | 275 | 720 | 1,075 |
| 0100 By hand | " | .12 | 66.667 | | | 930 | 570 | 1,500 | 2,225 |
| 0300 With dozer, ball and chain, light clearing | B-11A | 2 | 8 | | | 134 | 420 | 554 | 685 |
| 0400 Medium clearing | | 1.50 | 10.667 | I | | 179 | 560 | 739 | 915 |

| 0 | 22 100 Grading | 1 | | LABOR- | | Messin | 1999 BAR | E COSTS | | TOTAL |
|-----------|--|--------|---|--------|------------|--------|----------|---------|----------|----------|
| | | CREW | OUTPUT | HOURS | UNIT | MAT. | LABOR | EQUIP. | TOTAL | INCL 0&P |
| | GRADING Site excav. & fill, see div 022-200 | | | | | | | | | |
| 0020 | Fine grading, see div 025-122 | | | | | | | | | |
| 0 | 22 200 Excav./Backfill/Compact. | | | | | | | | | |
| 0010 | BACKFILL By hand, no compaction, light soil | 1 Clab | 14 | .571 | C.Y. | | 7.95 | | 7.95 | 13.65 |
| 0100 | Heavy soil | | 11 | .727 | | | 10.15 | | 10.15 | 17.40 |
| 0300 | Compaction in 6" layers, hand tamp, add to above | + | 20.60 | .388 | \vdash | | 5.40 | | 5.40 | 9.30 |
| 0500 | Air tamp, add | B-9C | 190 | .211 | | | 3.02 | .95 | 3.97 | 6.25 |
| 0600 | Vibrating plate, add | A-1 | 60 | .133 | \vdash | | 1.86 | 1.14 | 3.37 | 4.45 |
| 0800 | Compaction in 12" layers, hand tamp, add to above | 1 Clab | 34 | .235 | | | 3.28 | 1.14 | 3.28 | 5.60 |
| 1300 | Dozer backfilling, bulk, up to 300' haul, no compaction | B-10B | 1,200 | .007 | | | .13 | .70 | .83 | .99 |
| 1400 | Air tamped | B-11B | 240 | .067 | | | 1.12 | 4.35 | 5.47 | 6.65 |
| 0010 | An or server produce | D-11D | 240 | .007 | * | | 1.12 | 4.35 | 5.47 | 0.00 |
| 0020 | | 1 | | | | | | | | |
| | and spread, with 200 H.P. dozer, no compaction | D.15 | 600 | 047 | 0.14 | 5.50 | 77 | 2.07 | 0.14 | 10.50 |
| 0100 | Bank run gravel | B-15 | 600 | .047 | C.Y. | 5.50 | .77 | 2.87 | 9.14 | 10.50 |
| 0200 | Common borrow | | 600 | .047 | | 3.75 | .77 | 2.87 | 7.39 | 8.60 |
| 0300 | Crushed stone, (1.40 tons per CY), 1-1/2" | | 600 | .047 | | 17.75 | .77 | 2.87 | 21.39 | 24 |
| 0320 | 3/4" | | 600 | .047 | | 17.75 | .77 | 2.87 | 21.39 | 24 |
| 0340 | 1/2" | | 600 | .047 | | 18.25 | .77 | 2.87 | 21.89 | 24.50 |
| 0360 | 3/8" | | 600 | .047 | | 19 | .77 | 2.87 | 22.64 | 25.50 |
| 0400 | Sand, washed, concrete | | 600 | .047 | | 11.50 | .77 | 2.87 | 15.14 | 17.15 |
| 0500 | Dead or bank sand | ▼ | 600 | .047 | lacksquare | 3.75 | .77 | 2.87 | 7.39 | 8.60 |
| 0010 | COMPACTION, STRUCTURAL Steel wheel tandem roller, 5 tons | B-10E | 8 | 1 | Hr. | | 19.60 | 19.10 | 38.70 | 53.50 |
| 0050 | Air tamp, 6" to 8" lifts, common fill | B-9 | 250 | .160 | C.Y. | | 2.30 | .72 | 3.02 | 4.72 |
| 0060 | Select fill | ïi ii | 300 | .133 | | | 1.91 | .60 | 2.51 | 3.94 |
| 0600 | Vibratory plate, 8" lifts, common fill | A-1 | 200 | .040 | | | .56 | .34 | .90 | 1.34 |
| 0700 | Select fill | п | 216 | .037 | • | | .52 | .32 | .84 | 1.24 |
| 0010 | EXCAVATING, BULK BANK MEASURE Common earth piled | - | | | | | | | | |
| 0010 | ************************************** | | | | | | | | 15% | 15% |
| 300110000 | For loading onto trucks, add Backhoe, hydraulic, crawler mtd., 1 C.Y. cap. = 75 C.Y./hr. | B-12A | 600 | .013 | C.Y. | | .27 | .91 | 1.18 | 1.45 |
| 0200 | | | 10000 | | 0.1. | | 200 | | 2.08 | |
| 0310 | Wheel mounted, 1/2 C.Y. cap. = 30 C.Y./hr. | B-12E | 240 | .033 | | | .68 | 1.40 | | 2.66 |
| 1200 | Front end loader, track mtd., 1-1/2 C.Y. cap. = 70 C.Y./hr. | B-10N | 560 | .014 | | | .28 | .63 | .91 | |
| 1500 | Wheel mounted, 3/4 C.Y. cap. = 45 C.Y./hr. | B-10R | 360 | .022 | * | | .44 | .68 | 1.12 | 1.47 |
| 8000 | For hauling excavated material, see div. 022-266 | | | | | | | | | |
| 0010 | EXCAVATING, STRUCTURAL Hand, pits to 6' deep, sandy soil | 1 Clab | 8 | 1 | C.Y. | | 13.95 | | 13.95 | 24 |
| 0100 | Heavy soil or clay | | 4 | 2 | | | 28 | | 28 | 48 |
| 1100 | | | 12 | .667 | | | 9.30 | | 9.30 | 15.95 |
| 1300 | | \ | 8 | 1. | ↓ | | 13.95 | | 13.95 | 24 |
| 1500 | | | | | % | | | | 50% | 50% |
| 0010 | EXCAVATING, TRENCH or continuous footing, common earth | + | | | - | | | | | |
| 0010 | | B-11C | 150 | .107 | C.Y. | | 1.79 | 1.46 | 3.25 | 4.61 |
| 0060 | | B-11M | 200 | .080 | | | 1.34 | 1.45 | 2.79 | 3.86 |
| | | n-111A | 200 | .080 | | | 1.34 | 1.45 | 2.79 | 3.86 |
| 0090 | 100 | D 100 | 250 | .032 | | | .65 | 1.43 | 2.73 | 2.81 |
| 0100 | | B-12Q | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | .81 | 3.18 | 3.99 | 4.85 |
| 0300 | | B-12J | 200 | .040 | | | 13.95 | 3.10 | 13.95 | 24 |
| 1400 | The second secon | 1 Clab | 8 | 1 | | | - 1 | | | |
| 1500 | | " | 4 | 2 | * | | 28 | | 28 | 48 |
| 0010 | EXCAVATING, UTILITY TRENCH Common earth | | | | | | | | | |
| 0050 | Trenching with chain trencher, 12 H.P., operator walking | | | | | | | | <u> </u> | |
| | 4" wide trench, 12" deep | B-53 | 800 | .010 | L.F. | | .14 | .12 | .26 | .37 |
| 0100 | The state of the s | | | | | | | | | |
| | | | | | | | | .09 | .23 | .33 |

| | 02 | 22 200 Excav./Backfill/Compact. | | 1 2 1 1 1 1 1 1 1 | LABOR- | | | 1999 BAF | E COSTS | | TOTAL |
|----|-----|---|----------|-------------------|--------|----------|----------|----------|---------|-------|----------|
| L | | _ | CREW | OUTPUT | HOURS | UNIT | MAT. | LABOR | EQUIP. | TOTAL | INCL 0&P |
| | | FILL Spread dumped material, by dozer, no compaction | B-10B | 1,000 | .008 | C.Y. | | .16 | .84 | 1 | 1.18 |
| | 100 | By hand | 1 Clab | 12 | .667 | u. | | 9.30 | | 9.30 | 15.95 |
| | 500 | Gravel fill, compacted, under floor slabs, 4" deep | B-37 | 10,000 | .005 | S.F. | .15 | .07 | .02 | .24 | .31 |
| 0 | 600 | 6" deep | | 8,600 | .006 | | .23 | .08 | .02 | .33 | .41 |
| 0 | 700 | 9" deep | | 7,200 | .007 | | .38 | .10 | .02 | .50 | .60 |
| 0 | 800 | 12" deep | | 6,000 | .008 | ↓ | .52 | .12 | .03 | .67 | .82 |
| 1 | 000 | Alternate pricing method, 4" deep | | 120 | .400 | C.Y. | 11.25 | 6.05 | 1.27 | 18.57 | 24 |
| 1 | 100 | 6" deep | | 160 | .300 | | 11.25 | 4.52 | .95 | 16.72 | 21 |
| 1 | 200 | 9" deep | | 200 | .240 | | 11.25 | 3.62 | .76 | 15.63 | 19.40 |
| 1 | 300 | 12" deep | - ↓ | 220 | .218 | ↓ | 11.25 | 3.29 | .69 | 15.23 | 18.75 |
| _ | | HAULING Excavated or borrow material, loose cubic yards | + * | | 1210 | - | 11.20 | 0.23 | .03 | 10.20 | 10.75 |
| 1 | 015 | no loading included, highway haulers | | | | | | | | | |
| _ | 020 | 6 C.Y. dump truck, 1/4 mile round trip, 5.0 loads/hr. | B-34A | 195 | .041 | C.Y. | | .64 | 1.87 | 2.51 | 3.13 |
| | 200 | 4 mile round trip, 1.8 loads/hr. | D-34A | 70 | .114 | 0.1. | | 1.79 | 5.20 | 6.99 | 8.70 |
| | 310 | 12 C.Y. dump truck, 1/4 mile round trip 3.7 loads/hr. | B-34B | 288 | .028 | \vdash | | .44 | 1.54 | 1.98 | 2.42 |
| | | | D-34B | | | | | ,44 | | | |
| | 500 | 4 mile round trip, 1.6 loads/hr. | | 125 | .064 | * | | Ţ | 3.54 | 4.54 | 5.55 |
| | | MOBILIZATION OR DEMOBILIZATION Up to 50 miles | D 0 411 | | 1 222 | | | 0.1 | 150 | 170 | 000 |
| | 020 | Dozer, loader, backhoe or excavator, 70 H.P 250 H.P. | B-34K | 6 | 1.333 | Ea. | | 21 | 152 | 173 | 203 |
| | 900 | Shovel or dragline, 3/4 C.Y. | " | 3.60 | 2.222 | | | 35 | 254 | 289 | 340 |
| | 100 | Delivery charge for small equipment on flatbed trailer, minimum | | | | | | | | | 40 |
| 1 | 150 | Maximum | | | | • | | | | | 100 |
| L | | | | | | | | | | | |
| 00 | 010 | LOAM OR TOPSOIL Remove and stockpile on site | | | | | | | | | |
| 00 | 020 | 6" deep, 200' haul | B-10B | 865 | .009 | C.Y. | | .18 | .97 | 1.15 | 1.37 |
| 0 | 100 | 300' haul | | 520 | .015 | | | .30 | 1.61 | 1.91 | 2.27 |
| 0 | 150 | 500' haul | | 225 | .036 | • | | .70 | 3.73 | 4.43 | 5.25 |
| 0: | 200 | Alternate method: 6" deep, 200' haul | | 5,090 | .002 | S.Y. | | .03 | .16 | .19 | .23 |
| 0 | 250 | 500' haul | ↓ | 1,325 | .006 | " | | .12 | .63 | .75 | .90 |
| 0 | 701 | Furnish and place, truck dumped, unscreened, 4" deep | B-10S | 12,000 | .001 | S.F. | .24 | .01 | .03 | .28 | .31 |
| | 801 | 6" deep | <i>H</i> | 7,400 | .001 | " | .32 | .02 | .04 | .38 | .45 |
| _ | 900 | Fine grading and seeding, incl. lime, fertilizer & seed, | + | | | | | | | | |
| | 001 | With equipment | B-14 | 9,000 | .005 | S.F. | .05 | .08 | .02 | .15 | .22 |
| ╁ | | | 1 | | | 771.55 | | | | | |
| L | | 22 300 Pavement Base | | | | | | | | | |
| 0 | 011 | BASE Prepare and roll sub-base, small areas to 2500 S.Y. | B-32A | 13,500 | .002 | S.F. | | .03 | .07 | .10 | .13 |
| | | BASE COURSE For roadways and large paved areas | | | | | | | | | |
| _ | 051 | 3/4" stone compacted to 3" deep | B-36 | 36,000 | | S.F. | .49 | .02 | .03 | .54 | .61 |
| | 101 | 6" deep | | 35,100 | | | .99 | .02 | .03 | 1.04 | 1.15 |
| 0. | 201 | 9" deep | | 25,875 | | | 1.48 | .03 | .04 | 1.55 | 1.72 |
| 0 | 305 | 12" deep | | 21,150 | .002 | | 1.82 | .03 | .05 | 1.90 | 2.11 |
| 0 | 306 | Crushed 1-1/2" stone base, compacted to 4" deep | | 47,000 | | | .41 | .01 | .02 | .44 | .50 |
| 0 | 307 | 6" deep | | 35,100 | .001 | | .91 | .02 | .03 | .96 | 1.07 |
| | 308 | 8" deep | | 27,000 | .001 | | 1.21 | .02 | .04 | 1.27 | 1.42 |
| _ | 309 | 12" deep | 1 👃 | 16,200 | | • | 1.82 | .04 | .07 | 1.93 | 2.15 |
| | 350 | Bank run gravel, spread and compacted | 1 ' | | | , | | | | | |
| | 371 | 6" deep | B-32 | 54,000 | .001 | S.F. | .31 | .01 | .03 | .35 | .39 |
| | 391 | 9" deep | | 39,600 | | | .46 | .01 | .04 | .51 | .58 |
| | 401 | 12" deep | \pm | 32,400 | | | .61 | .02 | .05 | .68 | .76 |
| | | 97,000 × 100,000 €) | • | 52,700 | .001 | • | .01 | 50% | 50% | .00 | |
| 8 | 900 | For small and irregular areas, add | +- | - | | | | 5070 | 3070 | | |
| | | 22 700 Slope/Erosion Control | 5.00: | 0.100 | 010 | 0.1/ | 70 | 1.4 | 07 | 02 | 1.11 |
| 10 | | EROSION CONTROL Jute mesh, 100 S.Y. per roll, 4' wide, stapled | B-80A | | .010 | S.Y. | .72 | .14 | .07 | .93 | |
| | 100 | Plastic netting, stapled, 2" x 1" mesh, 20 mil | B-1 | 2,500 | .010 | | .40 | .14 | | .54 | .68 |
| | 100 | | | _ | | | | | | | |
| 0 | 200 | Polypropylene mesh, stapled, 6.5 oz./S.Y. | | 2,500 2,500 | .010 | | 1 .07 | .14 | | 1.14 | 1.34 |

| 10 | 22 700 Slope/Erosion Control | | DAILY | LABOR- | | | 1999 BAR | E COSTS | | TOTAL |
|--------|--|----------|-------|--------|----------|-------|----------|---------|--------|----------|
| | | CREW | | HOURS | UNIT | MAT. | LABOR | EQUIP. | TOTAL | INCL 0&P |
| 1000 | The special of the special conditions | 2 Clab | 1,600 | .010 | L.F. | .35 | .14 | | .49 | .63 |
| 1100 | , teres of terral control | " | 950 | .017 | ". | .28 | .23 | | .51 | .71 |
| 8 0010 | | | | | | | | | | |
| 0020 | and backfill not included, 10' wide | | | | | | | | | |
| 0100 | | B-13 | 650 | .074 | S.F. | 14.50 | 1.13 | .84 | 16.47 | 18.80 |
| 0200 | 3.1 | \sqcup | 615 | .078 | | 16.70 | 1.20 | .89 | 18.79 | 21.50 |
| 0300 | G. P. Last Baselin | | 580 | .083 | | 17.55 | 1.27 | .95 | 19.77 | 22.50 |
| 0400 | 12' high, 7.7' deep | \sqcup | 530 | .091 | | 18.95 | 1.39 | 1.04 | 21.38 | 24.50 |
| 0500 | 1000 | ♦ | 515 | .093 | * | 20 | 1.43 | 1.07 | 22.50 | 25.50 |
| 1800 | Concrete gravity wall with vertical face including excavation & backfill | | | | | | | | | |
| 1850 | No reinforcing | | | | | | | | | |
| 1900 | 6' high, level embankment | C-17C | 36 | 2.306 | L.F. | 43 | 45.50 | 11.45 | 99.95 | 138 |
| 2000 | 33° slope embankment | " | 32 | 2.594 | " | 40.50 | 51 | 12.85 | 104.35 | 146 |
| 2800 | Reinforced concrete cantilever, incl. excavation, backfill & reinf. | | | | | | | | | |
| 2900 | 6' high, 33° slope embankment | C-17C | 35 | 2.371 | L.F. | 40.50 | 46.50 | 11.75 | 98.75 | 137 |
| 6 0010 | STONE WALL Including excavation, concrete footing and | | | | | | | - | | |
| 0020 | stone 3' below grade. Price is exposed face area. | l | | | | | | | | |
| 0200 | Decorative random stone, to 6' high, 1'-6" thick, dry set | D-1 | 35 | .457 | S.F. | 7.60 | 7.85 | | 15.45 | 21.50 |
| 0300 | Mortar set | | 40 | .400 | | 9.25 | 6.90 | | 16.15 | 22 |
| 0500 | Cut stone, to 6' high, 1'-6" thick, dry set | | 35 | .457 | | 11.50 | 7.85 | | 19.35 | 26 |
| 0600 | Mortar set | | 40 | .400 | | 13.50 | 6.90 | | 20.40 | 26.50 |
| 0800 | Retaining wall, random stone, 6' to 10' high, 2' thick, dry set | | 45 | .356 | | 9.50 | 6.10 | | 15.60 | 21 |
| 0900 | Mortar set | | 50 | .320 | | 11.50 | 5.50 | | 17 | 22 |
| 1100 | Cut stone, 6' to 10' high, 2' thick, dry set | | 45 | .356 | | 14.75 | 6.10 | | 20.85 | 26.50 |
| 1200 | Mortar set | + | 50 | .320 | • | 15.75 | 5.50 | | 21.25 | 26.50 |
| 0 | 22 800 Soil Treatment | | | | | | | | | |
| 4 0010 | TERMITE PRETREATMENT | | | | | | | | | |
| 0020 | Slab and walls, residential | 1 Skwk | 1,200 | .007 | SF Flr. | .19 | .13 | | .32 | .42 |
| 0400 | Insecticides for termite control, minimum | | 14.20 | .563 | Gal. | 10 | 10.85 | | 20.85 | 29.50 |
| 0500 | Maximum | + | 11 | .727 | , | 17.10 | 14 | | 31.10 | 43 |
| 0 | 23 100 Tunnel Construction | | | | | | | | | |
| | MICROTUNNELING Not including excavation, backfill, shoring, | | | | | | | | | |
| 0020 | | | | | | | | | | 600 |
| 0100 | Plant Debel Hood Sharpholyne States Assessed States | | | | L.F. | | | | | 600 |
| 0110 | | | | | % | | | | | 50% |
| 1000 | | | | | Month | | | | | 80,000 |
| 1010 | | | | | Day | | | | | 600 |
| 1100 | | | | | Job | | | | | 40,000 |
| 1110 | Maximum | | | | | | | | | 400,000 |

| 025 Paving & Surfacing | | | 7 - 0 - 52 | | | | | | |
|--|--------|--------|------------|------|------|----------|---------|-------|----------|
| OOF TOO Walls /Dd /Dankma Danking | | DAILY | LABOR- | | | 1999 BAR | E COSTS | | TOTAL |
| 025 100 Walk/Rd/Parkng Paving | CREW | OUTPUT | HOURS | UNIT | MAT. | LABOR | EQUIP. | TOTAL | INCL 0&P |
| 0010 CONCRETE PAVEMENT Including joints, finishing, and curing | | | | | | | | | |
| 0021 Fixed form, 12' pass, unreinforced, 6" thick | B-26 | 18,000 | .005 | S.F. | 1.83 | .08 | .11 | 2.02 | 2.26 |
| 0101 8" thick | " | 13,500 | .007 | | 2.46 | .11 | .14 | 2.71 | 3.04 |
| 0701 Finishing, broom finish small areas | 2 Cefi | 1,215 | .013 | • | | .24 | | .24 | .39 |

| 0 | 025 100 Walk/Rd/Parkng Paving | | DAILY | LABOR- | | 1999 BARE COSTS | | | | TOTAL |
|---------|--|----------|-----------|--------------|----------|-----------------|--------------|--------|--------------|--------------|
| | | CREW | | HOURS | UNIT | MAT. | LABOR | EQUIP. | TOTAL | INCL 0&P |
| | FINE GRADE Area to be paved with grader, small area | B-11L | 400 | .040 | S.Y. | | .67 | 1.44 | 2.11 | 2.71 |
| 0100 | 0- | | 2,000 | .008 | | | .13 | .29 | .42 | .55 |
| 0200 | Grade subgrade for base course, roadways | 1 | 3,500 | .005 | | | .08 | .16 | .24 | .31 |
| 0300 | Fine grade, base course for paving, see div. 022-308 | ' | | | | | | | | .01 |
| 1020 | For large parking lots | B-32C | 5,000 | .010 | S.Y. | | .16 | .33 | .49 | .65 |
| 1050 | For small irregular areas | ,, | 2,000 | .024 | | | .41 | .83 | 1.24 | 1.60 |
| 1100 | | B-11L | 1,040 | .015 | | | .26 | .55 | .81 | 1.04 |
| 1150 | 0 | B-18 | 700 | .034 | | | .50 | .07 | .57 | .94 |
| 1200 | | B-62 | 1.200 | .020 | • | | .31 | .09 | .40 | .63 |
| 2550 | 0 | 2 Clab | 60 | .267 | C.S.F. | | 3.72 | .05 | 3.72 | 6.35 |
| 3000 | 1 8 | B-18 | 555 | .043 | S.Y. | | .63 | .09 | .72 | 1.18 |
| 3100 | 0 | D-10 | 400 | .060 | 3.1. | | | 1000 | | |
| 3120 | a second file | - | | | | | .88 | .13 | 1.01 | 1.64 |
| 3300 | | D 111 | 300 | .080 | | | 1.17 | .17 | 1.34 | 2.19 |
| 3310 | | B-11L | 8,900 | .002 | \perp | | .03 | .06 | .09 | .12 |
| 3310 | Steep slopes | | 7,100 | .002 | * | | .04 | .08 | .12 | .15 |
| 0010 | PAVING Asphaltic concrete | - | | | | | - | | | |
| 0020 | HU25 | B-25C | 9,000 | .005 | S.F. | 1.13 | .09 | .17 | 1.39 | 1.59 |
| 0300 | o storie base, 2 binder coarse, 1 topping | 0.230 | 35,000 | .003 | 5.1. | .23 | .02 | .04 | .29 | .35 |
| 0400 | personal process and an entire contractor | | 25,000 | .001 | | .23 | | | | |
| 0500 | and annexal | \vdash | | | | | .03 | .06 | .39 | .45 |
| | 3" thick | | 15,000 | .003 | | .47 | .05 | .10 | .62 | .72 |
| 0600 | 11 100000000000000000000000000000000000 | | 10,800 | .004 | \perp | .62 | .07 | .14 | .83 | .96 |
| 0800 | | | 41,000 | .001 | | .15 | .02 | .04 | .21 | .24 |
| 0900 | 1" thick | * | 34,000 | .001 | | .19 | .02 | .05 | .26 | .30 |
| 1000 | Fill pot holes, hot mix, 2" thick | B-16 | 4,200 | .008 | | .38 | .11 | .11 | .60 | .73 |
| 1100 | 4" thick | | 3,500 | .009 | | .56 | .14 | .13 | .83 | .99 |
| 1120 | 6" thick | * | 3,100 | .010 | | .75 | .15 | .14 | 1.04 | 1.25 |
| 1140 | Cold patch, 2" thick | B-51 | 3,000 | .016 | | .45 | .23 | .06 | .74 | .96 |
| 1160 | 4" thick | | 2,700 | .018 | | .86 | .26 | .06 | 1.18 | 1.45 |
| 1180 | 6" thick | | 1,900 | .025 | • | 1.33 | .37 | .09 | 1.79 | 2.20 |
| 0010 | SIDEWALKS, DRIVEWAYS, & PATIOS No base | | | | | | | | | |
| 0021 | Asphaltic concrete, 2" thick | B-37 | 6,480 | .007 | S.F. | .30 | .11 | .02 | .43 | .55 |
| 0101 | 2-1/2" thick | " | 5,950 | .008 | " | .39 | .12 | .03 | .54 | .66 |
| 0300 | Concrete, 3000 psi, CIP, 6 x 6 - W1.4 x W1.4 mesh, | | | | | | | | | |
| 0310 | broomed finish, no base, 4" thick | B-24 | 600 | .040 | S.F. | 1.02 | .68 | | 1.70 | 2.27 |
| 0350 | 5" thick | | 545 | .044 | | 1.36 | .75 | | 2.11 | 2.76 |
| 0400 | 6" thick | \ | 510 | .047 | | 1.58 | .81 | | 2.39 | 3.10 |
| 0450 | western sery !! | B-18 | 2,500 | .010 | | .14 | .14 | .02 | .30 | .42 |
| 0520 | | " | 1,600 | .015 | ++ | .28 | .22 | .03 | .53 | .73 |
| 1000 | | 2 Clab | 1,700 | .009 | | .18 | .13 | | .31 | .41 |
| 1050 | | n | 1,700 | .009 | + | .18 | .13 | | .31 | .42 |
| 1700 | | 2 Carp | 316 | .051 | | 4.53 | .97 | | 5.50 | 6.65 |
| 1750 | | " | 240 | .067 | + | 3.17 | 1.27 | | 4.44 | 5.65 |
| | | | | | | | | | | |
| | 25 150 Unit Pavers | D.1 | 135 | .119 | S.F. | 3 | 2.04 | | 5.04 | 6.75 |
| | ASPHALT BLOCKS, 6"x12"x1-1/4", w/bed & neopr. adhesive | D-1 | 130 | .119 | J.F. | 4.20 | 2.12 | | 6.32 | 8.20 |
| 0100 | | - | 135 | .123 | ++ | 3.20 | 2.12 | | 5.24 | 6.95 |
| 0300 | | | | | | | | | 6.60 | 8.50 |
| 0400 | | | 130 | .123 | | 4.48 | 2.12 | | | 6.75 |
| 0500 | 22-94 (1) A (1) A (1) | | 135 | .119 | | 3 | 2.04 | | 5.04 | |
| 0600 | | * | 130 | .123 | ▼ | 4.20 | 2.12 | | 6.32 | 8.20 |
| 0010 | BRICK PAVING 4" x 8" x 1-1/2", without joints (4.5 brick/S.F.) | D-1 | 110 | .145 | S.F. | 2.04 | 2.50 | | 4.54 | 6.50 |
| 1505000 | Grouted, 3/8" joint (3.9 brick/S.F.) | | 90 | .178 | | 2.43 | 3.06 | | 5.49 | 7.85 7.20 |
| 0100 | A CONTRACTOR OF THE CONTRACTOR | | | | | 0.00 | 2 50 | 1 | E 10 | 7 20 |
| | A CONTRACT C | | 110 90 | .145 .178 | | 2.69 2.48 | 2.50 3.06 | | 5.19 5.54 | 7.20 |

| 1 | D25 150 Unit Pavers | | | LABOR- | | | 1999 BAR | E COSTS | *** | TOTAL |
|------|--|----------|--------|--------|----------|-------|-------------|---------|--------|----------|
| - | | CREW | OUTPUT | HOURS | UNIT | MAT. | LABOR | EQUIP. | TOTAL | INCL 0&P |
| 0500 | 3) | B-25 | 5,130 | .017 | S.F. | .26 | .27 | .35 | .88 | 1.12 |
| 0540 | ordina state bed, I thick | B-18 | 5,000 | .005 | | .18 | .07 | .01 | .26 | .33 |
| 0580 | | D-1 | 300 | .053 | | .36 | .92 | | 1.28 | 1.95 |
| 0620 | | | 200 | .080 | | .36 | 1.38 | | 1.74 | 2.73 |
| 1500 | Brick on 1" thick sand bed laid flat, 4.5 per S.F. | | 100 | .160 | | 2.96 | 2.75 | | 5.71 | 7.90 |
| 2000 | Brick pavers, laid on edge, 7.2 per S.F. | ↓ | 70 | .229 | | 2.06 | 3.93 | | 5.99 | 8.90 |
| 0010 | STONE PAVERS | | | | * | | | | 0.55 | 0.50 |
| 1100 | Flagging, bluestone, irregular, 1" thick, | D-1 | 81 | .198 | S.F. | 1.85 | 3.40 | | 5.25 | 7.80 |
| 1150 | | | 92 | .174 | | 2.80 | 2.99 | | 5.79 | 8.15 |
| 1200 | 100 | | 85 | .188 | | 3.37 | 3.24 | | 6.61 | 9.20 |
| 1250 | / (| | 83 | .193 | | 3.92 | 3.32 | | 7.24 | 9.20 |
| 1300 | | | 92 | .174 | | 1.80 | 2.99 | | | |
| 1310 | | - | 85 | .174 | | | 100,000,000 | | 4.79 | 7.05 |
| 1351 | | | 2828 | | | 2.10 | 3.24 | | 5.34 | 7.80 |
| 1400 | 0 / 8 8 - 7 - 7 | | 105 | .152 | | 3.90 | 2.62 | | 6.52 | 8.75 |
| | The state of the s | ▼ | 150 | .107 | | 4.19 | 1.83 | | 6.02 | 7.70 |
| 1450 | | | | | * | 2.50 | | | 2.50 | 2.75 |
| 1500 | 0, | | | | | | | | 25% | 25% |
| 1550 | Granite blocks, 3-1/2" x 3-1/2" x 3-1/2" | D-1 | 92 | .174 | S.F. | 5.25 | 2.99 | | 8.24 | 10.85 |
| 0 | 25 250 Curbs | | | | | | | | | |
| 0010 | CURBS Asphaltic, machine formed, 8" wide, 6" high, 40 L.F./ton | B-27 | 1,000 | .032 | L.F. | .58 | .46 | .07 | 1.11 | 1.51 |
| 0150 | Asphaltic berm, 12" W, 3"-6" H, 35 L.F./ton, before pavement | n | 700 | .046 | | .80 | .66 | .10 | 1.56 | 2.13 |
| 0200 | 12" W, 1-1/2" to 4" H, 60 L.F. per ton, laid with pavement | B-2 | 1,050 | .038 | | .49 | .55 | | 1.04 | 1.48 |
| 0300 | A 10 10 10 10 10 10 10 10 10 10 10 10 10 | C-2A | 500 | .096 | | 2.11 | 1.77 | | 3.88 | 5.35 |
| 0400 | | 115 | 200 | .240 | | 2.22 | 4.43 | | 6.65 | 10 |
| 0550 | | B-29 | 700 | .069 | | 6.25 | 1.05 | .91 | 8.21 | 9.70 |
| 0600 | , , , , | " | 325 | .148 | | 7.75 | 2.26 | 1.96 | 11.97 | 14.50 |
| 1000 | | D-13 | 500 | .096 | | 10 | 1.74 | .78 | 12.52 | 14.80 |
| 1100 | | U-13 | 450 | .107 | | 13.15 | 1.94 | .87 | 15.96 | 18.70 |
| 1300 | | B-29 | 260 | .185 | | 16.10 | 2.83 | 2.45 | 21.38 | 25 |
| | The state of the s | D-29 | | | • | | | | | 84 |
| 1400 | | | 80 | .600 | Ea. | 54 | 9.20 | 7.95 | 71.15 | 7.0 |
| 1600 | | \perp | 300 | .160 | L.F. | 5 | 2.45 | 2.12 | 9.57 | 12 |
| 1800 | | ♦ | 41 | 1.171 | Ea. | 120 | 17.95 | 15.55 | 153.50 | 180 |
| 2000 | | | | | | | | | | |
| 2100 | Jumbo, 10-1/2" x 7-1/2" x 4", grey | D-1 | 150 | .107 | L.F. | 1.75 | 1.83 | | 3.58 | 5.05 |
| 2150 | | | 150 | .107 | | 2.15 | 1.83 | | 3.98 | 5.45 |
| 2200 | Regular, 9" x 4-1/2" x 4-1/2", grey | | 160 | .100 | | 1.70 | 1.72 | | 3.42 | 4.78 |
| 2250 | Pink | | 160 | .100 | | 2 | 1.72 | | 3.72 | 5.10 |
| 2300 | Cubes, 4" x 4" x 4", grey | | 175 | .091 | | 1.65 | 1.57 | | 3.22 | 4.49 |
| 2350 | | | 175 | .091 | | 1.75 | 1.57 | | 3.32 | 4.60 |
| 2400 | | 1 | 155 | .103 | • | 3.60 | 1.78 | | 5.38 | 6.95 |
| 2500 | | 1 ' | | | ' | | | | | |
| 2550 | | | | | Ton | 100 | | | 100 | 110 |
| 2600 | | | | | | 125 | | | 125 | 138 |
| 2650 | | - | | | | 120 | | | 120 | 132 |
| 2700 | | | | | | 140 | | | 140 | 154 |
| | | + | | | | 200 | - | | 200 | 220 |
| 2750 | | 1 | | | | 225 | | | 225 | 248 |
| 2800 | | - | | | ++ | 140 | | | 140 | 154 |
| 2850 | | - 1 | | | | 15 | | | 140 | 16.50 |
| 2900 | | _ | | | * | 13 | | | 13 | 10.00 |
| | EDGING Aluminum alloy, including stakes, 1/8" x 4", mill finish | B-1 | 390 | .062 | L.F. | 1.75 | .90 | | 2.65 | 3.47 |
| 0050 | 1 2 | 51 | 390 | .062 | | 2.03 | .90 | | 2.93 | 3.77 |
| 0051 | * | | 390 | .062 | | 2.03 | .90 | | 3.24 | 4.12 |
| 0052 | | * | | | | .90 | .74 | | 1.64 | 2.25 |
| 0100 | 70 end 10 10 10 10 10 10 10 10 10 10 10 10 10 | D-1 | 370 | .043 | | | | | 3.94 | 5.55 |
| 0150 | Set vertically, 3 bricks per L.F. | "" | 135 | .119 | V | 1.90 | 2.04 | | 3.94 | 5.55 |