

SIGNATURE BLOCK

PROJECT NUMBER: _____
 APPLICATION NUMBER: _____
 IS AN INFRASTRUCTURE LIST REQUIRED? () YES () NO
 IF YES, THEN A SET OF APPROVED DRG PLANS WITH A WORK ORDER IS REQUIRED FOR ANY CONSTRUCTION WITHIN PUBLIC-RIGHT-OF-WAY OR FOR CONSTRUCTION OF PUBLIC IMPROVEMENTS

DRB SITE DEVELOPMENT PLAN APPROVAL:

TRAFFIC ENGINEERING, TRANSPORTATION DIVISION	DATE
PARKS & RECREATION DEPARTMENT	DATE
UTILITIES DEVELOPMENT	DATE
CITY ENGINEER, ENGINEERING DIVISION / AMAPCA	DATE
ENVIRONMENTAL HEALTH DEPARTMENT (conditional)	DATE
SOLID WASTE MANAGEMENT	DATE
DRB CHAIRPERSON, PLANNING DEPARTMENT	DATE

Michael Holton 11-16-04
 PLN2(10706) 12/16/05

SITE PLAN LEGEND

	INDICATES THE EXTENT OF LANDSCAPE AREA SEE LANDSCAPE PLAN
	INDICATES THE EXTENT OF ASPHALT PAVING PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS
	INDICATES THE EXTENT OF CONCRETE SIDEWALK PROVIDED TOoled JOINTS AT 6 FT O/C MAX AND 1/2" EXPANSION JOINTS AT 24 FT O/C MAX
	INDICATES THE EXTENT OF CONCRETE PAVING WITH W/P 6x6x6x6. PROVIDED CONTROL JOINTS AS INDICATED.
	PROPERTY LINE.
	EASEMENT BOUNDARIES.

AFD Plans Checking Office
 924-3611
 HYDRANTS ONLY
 Hydrants shall be installed prior to construction
 (APPROVED/DISAPPROVED)
 R.C. Sanchez 11-16-04
 Signature & Date

BUILDING CRITERIA

PROJECT: MERIDIAN BUSINESS PARK LOT 5
 1501 MERIDIAN PLACE NW
 ALBUQUERQUE, NM

OWNER: G & A LTD. CO.
 1400 MERIDIAN PLACE NW, SUITE D

ARCHITECT: CLAUDIO VIGIL ARCHITECTS
 1001 RIO GRANDE BOULEVARD, SUITE 2
 ALBUQUERQUE, NEW MEXICO 87102

LEGAL DESCRIPTION: LOT 5 MERIDIAN BUSINESS PARK
 ZONING CLASSIFICATION: IP INDUSTRIAL PARK ZONE
 ZONING ATLAS MAP: K-10-2
 BUILDING FUNCTION: OFFICE WAREHOUSE SPACE
 CONSTRUCTION TYPE: TYPE II-B - FULLY SPRINKLERED
 OCCUPANCY GROUP: B-OFFICE / S-2 WAREHOUSE
 ALLOWABLE AREA:
 PER 2003 NEW MEXICO COMMERCIAL BUILDING CODE (2003 IBC) GROUP B AND S-2 OCCUPANCIES, ONE STORY, TYPE II-B CONSTRUCTION, 100% AUTOMATIC FIRE SPRINKLER SYSTEM, PROPERTY ENTIRELY SURROUNDED BY YARDS NOT LESS THAN 60' IN WIDTH; UNLIMITED AREA ALLOWED

BUILDING HEIGHT: 31'-0" AFF.
 GROSS BUILDING AREA: 102,482 GROSS SF
 TOTAL LOT AREA: 253,200 SF. = 5.813 ACRES
 NET LOT AREA: 152,120 SF. = 3.506 ACRES
 TOTAL PARKING/PAVED AREA: 117,502 SF.
 TOTAL LANDSCAPE AREA REQUIRED: 22,300 SF.
 TOTAL LANDSCAPE AREA PROVIDED: 45,300 SF.
 LANDSCAPE TO PARKING AREA RATIO: 26 : 1

PARKING ANALYSIS:
 OFFICE AREA - (10%) 10,048/1000 = 51 SPACES
 WAREHOUSE AREA - 90,437/1000 = 46 SPACES
 TOTAL = 97 SPACES

TOTAL PARKING SPACES REQUIRED = 118 PARKING SPACES
 FUTURE PARKING SPACES PROVIDED = 22 PARKING SPACES
 (6 ACCESSIBLE PARKING SPACES + 2 VAN ACCESSIBLE SPACES)

PARKING SPACE SIZES:
 REGULAR CAR PARKING SPACES = 9'-0" x 18'-0" WITH A 2'-0" OVERHANG
 HANDICAP PARKING SPACE = 8'-6" x 18'-0" WITH A 2'-0" OVERHANG
 HANDICAP AISLE = 8'-0" x 18'-0" AT VAN ACCESSIBLE PARKING
 5'-6" x 18'-0" AT ACCESSIBLE PARKING

BICYCLE SPACES:
 INDUSTRIAL PARK 25x111 = 105
 TOTAL BICYCLE SPACES REQUIRED = 8 BICYCLE SPACES
 TOTAL BICYCLE SPACES PROVIDED = 8 BICYCLE SPACES
 (2 BIKE RACK POSTS AT 4 BICYCLES PER POST)

- NOTE:
- ALL ASPHALT AND CONCRETE CONSTRUCTION MUST BE 100% COMPLETE BEFORE INITIAL CALL FOR TEMPORARY CO.
 - AN AS-BUILT COPY OF THE APPROVED TCL (TRAFFIC CIRCULATION LAYOUT) MUST BE SUBMITTED BY THE DESIGNER OF RECORD, AS REQUIRED BY TRANSPORTATION DEVELOPMENT, (INCLUDING RANDOM FIELD CHECKS) WILL BE MADE BEFORE A FINAL CERTIFICATE OF OCCUPANCY IS ISSUED.
 - OVERHEAD DOCK DOOR MUST BE INSTALLED ON THE INTERIOR SIDE. THE RETRACTING EQUIPMENT MUST NOT APPEAR ON THE EXTERIOR.
 - SITE LIGHTING SHALL NOT GLARE ON TO ANY PUBLIC RIGHT-OF-WAY AND SHALL NOT HAVE AN OFF-SITE LUMINANCE OF GREATER THAN 100 FOOT LAMBERTS. ALL LIGHT FIXTURES SHALL BE FULL CUTOFF TYPE TO PREVENT FUGITIVE LIGHT. NO LIGHT SOURCE SHALL BE VISIBLE FROM THE SITE PERIMETER. ALL LAMPS SHALL BE FULLY SHIELDED TO PREVENT FUGITIVE LIGHT BEYOND THE PROPERTY LINE.

NORTH SITE DEVELOPMENT PLAN
 FOR BUILDING PERMIT
 SITE PLAN

NOVEMBER 16, 2004 1"=30'-0"

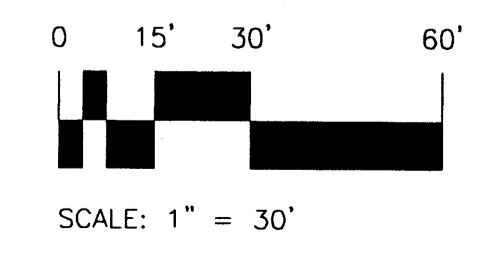
CLAUDIO VIGIL ARCHITECTS
OFFICE / WAREHOUSE
 MERIDIAN LOT 5
 7501 MERIDIAN PLACE NW
 ALBUQUERQUE, NEW MEXICO

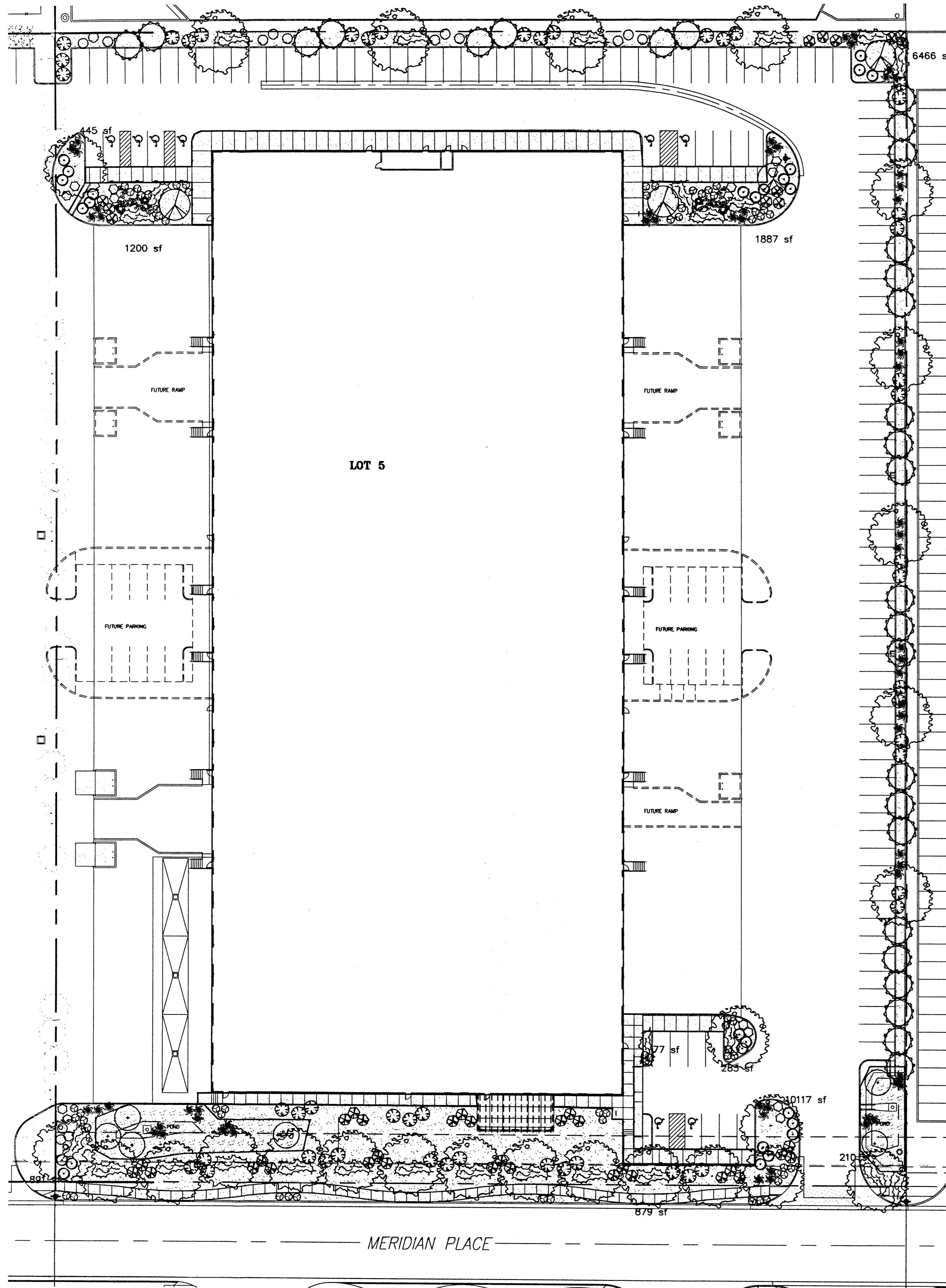
SPRP
 PRELIMINARY PLAN
 APPROVED BY DRB
 ON 12/16/04

SHEET
 DRB1
 PROJECT NUMBER
 04095

OWNERSHIP OF INSTRUMENTS OF SERVICE
 All design concepts, details, plans, specifications, computer files, field data, notes and other documents and instruments prepared by Claudio Vigil Architects, P.C. as instruments of service shall remain the property of Claudio Vigil Architects, P.C. Claudio Vigil Architects, P.C. shall retain all common law, statutory and other reserved rights, including the copyright thereto.

1801 Rio Grande NW, #2, Albuquerque, NM 87104
 Phone: 505/842-1113 Fax: 505/842-1330





PLANT LEGEND

- ASH (H) OR HONEY LOCUST (H) 26
Fraxinus pennsylvanica
Gleditsia triacanthos
2" Cal.
- FLOWERING PEAR (H) 4
Pyrus calleryana
2" Cal.
- DESERT WILLOW (L) 35
Chilopsis linearis
15 Gal. 200 sf
- INDIAN HAWTHORN (M) 42
Raphiolepis indica
5 Gal. 36sf
- RUSSIAN SAGE (M) 27
Perovskia atriplicifolia
5 Gal. 36sf
- APACHE PLUME (L) 15
Fallugia paradoxa
5 Gal. 25sf
- NATURAL EDGE
- SANTA FE BROWN GRAVEL WITH FILTER FABRIC
- RIP RAP WITH FILTER FABRIC
- NEW MEXICO OLIVE (L) 6
Forestiera neomexicana
15 Gal.
- MAIDENGRASS (M) 63
Miscanthus sinensis
5 Gal. 16sf
- HONEYSUCKLE 26
Lonicera japonica
1 Gal. 200sf
- AUTUMN SAGE (M) 14
Salvia greggii
2 Gal. 9sf
- CHAMISA (L) 50
Chrysothamnus nauseosus
1 Gal. 25sf
- WILDFLOWER 62
1 Gal. 4sf
- OVERSIZED GRAVEL & 6 BOULDERS

LANDSCAPE NOTES:

Landscape maintenance shall be the responsibility of the Property Owner.

It is the intent of this plan to comply with the City Of Albuquerque Water Conservation Landscaping and Water Waste Ordinance planting restriction approach.

Approval of this plan does not constitute or imply exemption from water waste provisions of the Water Conservation Landscaping and Water Waste Ordinance. Water management is the sole responsibility of the Property Owner.

All landscaping will be in conformance with the City of Albuquerque Zoning Code, Street Tree Ordinance, Pollen Ordinance, and Water Conservation Landscaping and Water Waste Ordinance. In general, water conservative, environmentally sound landscape principles will be followed in design and installation.

Plant beds shall achieve 75% live ground cover at maturity.

Santa Fe Brown Gravel over Filter Fabric shall be placed in all landscape areas which are not designated to receive native seed.

STREET TREE REQUIREMENTS

Street trees required under the City Of Albuquerque Street Tree Ordinance are as follows:

Meridian Ave. NW
Required # 12 Provided # 12

IRRIGATION NOTES:

Irrigation shall be a complete underground system with Trees to receive (5) 1.0 GPH Drip Emitters and Shrubs to receive (2) 1.0 GPH Drip Emitters. Drip and Bubbler systems to be tied to 1/2" poly pipe with flush caps at each end.

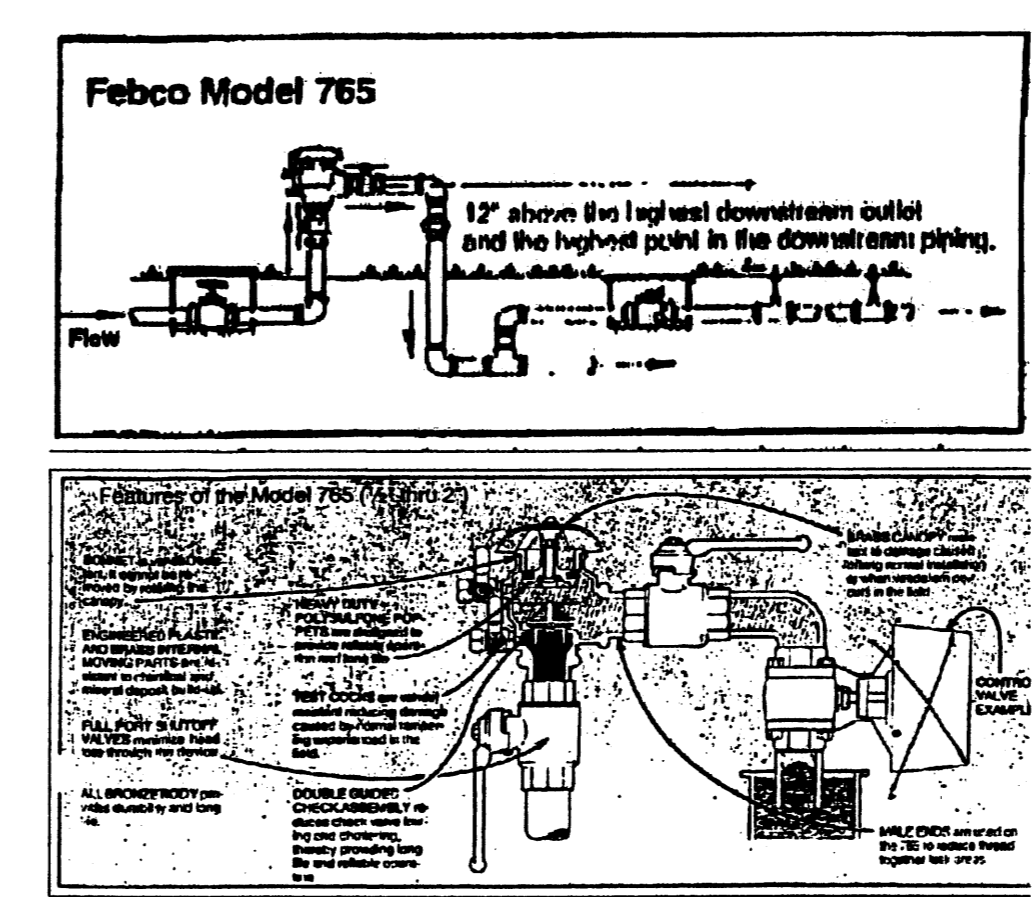
Run time per each drip valve will be approximately 15 minutes per day, to be adjusted according to the season.

Point of connection for irrigation system is unknown at current time and will be coordinated in the field.

Irrigation will be operated by automatic controller. Location of controller to be field determined and power source for controller to be provided by others.

Irrigation maintenance shall be the responsibility of the Property Owner.

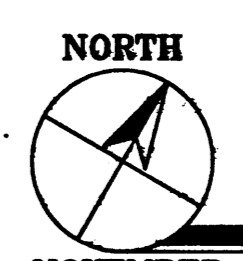
FINAL LANDSCAPING LAYOUT AND DESIGN TO BE DETERMINED UPON RECEIPT OF FINAL GRADING PLAN.



BACKFLOW PREVENTOR DETAIL

LANDSCAPE CALCULATIONS

TOTAL LOT AREA	253238	square feet
TOTAL BUILDINGS AREA	100480	square feet
OFFSITE AREA	0	square feet
NET LOT AREA	152758	square feet
LANDSCAPE REQUIREMENT	15%	
TOTAL LANDSCAPE REQUIREMENT	22914	square feet
TOTAL BED PROVIDED	22455	square feet
GROUND COVER REQ.	75%	square feet
TOTAL GROUND COVER REQUIREMENT	16841	square feet
TOTAL GROUND COVER PROVIDED	17771	square feet
TOTAL PONDING AREA	2773	square feet
TOTAL NON-PUBLIC SIDEWALK	6399	square feet
TOTAL NON-PUBLIC SIDEWALK, TO COUNT AS LANDSCAPING (max. 33% of landscape required)	3983	square feet
TOTAL LANDSCAPE PROVIDED	24527	square feet



LANDSCAPE PLAN

NOVEMBER 16, 2004 1"=30'-0"

CLAUDIO VIGIL ARCHITECTS

OFFICE / WAREHOUSE
MERIDIAN LOT 5
7501 MERIDIAN PLACE NW
ALBUQUERQUE, NEW MEXICO

SHEET
L-1

PROJECT NUMBER
04095

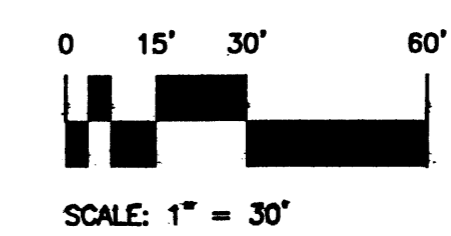
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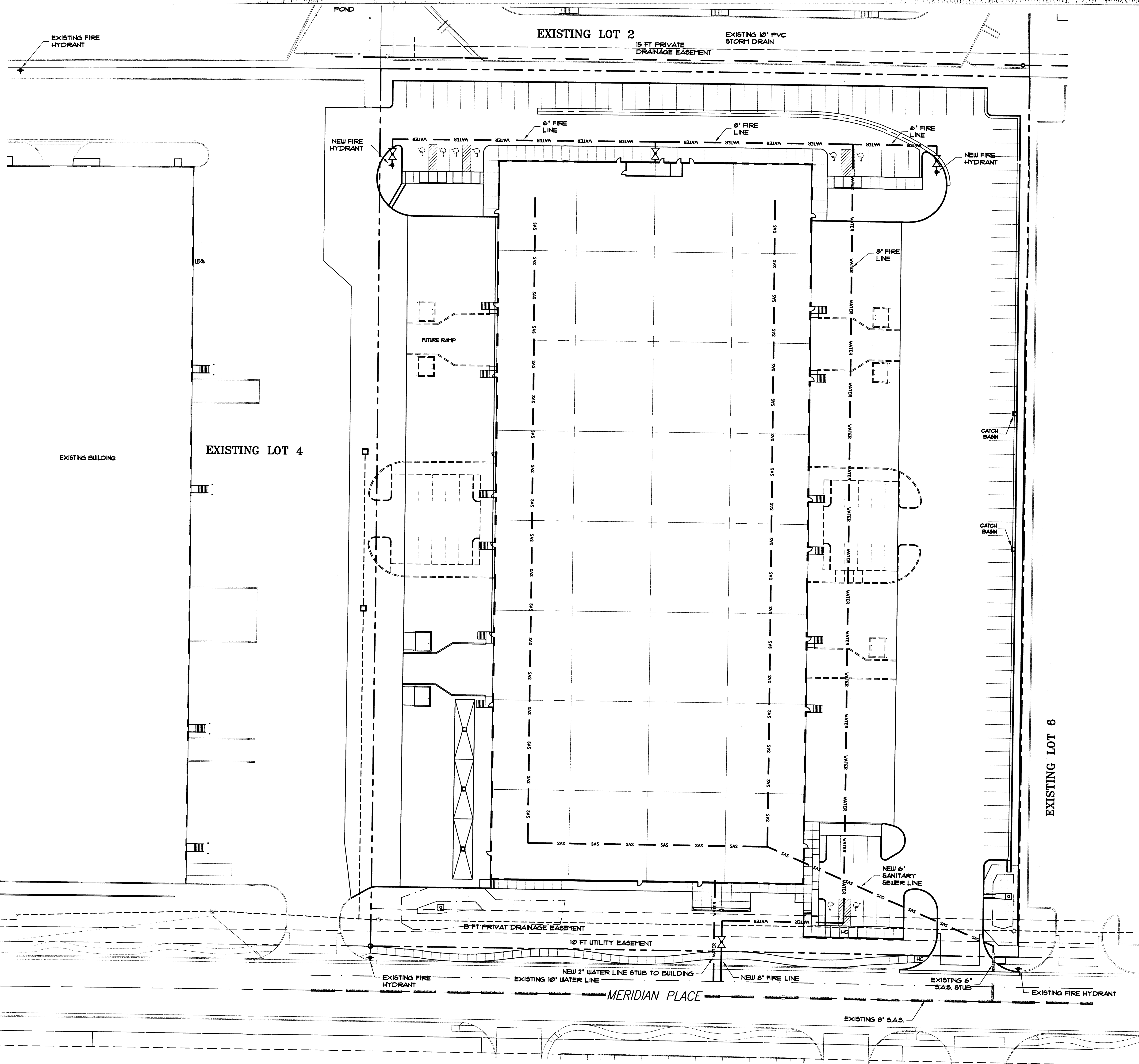
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Phone: 505/842-1113 Fax: 505/842-1330



LANDSCAPE ARCHITECTS & CONTRACTORS
Cont. Lic. #26458
7909 Edith N.E.
Albuquerque, NM 87184
Ph. (505) 898-9690
Fax (505) 898-7737
cmd@hilltoplandscaping.com

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GENERAL NOTES

THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ANY EXISTING UTILITY LINES, PIPELINES, OR OTHER UNDERGROUND UTILITY IN, OR NEAR, THE CONSTRUCTION SITE WITH THE OWNER AND UTILITY COMPANY PRIOR TO COMMENCEMENT OF WORK. ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITIES DEPICTED ON THESE DRAWINGS ARE SHOWN IN APPROXIMATE LOCATIONS BASED ON INFORMATION PROVIDED TO THE ARCHITECT/ENGINEER BY OTHERS. THIS INFORMATION MAY BE INACCURATE OR INCOMPLETE. ADDITIONAL UNDERGROUND LINES MAY EXIST THAT HAVE NOT BEEN SHOWN.

THE CONTRACTOR SHALL CONTACT THE STATEWIDE UTILITY LOCATOR SERVICE AT 1-800-321-2531 AT LEAST TWO WORKING DAYS BEFORE BEGINNING CONSTRUCTION. AFTER THE UTILITIES ARE SPOTTED, THE CONTRACTOR SHALL EXPOSE ALL PERTINENT UTILITIES TO VERIFY THEIR VERTICAL AND HORIZONTAL LOCATIONS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY CONFLICT BETWEEN THE EXISTING CONDITIONS AND THE PROPOSED CONSTRUCTION SO THAT A RESOLUTION CAN BE DETERMINED WITH MINIMAL DELAY.

THE CONTRACTOR SHALL EXERCISE DUE CARE TO AVOID DISTURBING ANY EXISTING UTILITIES, ABOVE AND BELOW THE GROUND. ANY DAMAGE TO EXISTING UTILITIES (AS DETERMINED ABOVE) BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL COORDINATE ANY INTERRUPTION IN SERVICE WITH THE OWNER AND THE UTILITY COMPANY THREE WORKING DAYS PRIOR TO INTERRUPTION.

THE CONTRACTOR SHALL MAINTAIN A RECORD DRAWING SET OF PLANS AND PROMPTLY LOCATE ALL UTILITIES, EXISTING AND NEW, IN THEIR CORRECT LOCATIONS, VERTICAL AND HORIZONTAL, ON THE RECORD SET. THE RECORD SET SHALL BE MAINTAINED ON THE PROJECT SITE AND SHALL BE AVAILABLE TO THE OWNER AND ARCHITECT AT ANY TIME DURING CONSTRUCTION. UPON COMPLETION OF THE PROJECT, THE RECORD SET SHALL BE TURNED OVER TO THE OWNER.



UTILITIES PLAN

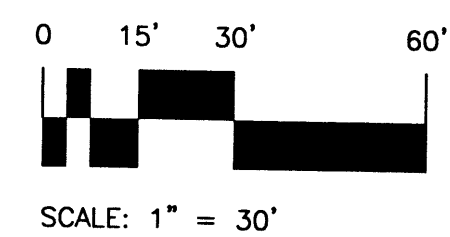
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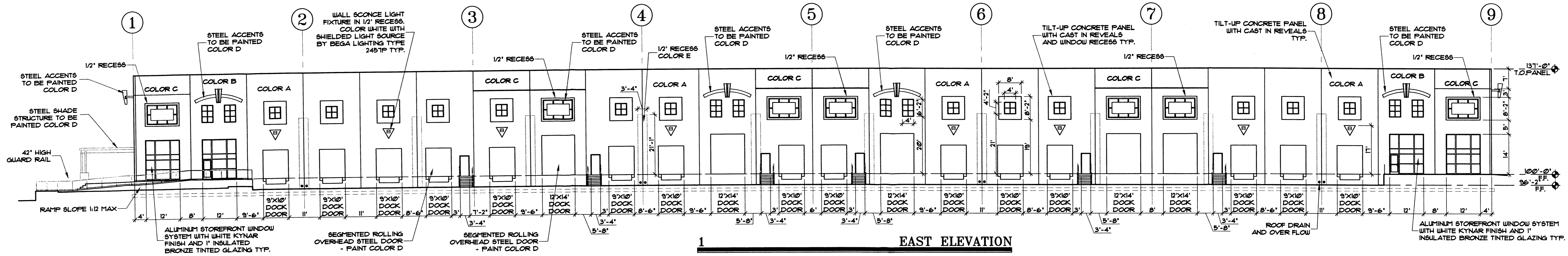
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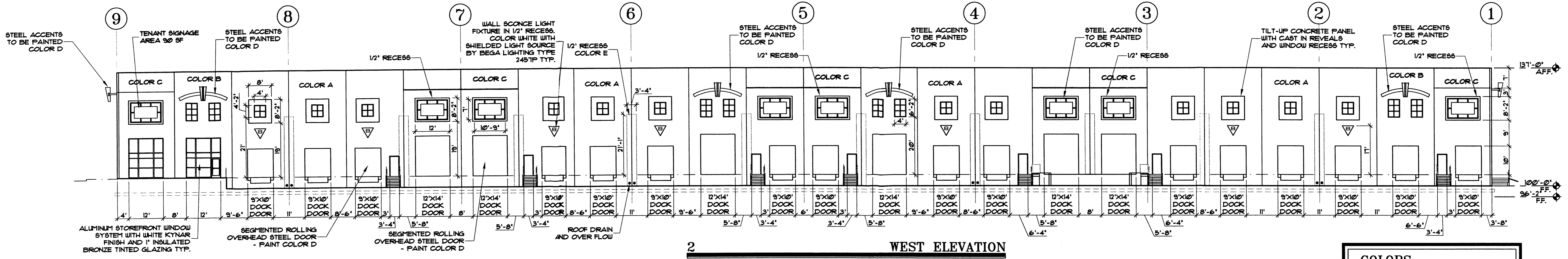
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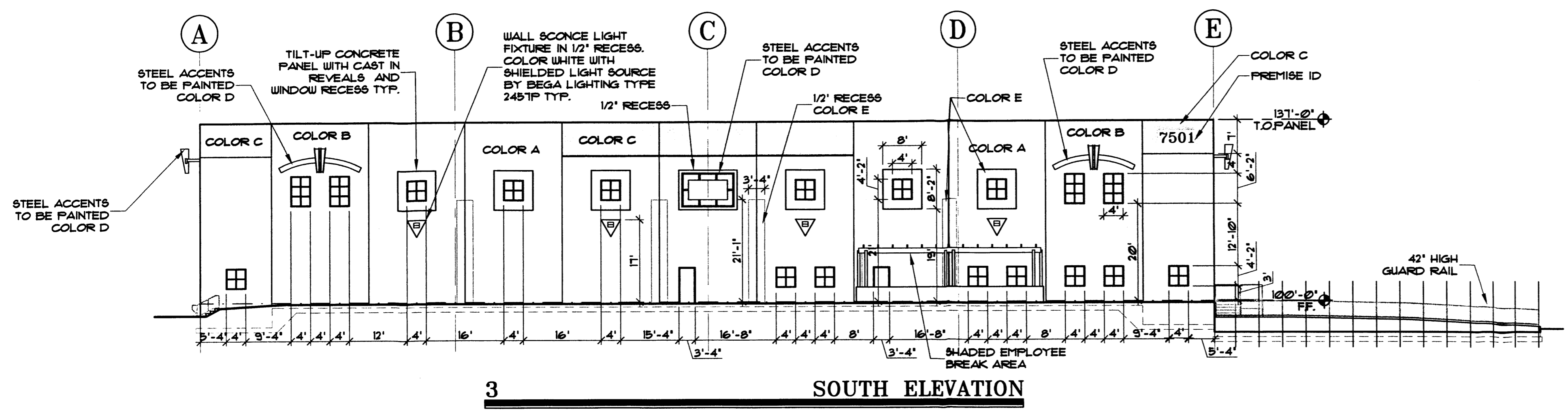




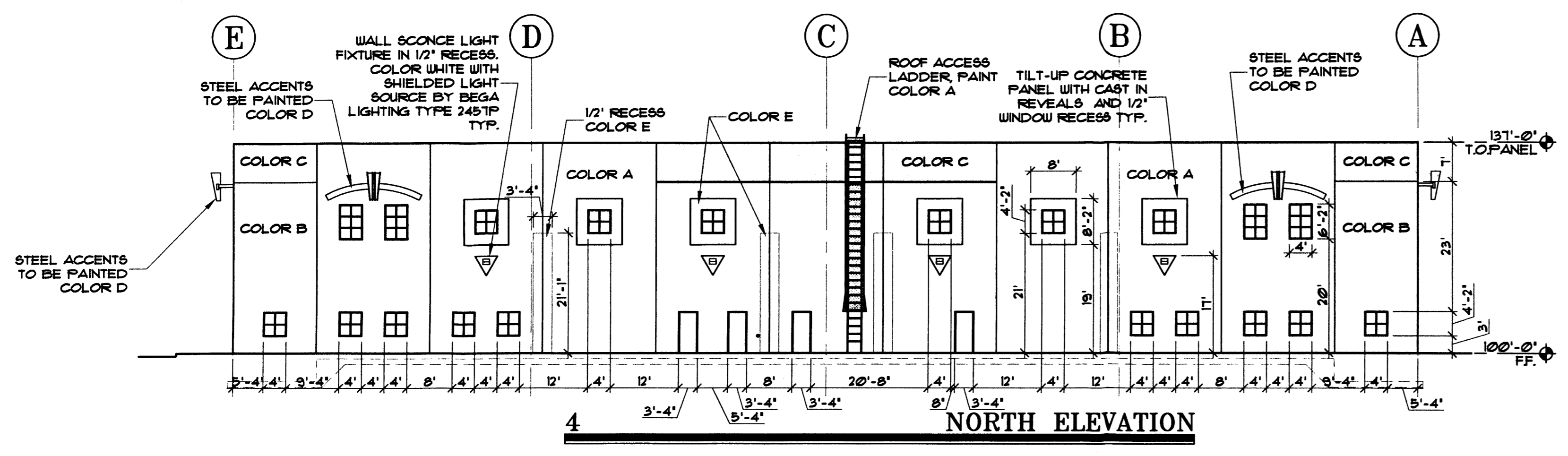
1 EAST ELEVATION



2 WEST ELEVATION



3 SOUTH ELEVATION

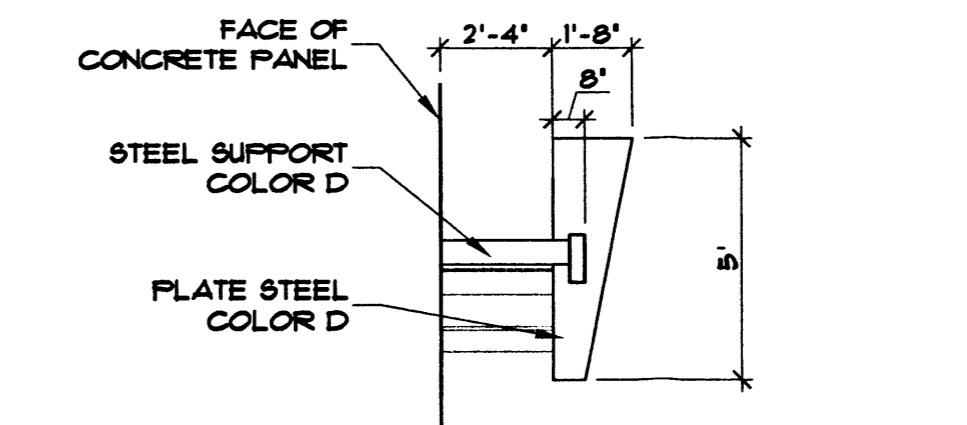


4 NORTH ELEVATION

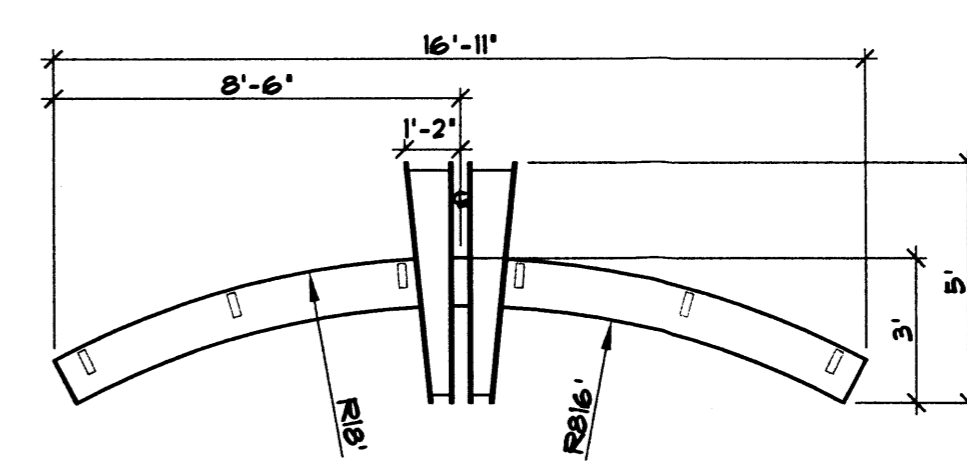
COLORS	
COLOR A:	SW 2200 - TRAVERTINE
COLOR B:	SW 2229 - AUDUBON
COLOR C:	SW 2248 - APRIL SHOWER
COLOR D:	WHITE
COLOR E:	SW 2226 - SHIRE GREEN

ELEVATIONS

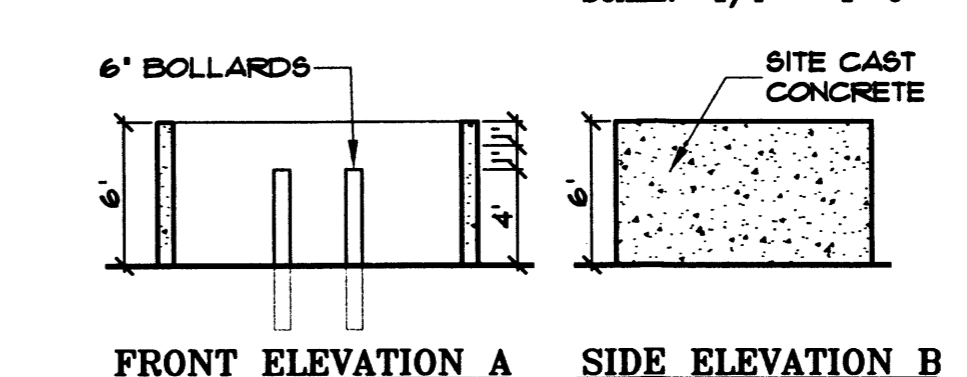
NOVEMBER 16, 2004 1/16" = 1'-0"



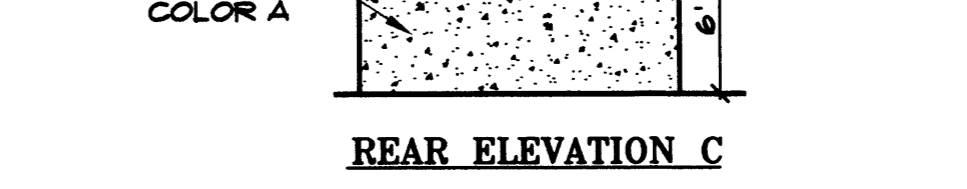
3SHADE STRUCTURE SECTION
SCALE: 1/4" = 1'-0"



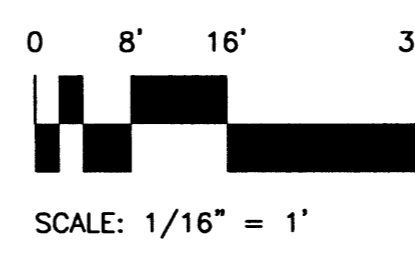
2 SHADE STRUCTURE
SCALE: 1/4" = 1'-0"



FRONT ELEVATION A SIDE ELEVATION B



REAR ELEVATION C
1 TRASH ENCLOSURE
SCALE: 1/8" = 1'-0"



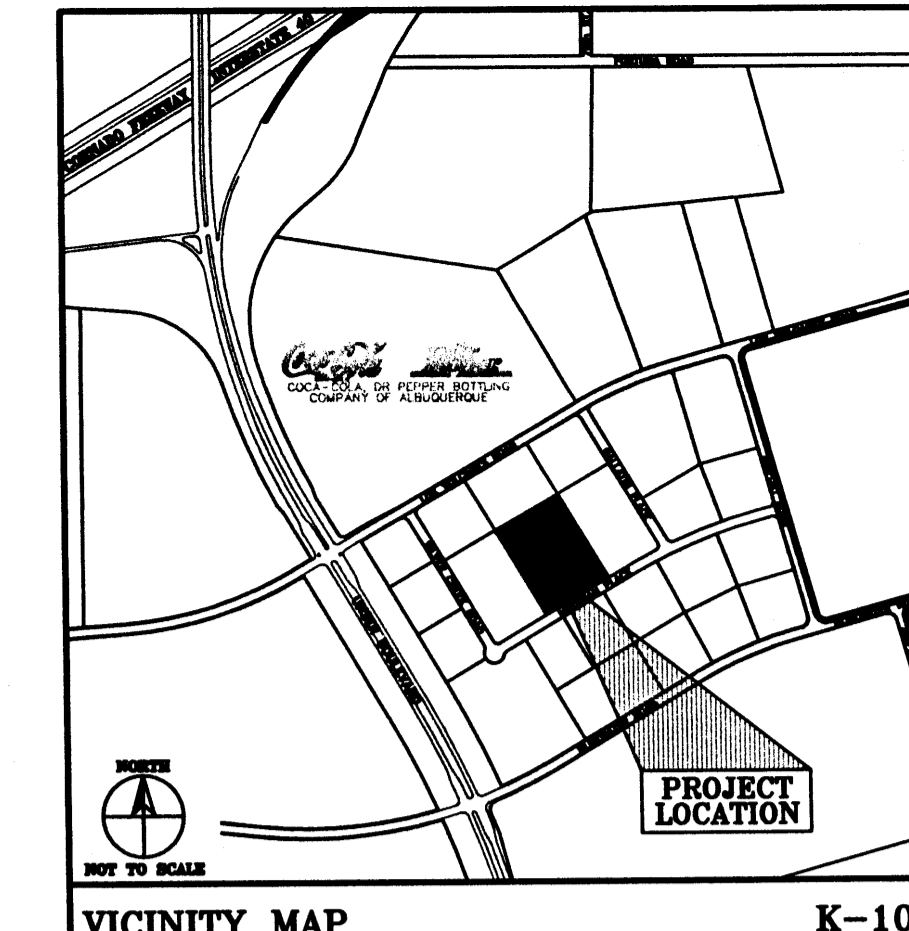
CLAUDIO VIGIL ARCHITECTS
OFFICE / WAREHOUSE
 MERIDIAN LOT 5
 7501 MERIDIAN PLACE NW
 ALBUQUERQUE, NEW MEXICO

SHEET
DRB
A-2
 PROJECT NUMBER
 04095

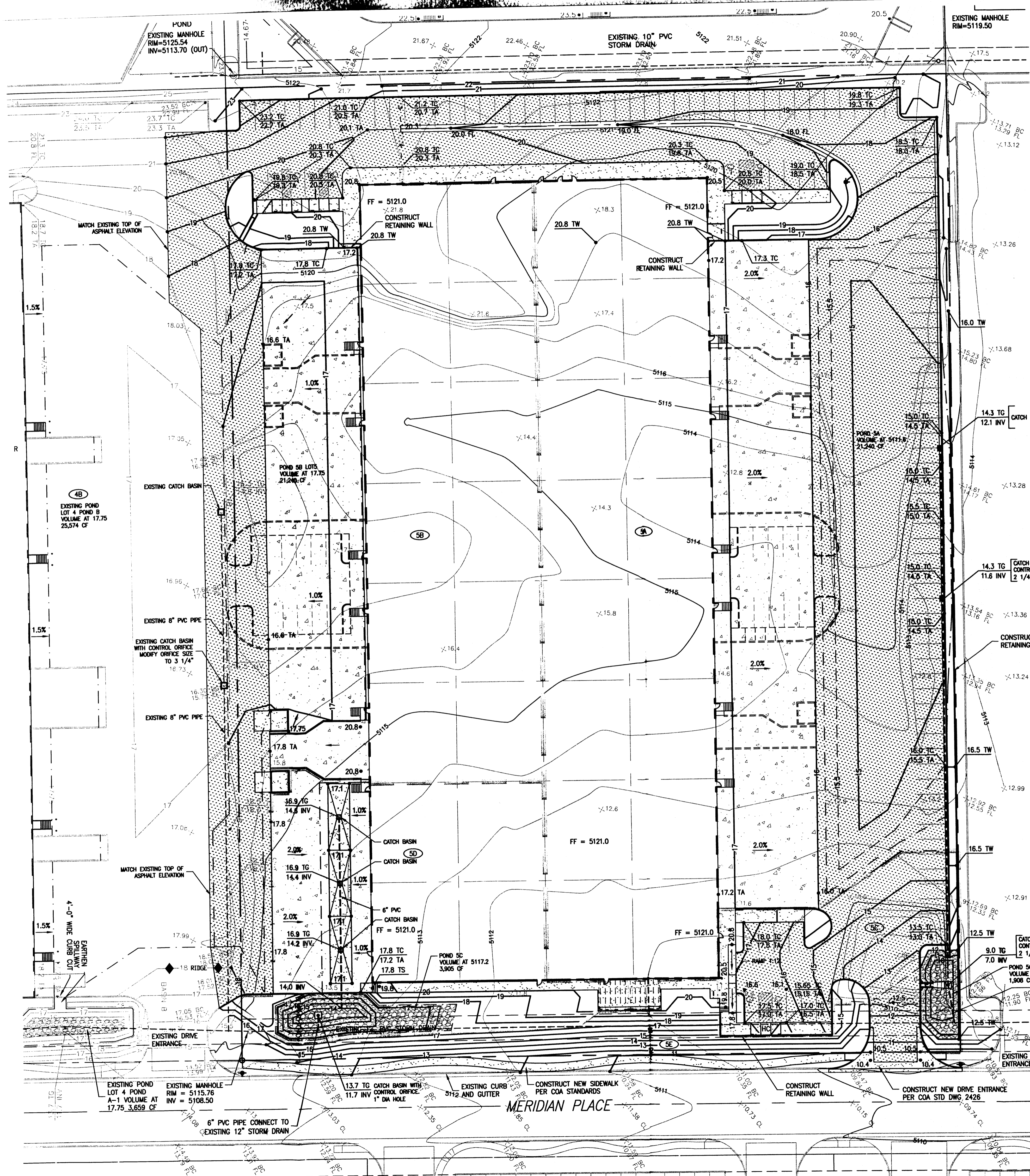
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GRADING AND DRAINAGE PLAN - LOT 9



VICINITY MAP
 ADDRESS: 7501 MERIDIAN PLACE
 LEGAL DESCRIPTION: LOT 5, MERIDIAN BUSINESS PARK
 BENCH MARK: ACS MONUMENT 10-K10 LOCATED AT THE SOUTHEAST CORNER OF UNSER BOULEVARD AND LOS VOLCANES ROAD
 ELEVATION = 5142.79 FT.



THE FOLLOWING ITEMS CONCERNING THE LOT-5, MERIDIAN BUSINESS PARK GRADING AND DRAINAGE PLAN ARE CONTAINED HEREON:

- VICINITY MAP
- GRADING PLAN
- CALCULATIONS

THE PROPOSED IMPROVEMENTS, AS SHOWN BY THE VICINITY MAP, ARE LOCATED ON THE NORTH SIDE OF MERIDIAN PLACE EAST OF THE INTERSECTION OF SILVER CREEK ROAD. THE SITE IS UNDEVELOPED. THE LANDS SLOPE FROM THE NORTHWEST CORNER TO THE SOUTHEAST AT AN APPROXIMATE SLOPE OF 2%. THE SITE WAS IN A FLOOD HAZARD ZONE, BUT THE CONSTRUCTION OF THE UNSER DIVERSION CHANNEL REMOVED THE SITE FROM THE FLOOD HAZARD ZONE.

THE MASTER DRAINAGE PLAN FOR THIS SUBDIVISION WAS PREPARED BY EASTERLING AND ASSOCIATES. THE MASTER PLAN ESTABLISHED A DISCHARGE RATE OF 0.1 CFS/ACRE AND REQUIRES TEMPORARY DIVERSION DITCHES AND PONDS TO CONTROL THE RUNOFF BE CONSTRUCTED ON EACH LOT.

THIS SITE IS HIGHER THAN THE ROAD TO THE SOUTH THE NORTH AND THE LANDS TO NORTH, EAST, AND WEST ARE DEVELOPED. THEREFORE, OFF SITE FLOWS ARE NOT CONSIDERED SIGNIFICANT.

THE GRADING PLAN SHOWS:

- THE EXISTING AND PROPOSED GRADES, INDICATED BY SPOT ELEVATIONS AND CONTOURS AT 1'-0" INTERVALS.
- CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS.
- THE LIMIT AND CHARACTER OF EXISTING IMPROVEMENTS, AND
- THE LIMIT AND CHARACTER OF THE PROPOSED IMPROVEMENTS.

THE PROPOSED IMPROVEMENTS CONSIST OF A WAREHOUSE/OFFICE WITH ASSOCIATED PARKING AND LANDSCAPING. THE SITE HAS BEEN DIVIDED INTO FIVE SUBBASINS.

CALCULATIONS
 PRECIPITATION ZONE = 1
 TOTAL SITE AREA = 5.813 ACRES

BASIN 5A
 AREA = 3.009 ACRES (52%)
 EXISTING CONDITIONS
 LAND TREATMENT A=100%
 E = 0.44(1.00) = 0.44 INCHES
 V = 0.44 (3.009) / 12 = 0.110 ACRE FEET
 Q = 1.29 (1.00) (3.009) = 3.9 CFS
 DEVELOPED CONDITIONS
 LAND TREATMENT B=6% D=94%
 E = 0.67 (0.06) + 1.97 (0.94) = 1.90 INCHES
 V = 1.90 (3.009) / 12 = 0.476 ACRE FEET
 Q = [2.03 (0.06) + 4.37 (0.94)] (3.009) = 12.8 CFS
 INCREASE IN VOLUME OF RUNOFF = 0.365 ACRE FT
 INCREASE IN RATE OF RUNOFF = 8.9 CFS
POND VOLUME BASIN 5A
 T_c = 0.2 HR 0.25 Ad/At = 0.25(0.94) = 0.235 HR
 T_p = 2.107 E At/Qp - 0.25 Ad/At = 0.707 HR
 T_p = (0.7 Tc) + ((1.6-Ad/At)/12) = 0.195 HR
 DISCHARGE RATE = 0.1 (1.64) = 0.30 CFS
 V_{required} = 20,896 CF

POND VOLUME POND 5A
 VOLUME @ ELEV 5115.8 (OUTLET INV AT 5111.8)
 V = [0.5*(27510+22400)*0.3 + 0.5*(22400+14400)*0.5 + 0.5*(14400)*0.7] = 21,275 CF
DISCHARGE PIPE SIZES AT POND 5A
 USE 2 1/4" DIA ORIFICE AREA = 3.98 IN SQ = 0.0278 SF
 Q = 0.60 (0.0278) √ 2 (32.2) (4.2) = 0.27 CFS

BASIN 5B
 AREA = 1.715 ACRES (30%)
 EXISTING CONDITIONS
 LAND TREATMENT A=100%
 E = 0.44(1.00) = 0.44 INCHES
 V = 0.44 (1.715) / 12 = 0.063 ACRE FEET
 Q = 1.29 (1.00) (1.715) = 2.2 CFS
 DEVELOPED CONDITIONS
 LAND TREATMENT B=3% D=97%
 E = 0.67 (0.03) + 1.97 (0.97) = 1.93 INCHES
 V = 1.93 (1.715) / 12 = 0.275 ACRE FEET
 Q = [2.03 (0.03) + 4.37 (0.97)] (1.715) = 7.4 CFS
 INCREASE IN VOLUME OF RUNOFF = 0.212 ACRE FT
 INCREASE IN RATE OF RUNOFF = 5.2 CFS
ADDITIONAL POND VOLUME BASIN 5B
 T_c = 0.2 HR 0.25 Ad/At = 0.25(0.97) = 0.243 HR
 T_p = 2.107 E At/Qp - 0.25 Ad/At = 0.704 HR
 T_p = (0.7 Tc) + ((1.6-Ad/At)/12) = 0.193 HR
 ADDITIONAL DISCHARGE RATE = 0.1 (1.715) = 0.17 CFS
 +V_{required} = 12,094 CF
POND VOLUME POND 5B
 VOLUME @ ELEV 5117.75 (OUTLET INV AT 5114.5)
 +V = [0.5*(26838+23203)*0.25 + 0.5*(22203+15307)*0.5 + 0.5*(15307)*0.7] = 21,240 CF

EXISTING BASIN 4B
 AREA = 3.616 ACRES
 VOLUME POND 4B - 25,574 CF @ 5117.75
MODIFIED DISCHARGE PIPE SIZES AT POND 4B
 DISCHARGE RATE 0.36 CFS + 0.17 CFS = 0.53 CFS
 USE 3 1/4" DIA ORIFICE AREA = 8.29 IN SQ = 0.0576 SF
 Q = 0.60 (0.0576) √ 2 (32.2) (3.25) = 0.50 CFS

CONSTRUCTION NOTES

- TWO WORKING DAY PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CALL FOR LOCATION OF EXISTING UTILITIES.
- ALL WORK WITHIN THE CITY RIGHT OF WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE CITY OF ALBUQUERQUE STANDARD AND PROCEDURE.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS, LAWS, AND RULES CONCERNING SAFETY AND HEALTH.
- PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY THE EXISTING SITE CONDITIONS AND INFORM THE ARCHITECT / ENGINEER OF ANY DISCREPANCY BETWEEN THE INFORMATION SHOWN THE PLANS AND THOSE OF THE EXISTING SITE.
- THE OWNER SHALL VERIFY LOCATIONS OF PONDS WITH GEOTECHNICAL ENGINEER PRIOR TO PROCEEDING WITH ANY CONSTRUCTION WORK ON THIS PROJECT, AND INFORM THE ARCHITECT / ENGINEER OF ANY ADDITIONAL REQUIREMENTS.
- CONTRACTOR SHALL PROVIDE THE ARCHITECT / ENGINEER AS BUILT SURVEY FOR ENGINEER'S CERTIFICATION.

BASIN 5C
 AREA = 0.297 ACRES (5%)
 EXISTING CONDITIONS
 LAND TREATMENT A=100%
 E = 0.44(1.00) = 0.44 INCHES
 V = 0.44 (0.297) / 12 = 0.016 ACRE FEET
 Q = 1.29 (1.00) (0.297) = 0.57 CFS
 DEVELOPED CONDITIONS
 LAND TREATMENT B=12% D=88%
 E = 0.67 (0.12) + 1.97 (0.88) = 1.81 INCHES
 V = 1.81 (0.297) / 12 = 0.042 ACRE FEET
 Q = [2.03 (0.12) + 4.37 (0.88)] (0.297) = 1.14 CFS
 INCREASE IN VOLUME OF RUNOFF = 0.027 ACRE FT
 INCREASE IN RATE OF RUNOFF = 0.57 CFS
POND VOLUME BASIN 5C
 T_c = 0.2 HR 0.25 Ad/At = 0.25(0.88) = 0.220 HR
 T_p = 2.107 E At/Qp - 0.25 Ad/At = 0.715 HR
 T_p = (0.7 Tc) + ((1.6-Ad/At)/12) = 0.200 HR
 DISCHARGE RATE = 0.1 (0.297) = 0.03 CFS
 V_{required} = 1,846 CF

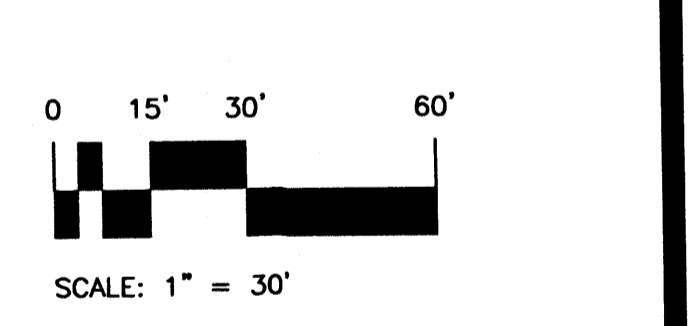
POND VOLUME POND 5C
 VOLUME @ ELEV 5112.0 (OUTLET INV AT 5107.0)
 V = [0.5*(1126+2(875+470)+0)]*1.0 = 1,908 CF
DISCHARGE PIPE SIZES AT POND 5C
 DISCHARGE RATE = 0.27 CFS + 0.03 CFS = 0.30 CFS
 USE 2 1/4" DIA ORIFICE AREA = 3.98 IN SQ = 0.0278 SF
 Q = 0.60 (0.0278) √ 2 (32.2) (5.0) = 0.30 CFS

BASIN 5E
 AREA = 0.202 ACRES (3%)
 EXISTING CONDITIONS
 LAND TREATMENT A=100%
 E = 0.44(1.00) = 0.44 INCHES
 V = 0.44 (0.202) / 12 = 0.007 ACRE FEET
 Q = 1.29 (1.00) (0.202) = 0.3 CFS
 DEVELOPED CONDITIONS
 LAND TREATMENT B=94% D=6%
 E = 0.67 (0.06) + 1.97 (0.94) = 0.75 INCHES
 V = 0.75 (0.202) / 12 = 0.013 ACRE FEET
 Q = [2.03 (0.06) + 4.37 (0.94)] (0.202) = 0.4 CFS
 INCREASE IN VOLUME OF RUNOFF = 0.005 ACRE FT
 INCREASE IN RATE OF RUNOFF = 0.1 CFS

BASIN 5D
 AREA = 0.608 ACRES (10%)
 EXISTING CONDITIONS
 LAND TREATMENT A=100%
 E = 0.44(1.00) = 0.44 INCHES
 V = 0.44 (0.608) / 12 = 0.034 ACRE FEET
 Q = 1.29 (1.00) (0.608) = 1.2 CFS
 DEVELOPED CONDITIONS
 LAND TREATMENT B=19% D=81%
 E = 0.67 (0.19) + 1.97 (0.81) = 1.72 INCHES
 V = 1.72 (0.608) / 12 = 0.087 ACRE FEET
 Q = [2.03 (0.19) + 4.37 (0.81)] (0.608) = 2.4 CFS
 INCREASE IN VOLUME OF RUNOFF = 0.053 ACRE FT
 INCREASE IN RATE OF RUNOFF = 1.2 CFS
POND VOLUME BASIN 5D
 T_c = 0.2 HR 0.25 Ad/At = 0.25(0.81) = 0.203 HR
 T_p = 2.107 E At/Qp - 0.25 Ad/At = 0.723 HR
 T_p = (0.7 Tc) + ((1.6-Ad/At)/12) = 0.206 HR
 DISCHARGE RATE = 0.1 (0.608) = 0.06 CFS
 V_{required} = 3,808 CF

POND VOLUME POND 5D
 VOLUME @ ELEV 5117.2 (OUTLET INV AT 5111.7)
 V = [0.5*(5690+2549)*1.2 + 0.5*(2549+2(961+581+265)+0)]*1.0 = 3,905 CF
DISCHARGE PIPE SIZES AT POND 5D
 USE 1" DIA ORIFICE AREA = 0.78 IN SQ = 0.0055 SF
 Q = 0.60 (0.0055) √ 2 (32.2) (5.5) = 0.06 CFS

GRADING PLAN
 NOVEMBER 16, 2004
 1" = 30'-0"



LEGEND:

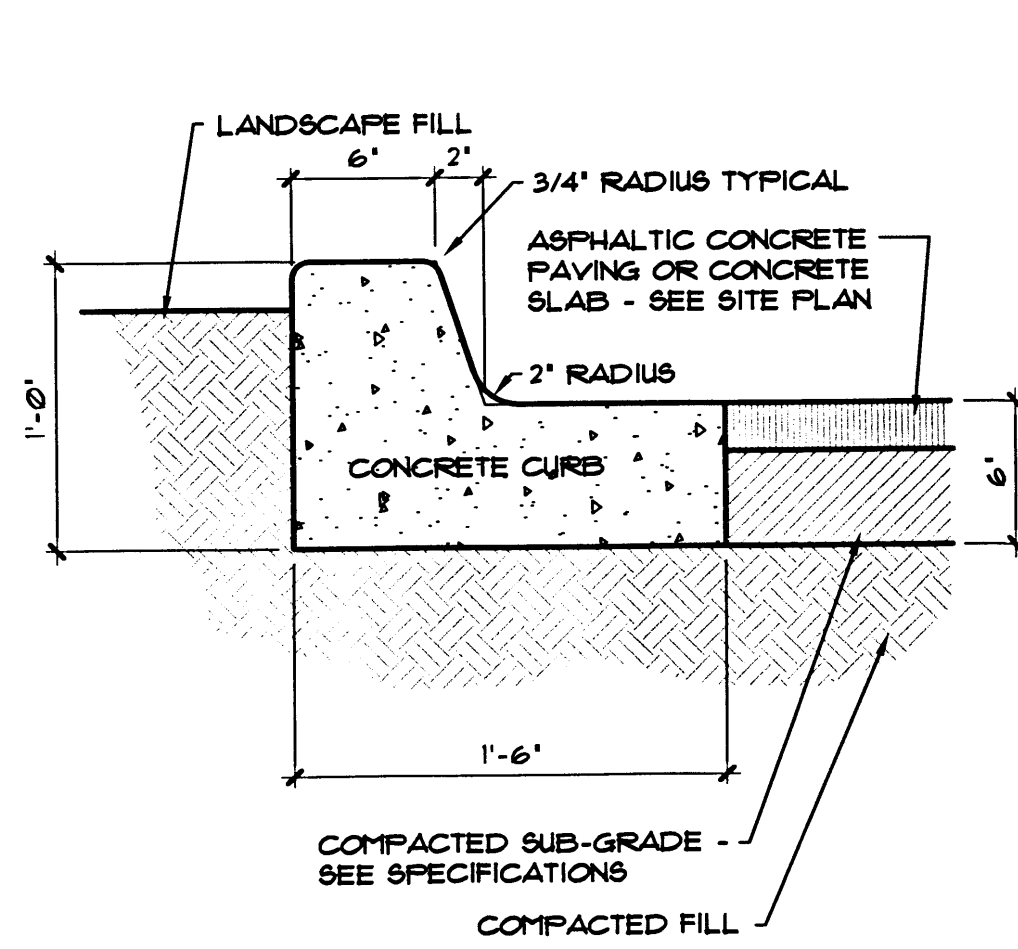
- 51.0 EXISTING SPOT ELEVATION
- 51.00 NEW SPOT ELEVATION
- 51— EXISTING CONTOUR
- 51— NEW CONTOUR
- SWALE
- ✓ VERIFIED ELEVATION
- 51.0 AS BUILT ELEVATION
- BASIN BOUNDARY
- SB BASIN IDENTIFICATION
- PROPERTY LINE
- FL FLOW LINE
- GND GROUND
- INV INVERT
- TA TOP OF ASPHALT
- TC TOP OF CURB
- TG TOP OF GRADE
- TS TOP OF CONCRETE SLAB
- TW TOP OF WALL
- TBM TEMPORARY BENCH MARK
- GRAVEL
- ASPHALT PAVING
- CONCRETE

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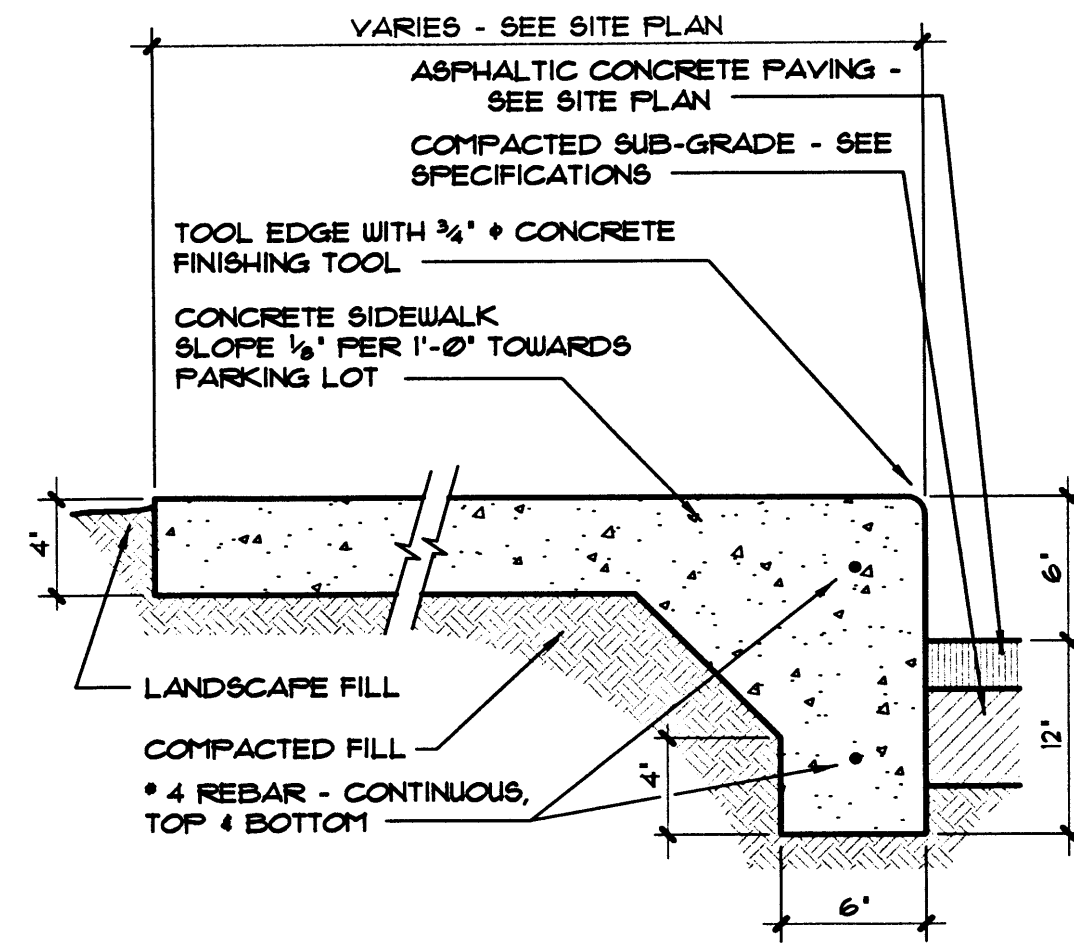
SHEET
 C-2
 PROJECT NUMBER
 04095

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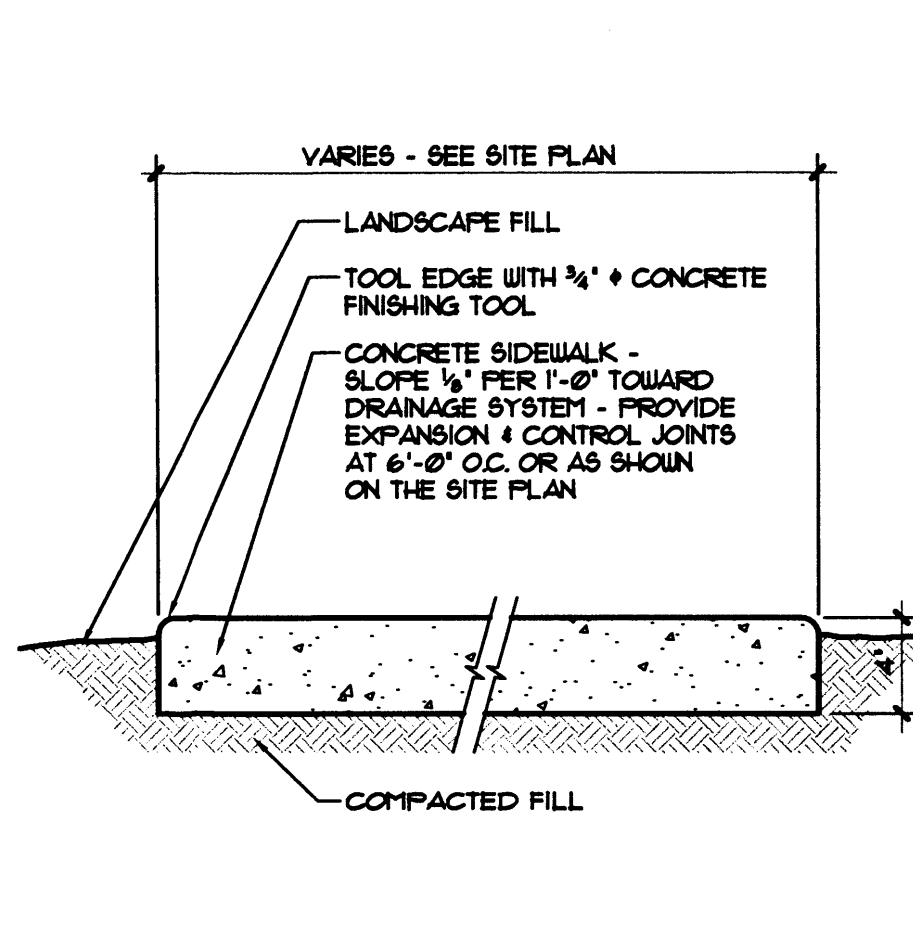
1801 Rio Grande NW, #2, Albuquerque, NM 87104
 Phone: 505/842-1113 Fax: 505/842-1330



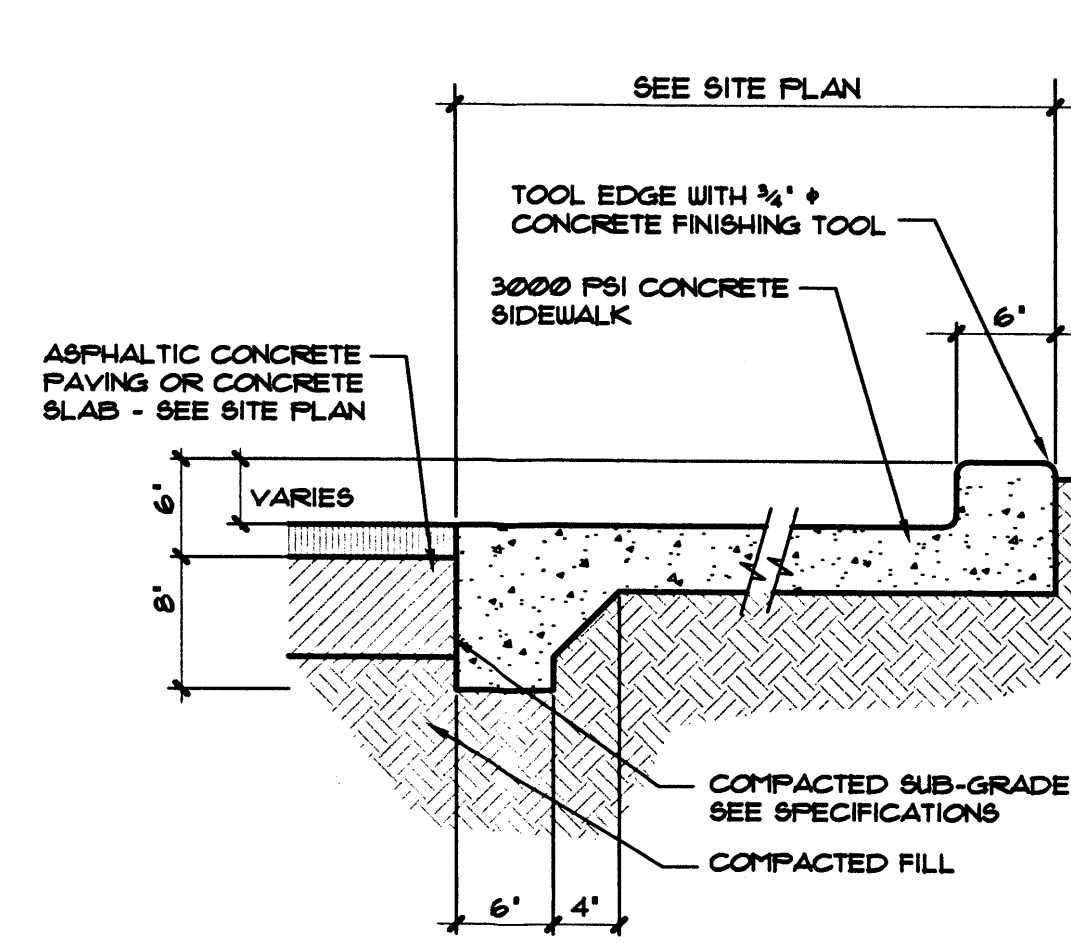
1 **TYPICAL CURB**
SCALE: 1 1/2" = 1'-0"



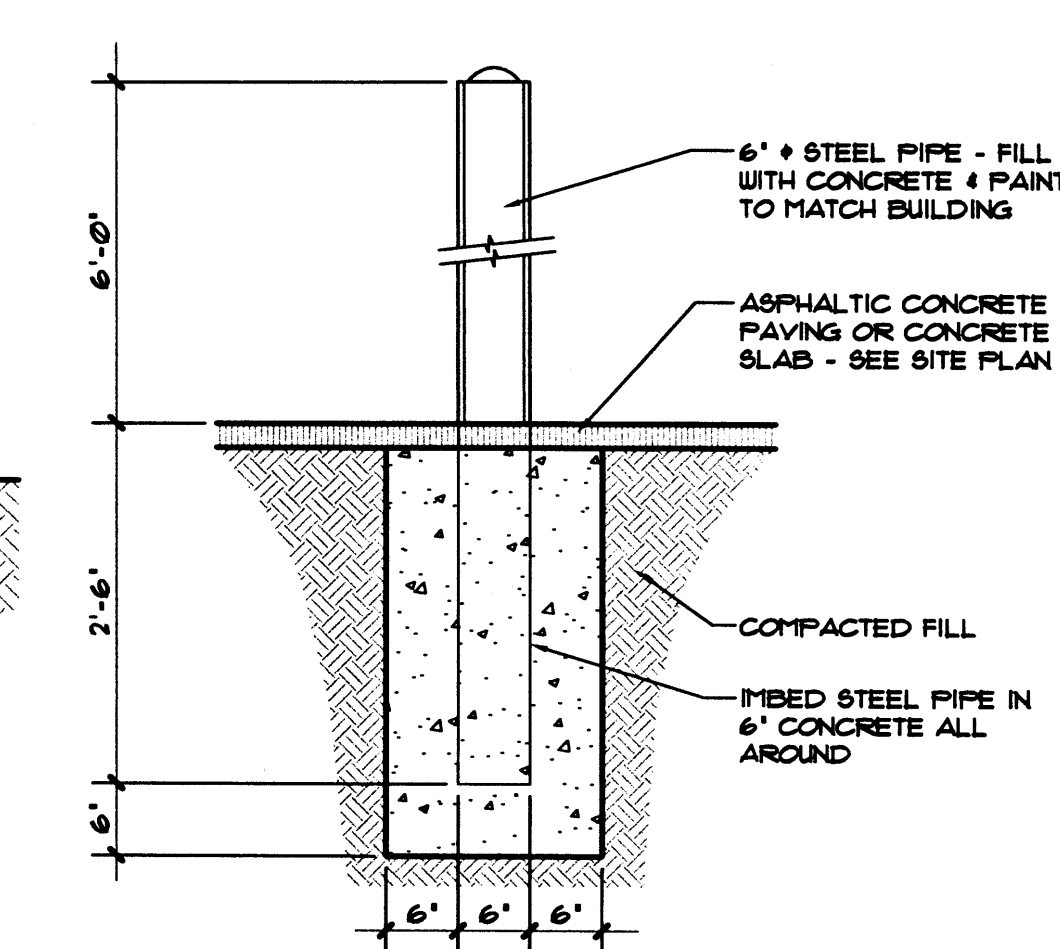
2 **TURNDOWN SIDEWALK**
SCALE: 3/4" = 1'-0"



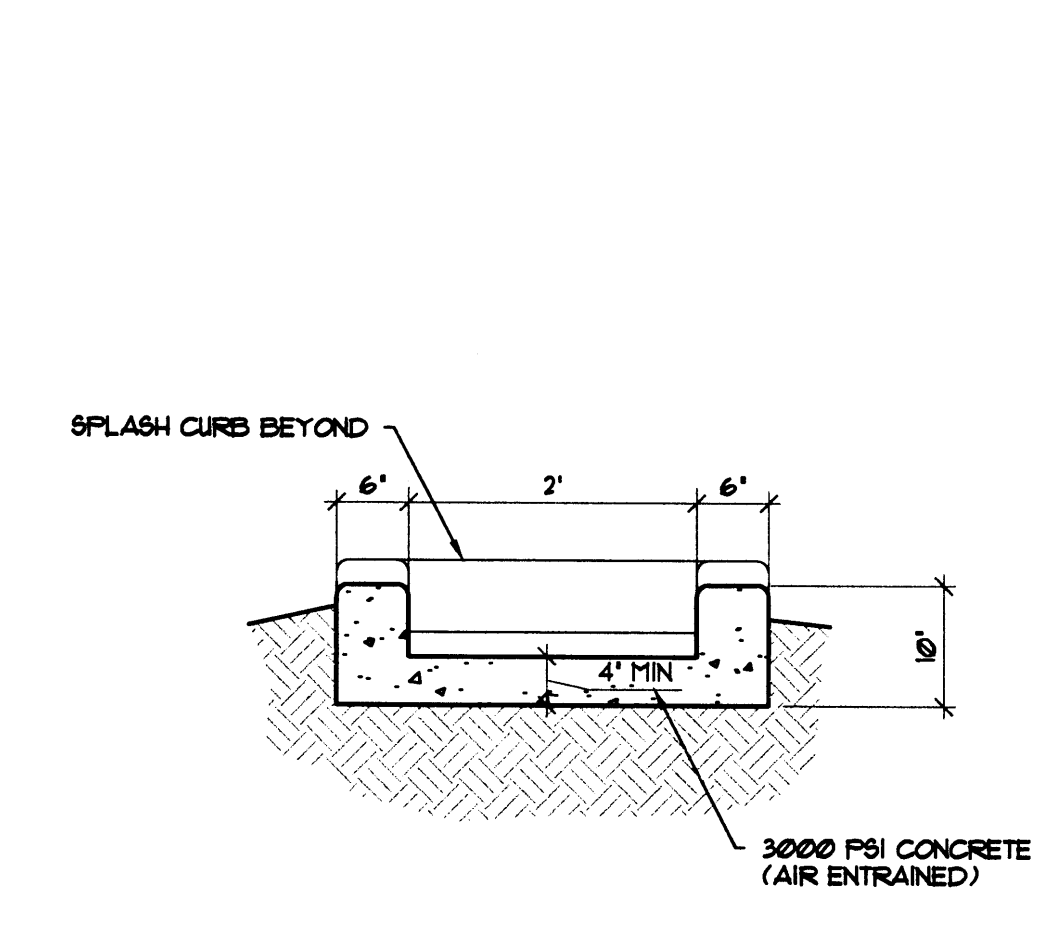
3 **TYPICAL SIDEWALK**
SCALE: 1-1/2" = 1'-0"



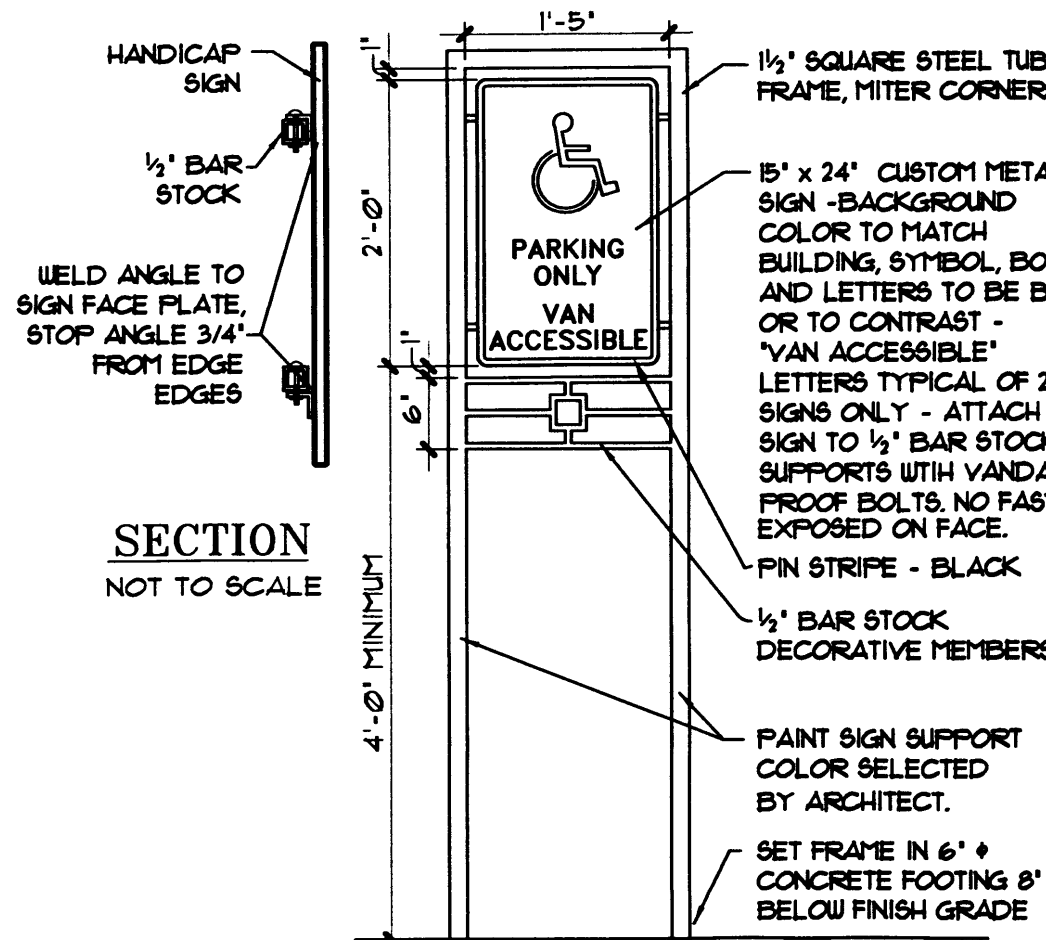
4 **SIDEWALK CURB**
SCALE: 3/4" = 1'-0"



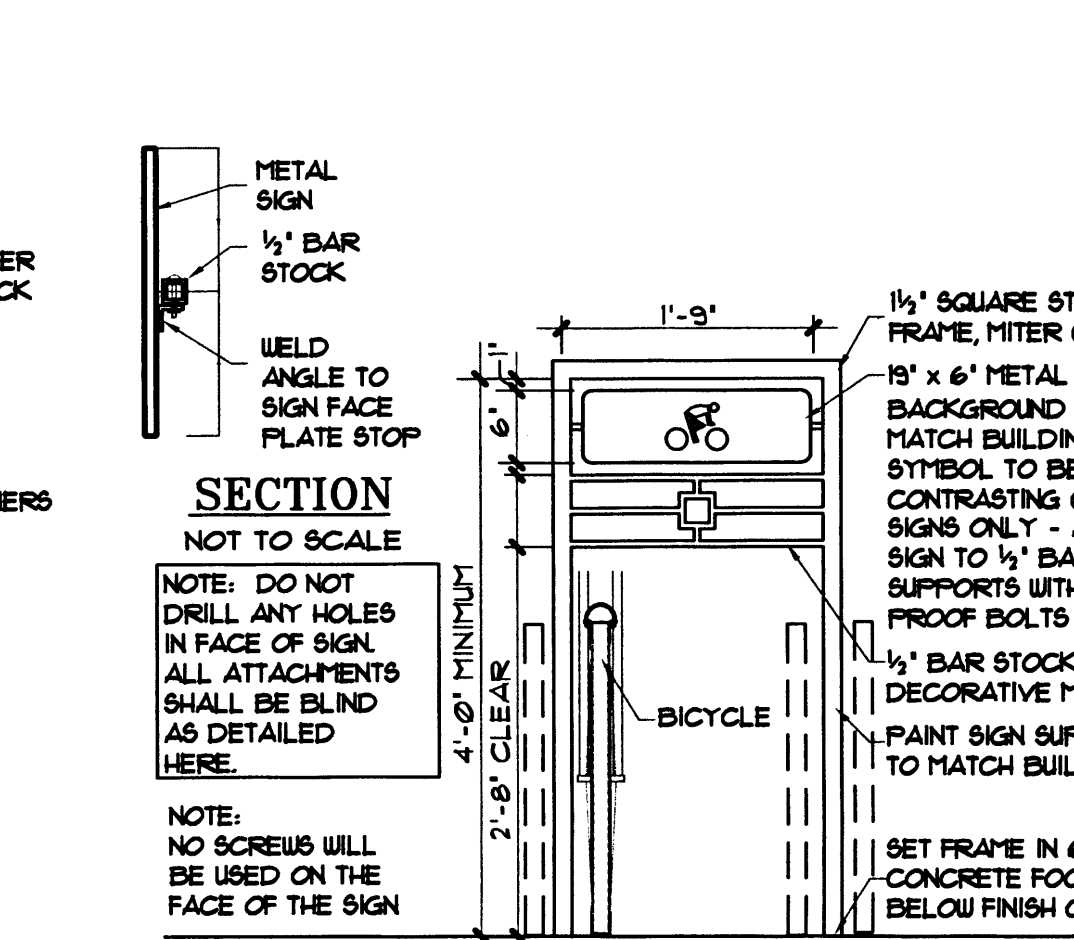
5 **EXTERIOR BOLLARD DETAIL**
SCALE: 3/4" = 1'-0"



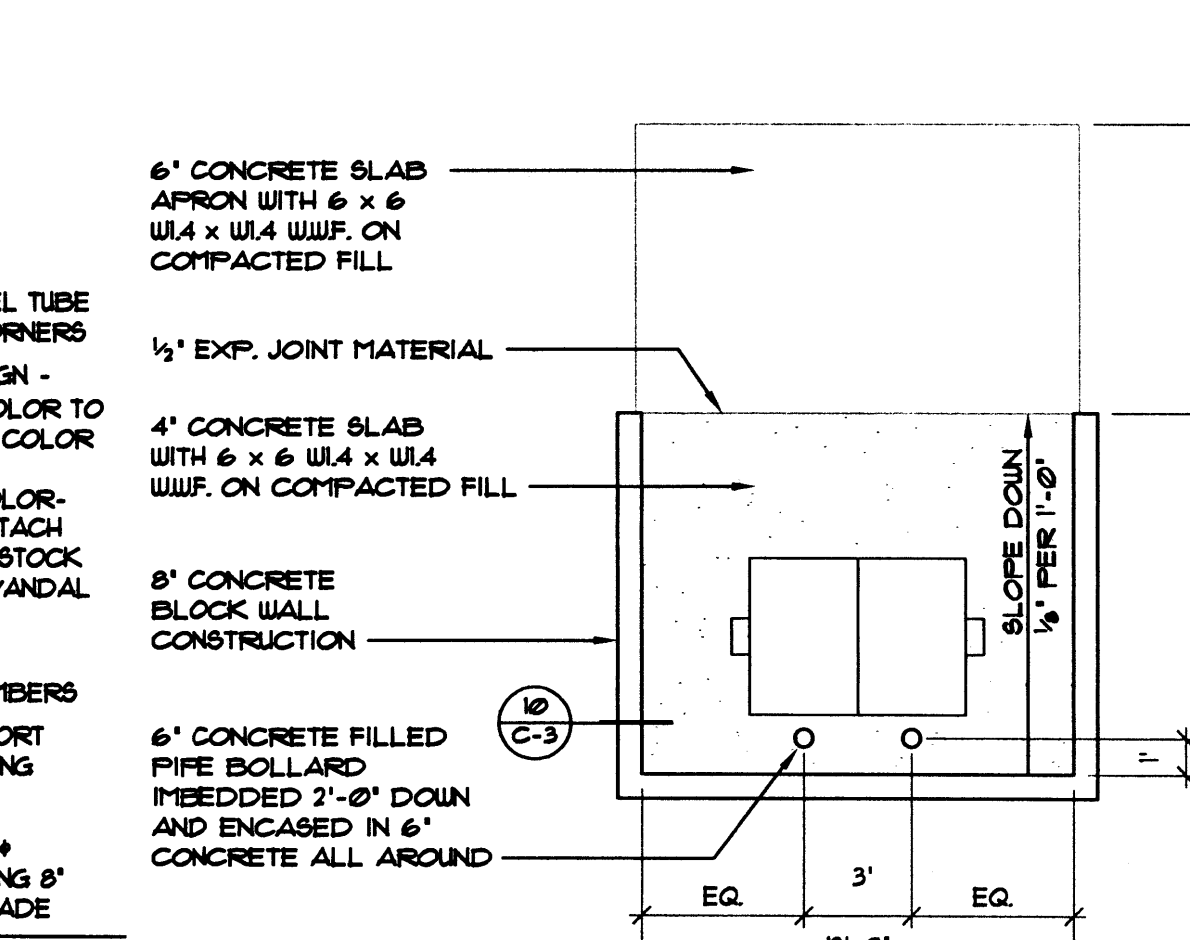
6 **CONCRETE RUNDOWN**
SCALE: 3/4" = 1'-0"



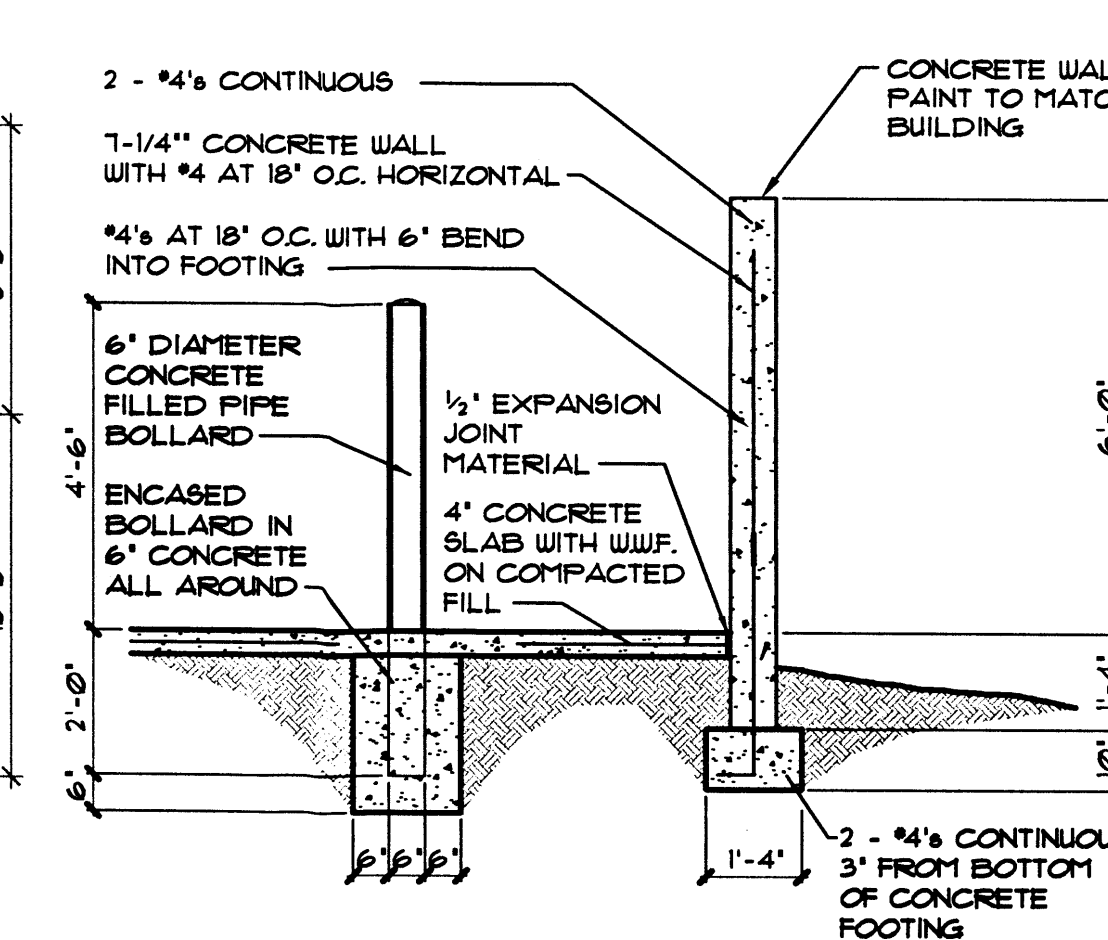
7 **HANDICAP SIGN**
SCALE: 3/4" = 1'-0"



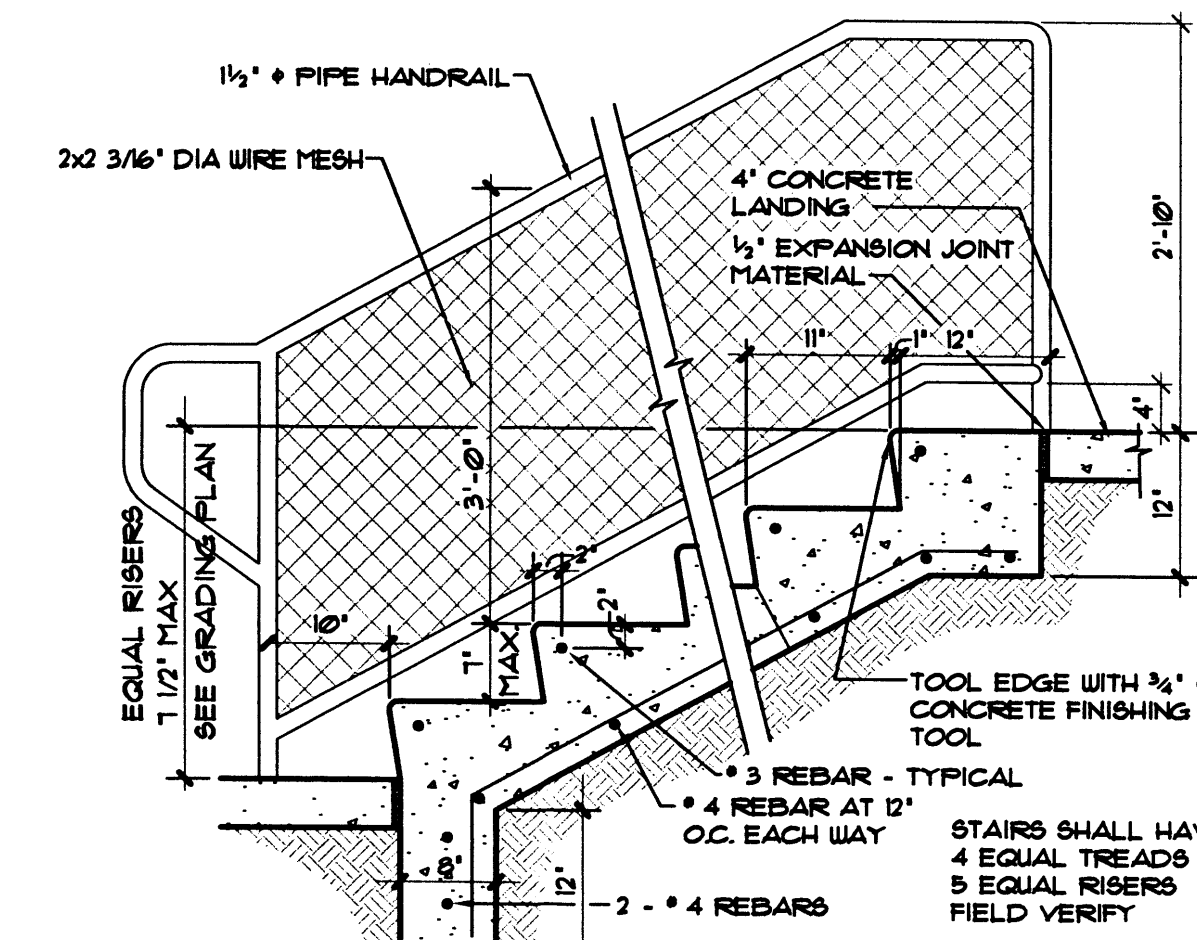
8 **BICYCLE RACK**
SCALE: 3/4" = 1'-0"



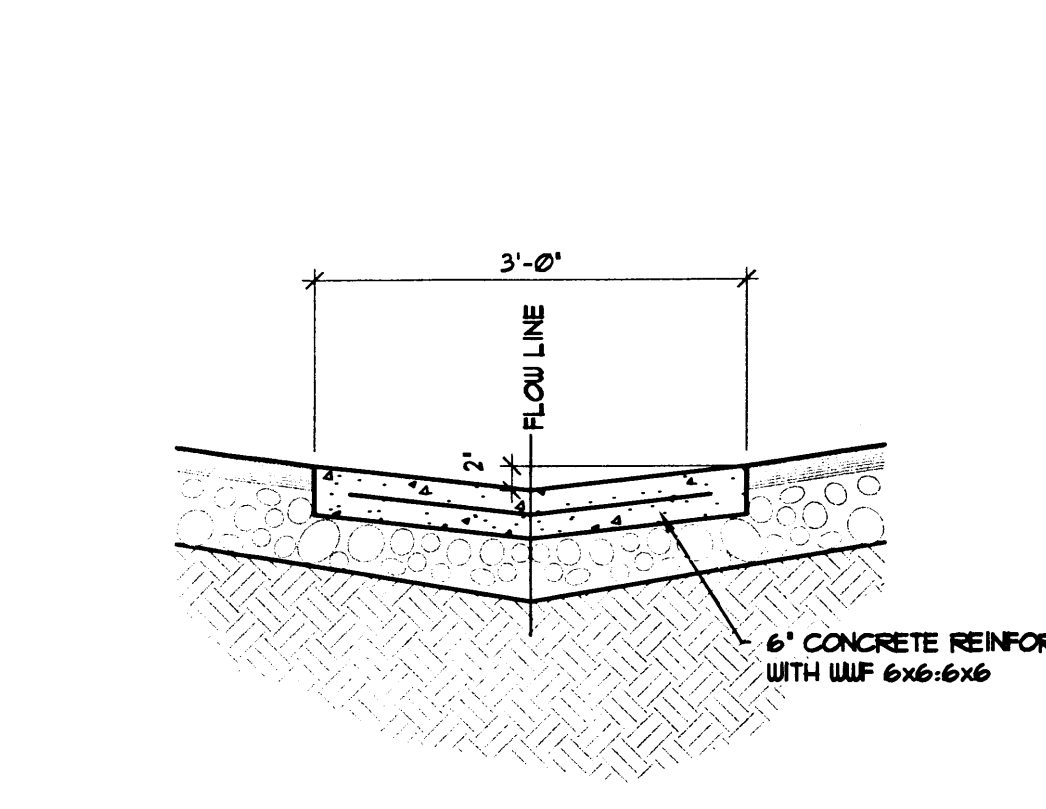
9 **TRASH ENCLOSURE**
SCALE: 3/16" = 1'-0"



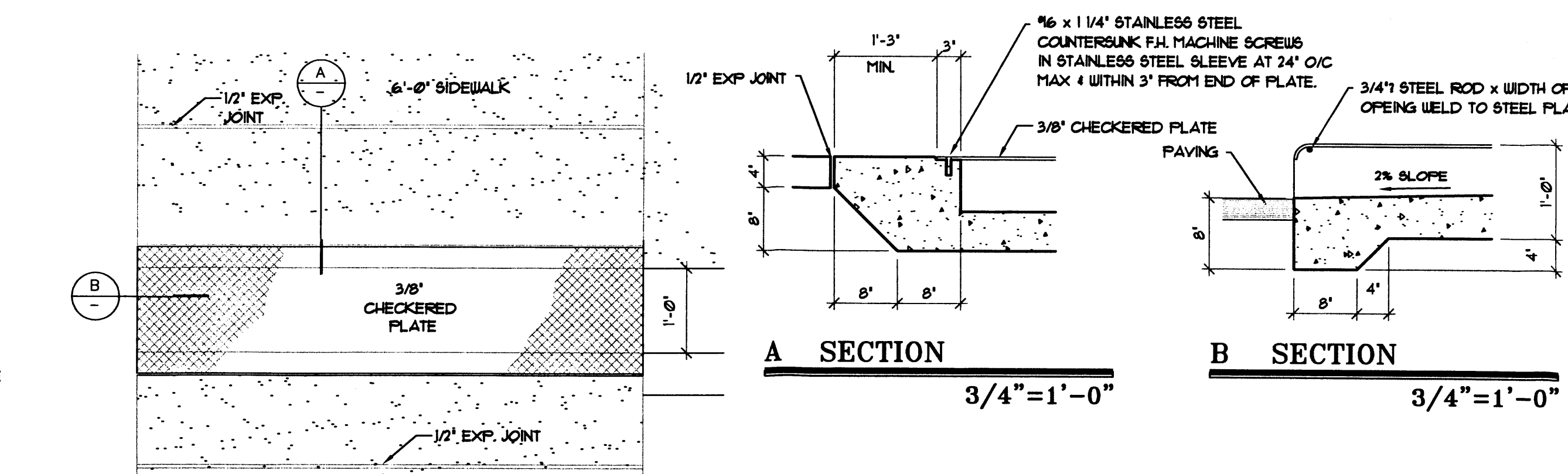
10 **TRASH ENCLOSURE**
SCALE: 3/8" = 1'-0"



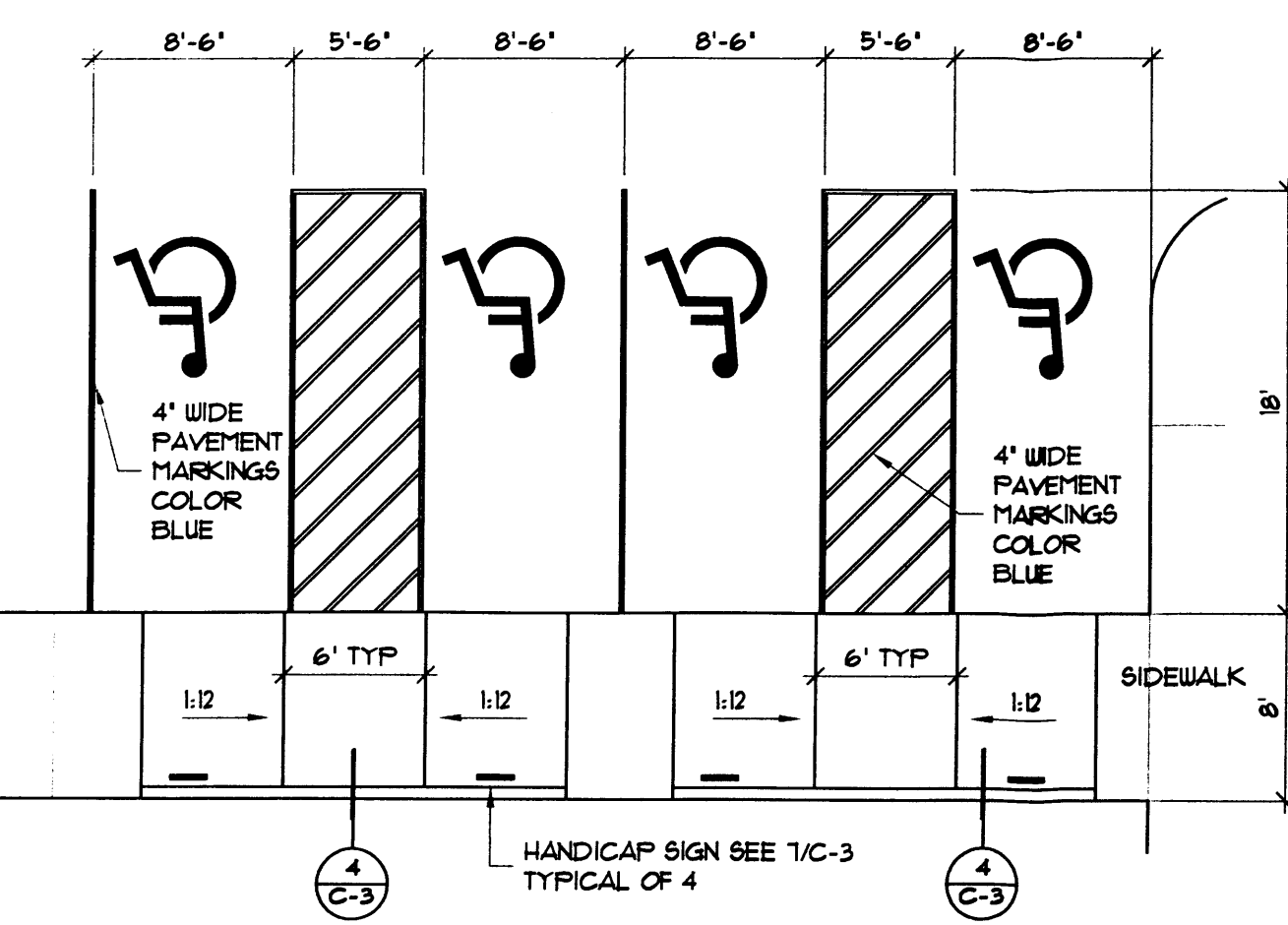
11 **CONCRETE STAIR**
SCALE: 3/4" = 1'-0"



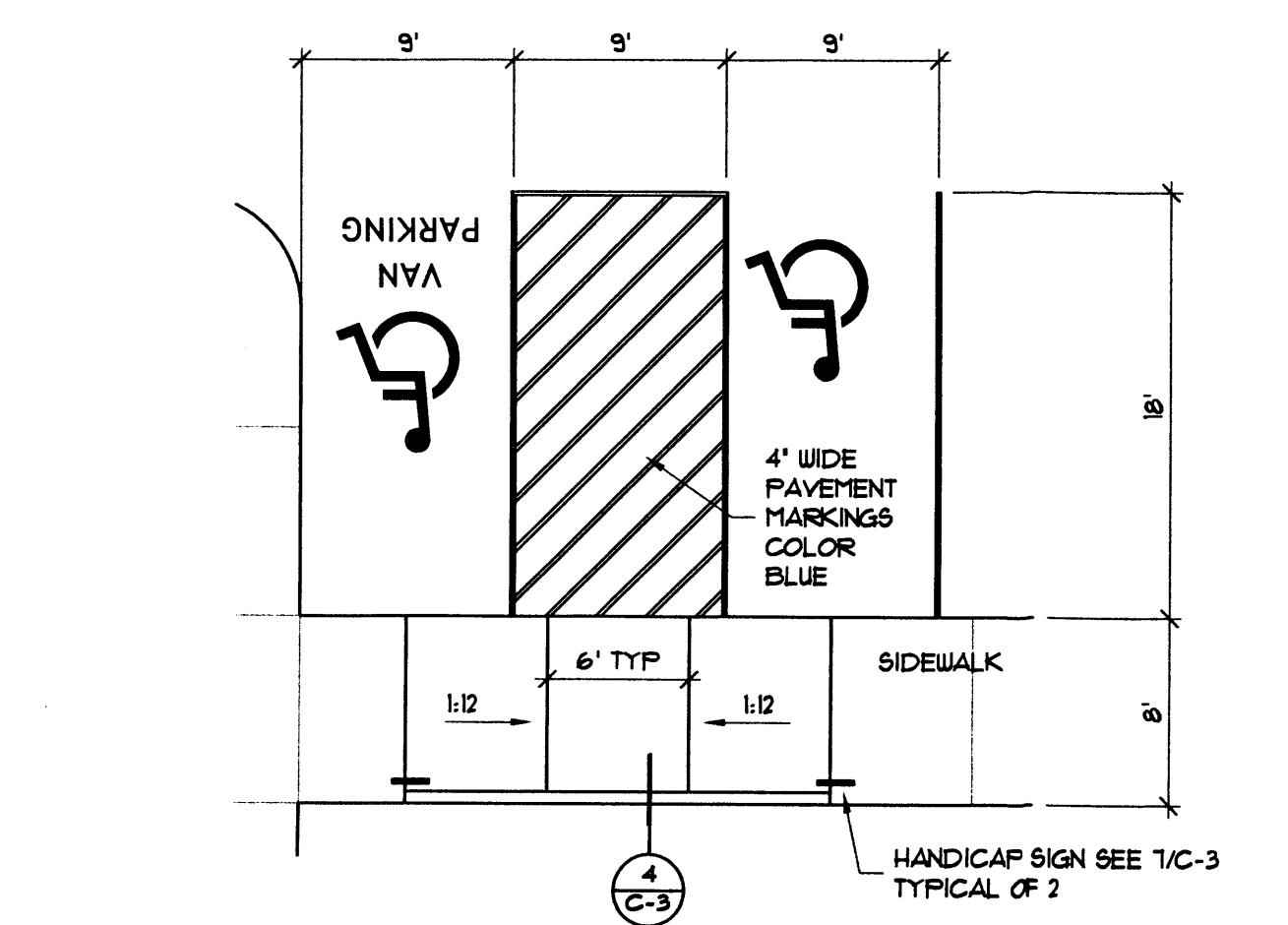
12 **CONCRETE VALLEY**
SCALE: 3/4" = 1'-0"



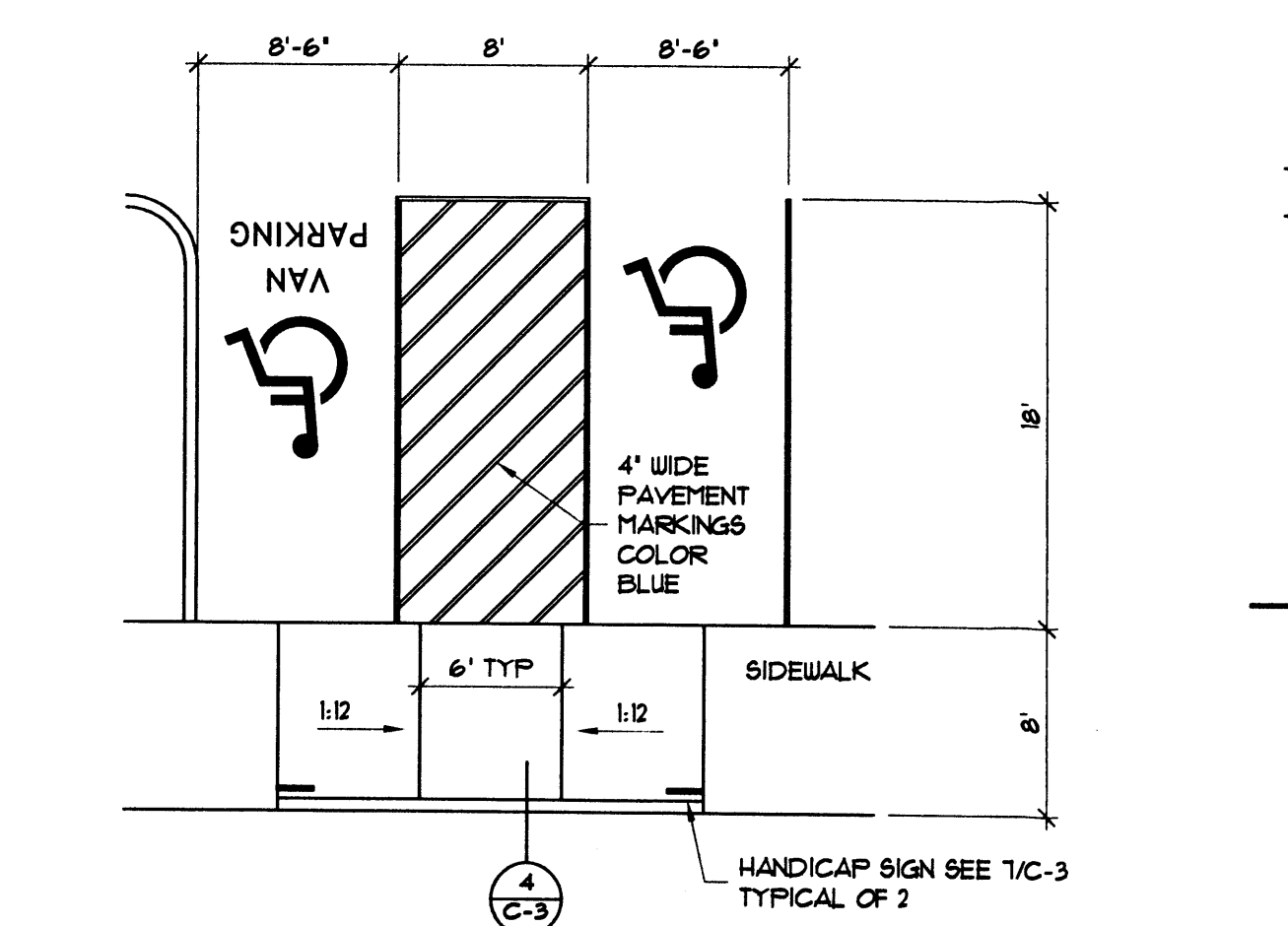
13 **SIDEWALK CULVERT**
SCALE: 3/4" = 1'-0"



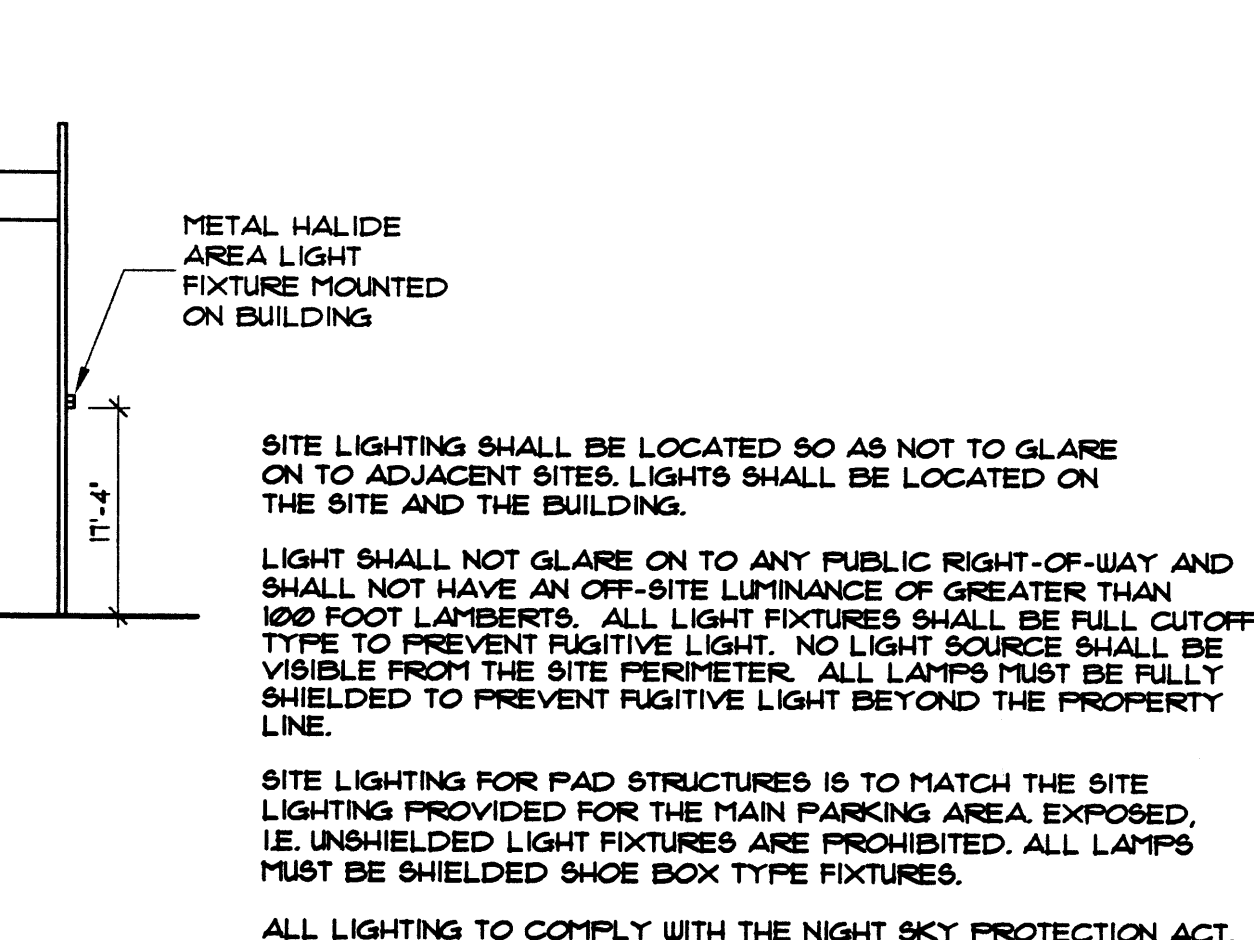
A **HANDICAP PARKING**
SCALE: 1/8" = 1'-0"



B **HANDICAP PARKING**
SCALE: 1/8" = 1'-0"



C **HANDICAP PARKING**
SCALE: 1/8" = 1'-0"



D **TYPICAL LIGHTING DETAIL**
NOT TO SCALE

SITE DETAILS

NOVEMBER 16, 2004 SCALE AS NOTED

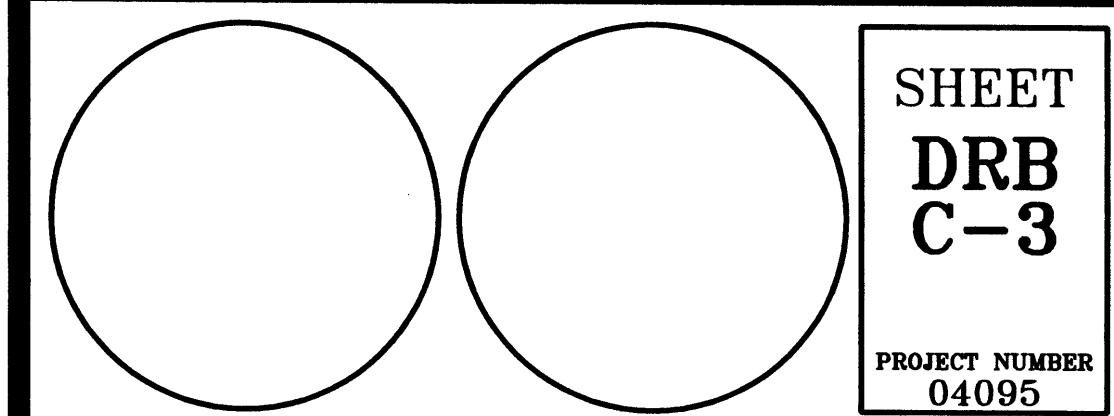


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