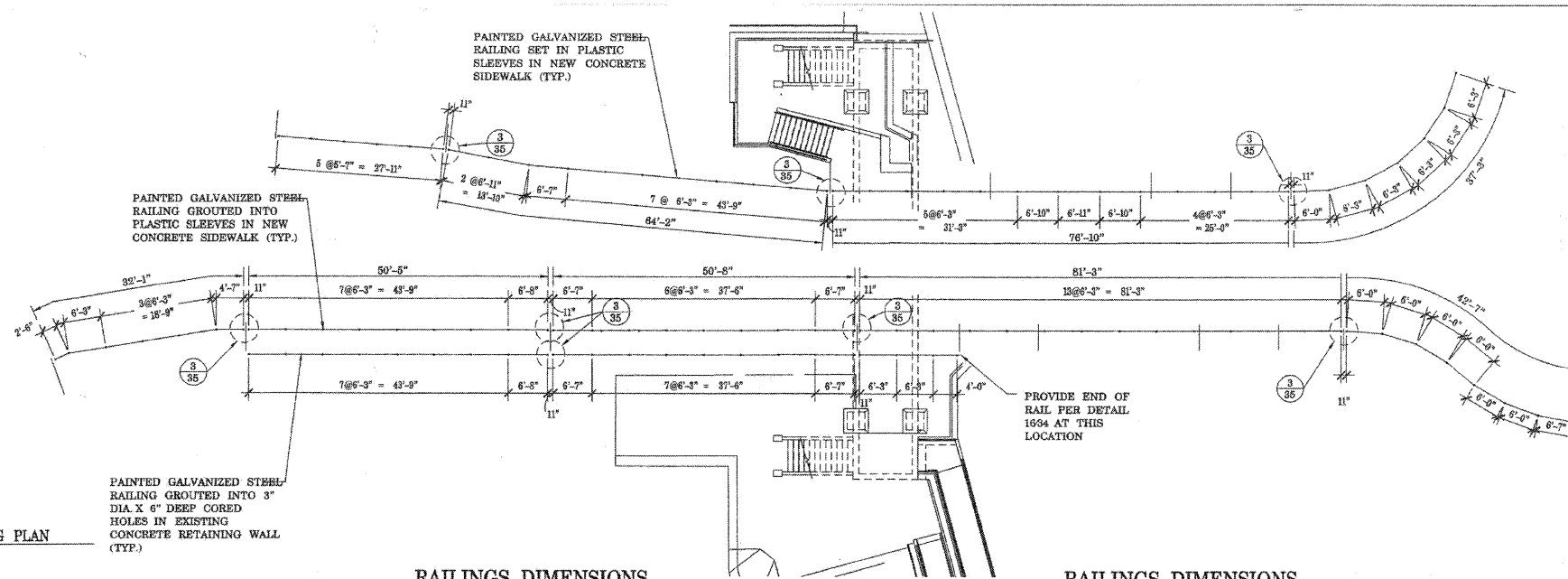
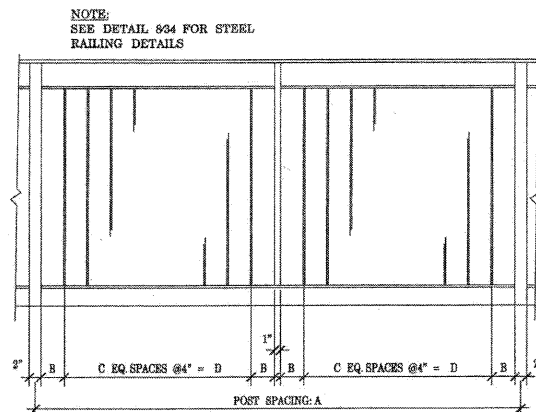


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



NOTE:
ALL DIMENSIONS GIVEN TO CENTERLINE OF POSTS.
PROPOSED POST SPACING MAY NEED TO BE ADJUSTED IN THE FIELD PRIOR TO POURING CONCRETE TO CORRESPOND WITH ACTUAL LOCATIONS OF CONCRETE JOINTS.
CONTRACTOR TO VERIFY EXACT LOCATIONS OF PIPE SLEEVES PRIOR TO FABRICATION OF STL. RAILINGS.
SOME RAILING PORTIONS MAY REQUIRE FIELD WELDED JOINTS - SEE NOTE BELOW FOR PATCHING GALVANIZING AT THESE LOCATIONS.
SEE DETAILS ON SHEET 32 FOR EDGE DISTANCE OF PIPE SLEEVES FOR RAIL POSTS

1 RAILING POST SPACING PLAN
SCALE: 3/8" = 1'-0"



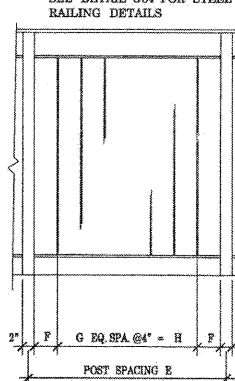
2 TYPICAL RAILING ELEVATIONS AND DIMENSIONS
SCALE: 1" = 1'-0"

RAILINGS DIMENSIONS

| POST SPACING* | DIM. | NO. | LENGTH |
|---------------|---------|-----|--------|
| A | B | C | D |
| 4'-0" | 3'-14" | 4 | 1'-4" |
| 4'-6" | 2'-3/8" | 5 | 1'-8" |
| 4'-7" | 3" | 5 | 1'-8" |
| 4'-11" | 4" | 5 | 1'-8" |
| 5'-2" | 3'-3/4" | 6 | 2'-0" |
| 5'-6" | 3'-3/4" | 6 | 2'-0" |
| 5'-7" | 4" | 6 | 2'-0" |
| 5'-11" | 3" | 7 | 2'-4" |
| 6'-0" | 3'-14" | 7 | 2'-4" |
| 6'-1" | 3'-1/2" | 7 | 2'-4" |
| 6'-2" | 3'-3/4" | 7 | 2'-4" |
| 6'-3" | 4" | 7 | 2'-4" |
| 6'-7" | 3" | 8 | 2'-8" |
| 6'-8" | 3'-1/4" | 8 | 2'-8" |
| 6'-10" | 3'-3/4" | 8 | 2'-8" |
| 6'-11" | 4" | 8 | 2'-8" |

* POST SPACINGS AS INDICATED ON PLAN 165 AND ELEVATIONS ON SHEETS 33 AND 34

RAILINGS DIMENSIONS



| POST SPACING* | DIM. | NO. | LENGTH |
|---------------|---------|-----|--------|
| E | F | G | H |
| 1'-2" | 4" | 1 | 4" |
| 2'-2" | 4" | 4 | 1'-4" |
| 2'-6" | 3" | 5 | 1'-8" |
| 2'-10" | 4" | 6 | 2'-0" |
| 3'-0" | 3" | 7 | 2'-4" |
| 3'-5" | 2'-1/2" | 8 | 2'-8" |
| 3'-4" | 3" | 8 | 2'-8" |
| 3'-5" | 3'-1/2" | 8 | 2'-8" |
| 3'-6" | 4" | 8 | 2'-8" |

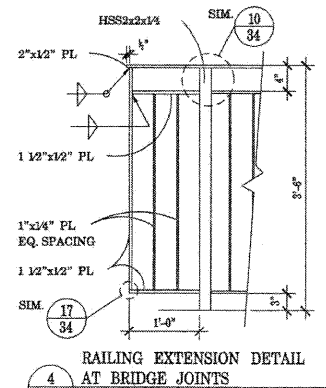
* POST SPACINGS AS INDICATED ON PLAN 165 AND ELEVATIONS ON SHEETS 33 AND 34

BILL OF MATERIALS - RAILINGS

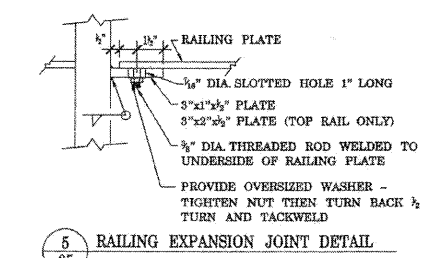
| ITEM | UNIT | TOTAL |
|---------------|------|-------|
| STEEL RAILING | LFT. | 317 |
| PIPE HANDRAIL | LFT. | 168 |

3 TYPICAL ELEVATION OF RAILING DETAIL AT JOINTS
SCALE: 1" = 1'-0"

NOTES:
HOLLOW STRUCTURAL STEEL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION A500, GRADE B, STRUCTURAL STEEL TUBING.
ALL OTHER STEEL SHAPES AND PLATES SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M270 M GRADE 36.
THE HANDRAILING MOUNTED TO THE STEEL RAILING ALONG THE RAMP AND AT THE STAIRS AS WELL AS THE WALL MOUNTED HANDRAIL DEPICTED IN DETAIL 634, FURNISHED AND INSTALLED SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT BID PRICE FOR "STEEL RAILING"
ALL POSTS, RAILINGS AND RENT PLATES SHALL BE GALVANIZED AFTER SHOP FABRICATION ACCORDING TO AASHTO M 111 AND ASTM A 385. VENT HOLES FOR GALVANIZING SHALL BE PLACED IN THE POSTS AT LOCATIONS THAT WILL NOT ALLOW THE ACCUMULATION OF MOISTURE IN THE MEMBERS.
ALL POSTS TO BE SET PLUMB. RAILINGS ARE TO FOLLOW SLOPE OF GROUND - CONTRACTOR TO VERIFY IN THE FIELD.
THE INORGANIC ZINC RICH PRIMER/ACRYLIC/ACRYLIC PAINT SYSTEM SHALL BE USED FOR SHOP PAINTING OF ALL STEEL RAILINGS EXCEPT WHERE OTHERWISE NOTED.
FINAL PAINT COAT SHALL BE BLACK.
ALL WELDS TO BE MWS (MINIMUM WELD SIZE) PER AWS UNLESS NOTED OTHERWISE.
EXPANSION JOINTS IN THE PIPE HANDRAILS SHALL BE PLACED PER STANDARD SPECIFICATIONS SECTION 510.
EXPANSION JOINTS IN THE STEEL RAILING SHALL BE PLACED AT 40FT. MAX. -SEE DETAIL 535. ALIGN EXPANSION JOINT WITH JOINTS IN ATTACHED HANDRAIL ALONG THE RAMP.



4 RAILING EXTENSION DETAIL AT BRIDGE JOINTS
SCALE: 1" = 1'-0"



5 RAILING EXPANSION JOINT DETAIL
SCALE: 1" = 1'-0"

FOR INFORMATION ONLY

...Old dwg\01032-sidewalk.dwg 12/14/2009 9:36:42 AM

FOR INFORMATION ONLY
STRUCTURE NO. 049-6159

McDonough Associates Inc.
Engineers / Architects
130 East Randolph Street Chicago, Illinois 60601

| SHEET NO. | F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|-------------|----------------|--------------------|--------------|-----------|
| S-22 SHEETS S-25 | 1257 | 08-00083-00-BT | LAKE | 51 | 42 |
| SN 049-6159 | | | CONTRACT NO. 63450 | | |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | | |