NOTES:
1. TAPE AND BUNDLE WIRING AT 10 FOOT INTERVALS.
2. NATIVE BACKFILL AND TOP SOIL TO BE FREE OF ROCK AND DEBRIS.(3/4" MAX. ROCK SIZE)
NOTE:

1. POP-UP SIZE DEPENDENT UPON PLANT MATERIAL.
FINISH GRADE

NELSON MODEL PRO-7500
STAINLESS POP-UP GEARED
ROTOR OR APPROVED
EQUAL

SCH. 80 NIPPLE (SIZE AND
LENGTH AS REQUIRED)

P.V.C. TEE

STREET ELL

STREET ELLS (SIZE AND
LENGTH AS REQUIRED)

P.V.C. LATERAL LINE
(SCHEDULE 40)

TURF ROTOR POP-UP RISER
RAINBIRD 1806 MODEL OR APPROVED EQUAL

EDGE OF WALK, BACK OF CURB, OR HEADER BOARD.

1"-6"

FINISH GRADE

2-1/2" MARLEX STREET 90° ELLS

1/2" SCH. 80 PVC NIPPLES (LENGTH AS REQUIRED)

SCH. 40 PVC TEE

P.V.C. LATERAL LINE

6" POP-UP SPRAY HEAD
NOTES:

1. ALL PIPE AND FITTINGS TO BE SCH. 80 PVC UNLESS OTHERWISE NOTED.
2. PIPE SIZE FROM MAIN LINE SHALL MATCH HOSE BIBB INLET DIAMETER.
3. DISSIMILAR METALS SHALL BE SEPARATED BY AN APPROVED DIELECTRIC COUPLING.
4. PLASTIC PIPE SHALL NOT BE USED ABOVE GRADE.
NOTES:
1. ALL PIPE AND FITTINGS TO BE SCH. 40 GALVANIZED STEEL UNLESS OTHERWISE NOTED.
2. PIPE SIZE FROM MAIN LINE SHALL MATCH HOSE BIBB INLET DIAMETER.
3. DISSIMILAR METALS SHALL BE SEPARATED BY AN APPROVED DIELECTRIC COUPLING.
4. PLASTIC PIPE SHALL NOT BE USED ABOVE GRADE.
NOTES:
1. ALL PIPING TUBE TO BE 1" OR LARGER.
2. VALVE BOX LID TO HAVE "Q.C." MOLDED INTO TOP OF LID OR BRASS TAG INSTALLED ON LID MARKED "Q.C."
NOTES:

1. AREA AROUND BOX CAN EITHER BE PLANTED, HARDSURFACE OR A COMBINATION.
2. TOP OF BOX:
   1/2" ABOVE GRADE OR LAWN.
   1" ABOVE GRADE FOR GROUND COVER OR SHRUBS.
3. CLOSE NIPPLES SHALL NOT BE USED.
4. CRUSHED ROCK SHALL COVER VALVE BOX PIPE OPENINGS TO PREVENT SOIL ENTRY.
5. GATE VALVE SHALL BE "RED & WHITE", OR APPROVED EQUAL.
NOTE: PROVIDE EACH VALVE WITH AN EMBOSSED PLASTIC OR METAL TAG SHOWING CONTROLLER & STATION NUMBER.

PLASTIC BOX WITH LOCKABLE COVER, SET FLUSH TO GRADE WITHIN THE MEDIAN OR BACK-UP AREA. BOX SHALL BE "CARSON", OR APPROVED EQUAL. LID TO HAVE "RCV STA. ___" MOLDED TO LID, OR STAMPED ON BRASS TAG.

NOTE: CONTROL VALVE TO BE GRISWOLD 2000 SERIES OR APPROVED EQUAL.

NOTE: HEAVILY COAT ALL THREADED AREAS WITH JOINT COMPOUND.
3/16" STL. ANGLE FRAMING

3/8" U-BOLT

SECTION B-B ELEVATION

3/8" BOLT & NUT W/ WASHER

SECTION A-A ELEVATION

3/16" STL. ANGLE FRAMING

LIFTING HANDLE

PADLOCKING UNIT

PADLOCKING DETAIL

2' MIN. (TURF AREA ONLY)

HINGE DETAIL

TEST COCKS

1"-0" MIN 2'-6" MAX

PLAN

FOR MEDIAN ISLANDS AND PUBLIC PARKS/FACILITIES (SIZES 1" TO 2")

PROFILE

SEE HINGE DETAIL

R.P. BACKFLOW PREVENTER WITH SINGLE-SWING HINGED ENCLOSURE
(FOR MEDIAN ISLANDS & PUBLIC PARKS/FACILITIES
FOR SIZES 2 1/2" TO 4")

NOTE: FOR NOTES AND LEGEND SEE SHEET L-8.
NOTE: THESE NOTES APPLY TO LANDSCAPING WORK. FOR DOMESTIC, COMMERCIAL/INDUSTRIAL APPLICATIONS, SEE "W"—WATER SECTION.

LEGEND

1. Finish Grade.

2. Service size galvanized steel pipe from water meter. Use Ductile Iron Pipe with flange fittings for sizes 2 1/2" and larger.

3. Reduced Pressure Backflow Preventer FEBCO 825Y (or approved equal) for sizes 3/4" through 2", and FEBCO 825 YD (or approved equal) for sizes 2 1/2" to 4".

4. Adjustable pipe saddle support, galvanized steel, suitable for supporting general piping 4" and larger.

5. Backflow preventer enclosure manufactured by Lemeur (or approved equal). Enclosure shall be single-swing type for backflow unit sizes 3/4" through 2" and double-swing type ("clam shell") for backflow unit sizes 2 1/2" through 4". Frame shall be 1 1/2" X 1 1/2" X 3/16" steel angle with 1 1/2" #9 expanded metal. Install as shown on plans.

6. 6" concrete enclosure pad, size as shown on the plan.

7. Service size galvanized steel pipe riser with a minimum of two (2) unions for threaded connections (sizes 1" to 2").

8. 90° elbow, flanged or threaded, wrapped with 10 mil PVC tape.

9. Concrete thrust block for service size 4" or larger (see detail W-12).

10. Water meter and service by others (see detail W-1).

11. Two coats of enamel. Color specified per approved plans.

NOTES:

1. Gate valves and test cocks are required.

2. Water supply—no connections or tees are allowed between the water meter and backflow unit.

3. Protection from freeze damage may be required in exposed areas.

4. Device must be accessible for testing and maintenance. Prior to activation, call 776-7333 for backflow device inspection.

5. Wrap buried galvanized pipe with 3M tape or approved equal.
NOTES:

1. ALL PLASTIC PIPE TO BE INSTALLED ACCORDING TO THESE DETAILS UNLESS OTHERWISE NOTED OR DETAILED.
2. THE PORTLAND CEMENT CONCRETE USED FOR THRUST BLOCKS SHALL BE 420–C–2000 CONCRETE.
3. ALL ANCHOR RODS SHALL BE GALVANIZED STEEL, MINIMUM 1/2” DIAMETER, WRAPPED AROUND PIPE.
4. SIZE OF THRUST BLOCKS SHALL BE SPECIFIED ON PLANS.
5. THRUST BLOCKS SHALL BE USED FOR PLASTIC PIPES WITH 3” DIAMETER OR LARGER.
6. FLOW DIRECTION INDICATED BY →
7. ALL VIEWS ARE PLAN VIEW UNLESS OTHERWISE SHOWN.
NOTES:

1. CENTER BOX OVER REMOTE CONTROL VALVE TO FACILITATE SERVICING VALVE.
2. SET BOXES 1" ABOVE FINISH GRADE OR MULCH COVER IN GROUND COVER / SHRUB AREA AND FLUSH WITH FINISH GRADE IN TURF AREAS.
3. SET RCV AND VALVE BOX ASSEMBLY IN GROUND COVER / SHRUB AREA WHERE POSSIBLE. INSTALL IN LAWN AREA ONLY IF GROUND COVER DOES NOT EXIST ADJACENT TO LAWN.
4. SET BOXES PARALLEL TO EACH OTHER AND PERPENDICULAR TO EDGE.
5. AVOID COMPACTING SOIL AROUND AROUND VALVE BOX EDGES TO PREVENT COLLAPSE AND DEFORMATION OF VALVE BOX SIDES.
6. ALL BOXES SHALL BE "CARSON" OR APPROVED EQUAL, AND BE EQUIPPED WITH BOLT DOWN LIDS.
7. ALL VALVE BOX LIDS SHALL IDENTIFY EQUIPMENT CONTAINED IN BOX BY MOLDING OR BRASS TAG TO LID AS FOLLOWS:
   GATE VALVE – "G.V."
   QUICK COUPLER – "Q.C."
   REMOTE CONTROL VALVE – "R.C.V. STA. #____"
   MISCELLANEOUS ELECTRICAL EQUIPMENT – "ELECTRICAL"
   MISCELLANEOUS IRRIGATION EQUIPMENT – "IRRIGATION"
STANDARD TREE PLANTING  
& STAKING WITH BUBBLER IRRIGATION

1. USE 2 PIPES IN CONCRETE CUT-OUT AREAS. PUT PIPE ON UPHILL SIDE OF TREE, LEVEL SITE NORTH OF TREE.
2. INSTALL LINEAR ROOT BARRIER ADJACENT TO PAVEMENT, CURB, OR SIDEWALK, WHERE PAVEMENT EDGE IS WITHIN 3' OF TREE TRUNK (6' LENGTH ON CENTER 3' EACH SIDE OF TREE).
STANDARD TREE PLANTING & STAKING WITHOUT IRRIGATION SYSTEM

(2) 4-PLY, 1"x 2" MIN. RUBBER TIES INSTALLED WITH A TWIST & NAILED TO THE STAKES.

2" PINE STAKE (2 TYP.)

1 1/4" GALV. ROOFING NAIL (1 EACH END)

15 GAL.  6 TABLETS
24" BOX  10 TABLETS

FERTILIZER

(2) RUBBER TIES PLACED 6" MAX. BELOW MAIN FORK OR BRANCH (AT BOTH LOCATIONS SHOWN)

(2) 2" DIA. LODGE POLE PINE STAKES TREATED WITH CHEMONITE OR APPROVED EQUAL. INSTALL STAKES OUTSIDE ROOTBALL (USE (2) 3" DIA. LODGE POLE PINE STAKES FOR 24" BOX OR LARGER)

PLACE ROOT CROWN 1/2 " - 3/4" ABOVE FINISHED GRADE
2" OF SOIL MIX
FINISHED GRADE

SCARIFY SIDES
ROOT BALL
FERTILIZER TABLETS
AS SPECIFIED
PLACE BesIDE ROOT BALL

LOAM TOP SOIL MIX
NATIVE SOIL

NOTE:
INSTALL LINEAR ROOT BARRIER ADJACENT TO PAVEMENT, CURB, OR SIDEWALK WHERE PAVEMENT EDGE IS WITHIN 3' OF TREE TRUNK (6' LENGTH ON CENTER 3' EACH SIDE OF TREE).

2" DIA. x 3"-0" LONG PERFORATED STYRENE PIPE WITH STYRENE DRAIN GRATE-COVER. FILL BOTTOM 6" ONLY WITH DRAIN ROCKS.
NOTES:
1. SET CROWN 1-1/2" ABOVE FINISH GRADE TO ALLOW FOR SETTLEMENT.
2. WELL DEVELOPED SHRUB ROOTBALL; LIGHTLY SCARIFY PERIMETER.
3. SLOW RELEASE FERTIZER TABLET AS PERSPECIFICATIONS.
4. 4" HIGH BERM TEMPORARY WATER BASIN. INSIDE DIAMETER TO EQUAL ROOTBALL DIAMETER.
5. PLANTING HOLE; TWO TIMES DIAMETER AND DEPTH OF SHRUB ROOTBALL. SCARIFY SIDES AND BOTTOM.
6. MULCH AS PER SPECIFICATIONS.
7. BACKFILL MIXTURE AS PER SPECIFICATIONS.
# PROHIBITED STREET TREES

<table>
<thead>
<tr>
<th>Botanical Name</th>
<th>Common Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acacia</td>
<td>All Species Trees of Heaven</td>
</tr>
<tr>
<td>Ailanthus Glandulosa</td>
<td>St. John’s Bread</td>
</tr>
<tr>
<td>Ceratonia Siliqua</td>
<td>(Carob Tree)</td>
</tr>
<tr>
<td>Cinnamomum Camphora</td>
<td>Camphor Tree</td>
</tr>
<tr>
<td>Conifers</td>
<td>All Species</td>
</tr>
<tr>
<td>Eucalyptus</td>
<td>All Species</td>
</tr>
<tr>
<td>Fruit Trees</td>
<td>All Fruit Bearing Species</td>
</tr>
<tr>
<td>Juglans California</td>
<td>California Black Walnut</td>
</tr>
<tr>
<td>Juglans Hindsi</td>
<td>American Black Walnut</td>
</tr>
<tr>
<td>Juglans Regia</td>
<td>English Walnut</td>
</tr>
<tr>
<td>Liquidambar Styraciflua</td>
<td>American Sweet Gum</td>
</tr>
<tr>
<td>Magnolia Grandiflora</td>
<td>Southern Magnolia</td>
</tr>
<tr>
<td>Palms</td>
<td>All Species</td>
</tr>
<tr>
<td>Pinus Radiata</td>
<td>Monterey Pines (All Species)</td>
</tr>
<tr>
<td>Platanus Orientalis</td>
<td>European Plane Tree</td>
</tr>
<tr>
<td>Olea Europaea</td>
<td>Olive (Fruiting)</td>
</tr>
<tr>
<td>Populus (Popular Tree)</td>
<td>All Species</td>
</tr>
<tr>
<td>Robinia Pseudoacacia</td>
<td>Black Locust</td>
</tr>
<tr>
<td>Sequoia Gigantea</td>
<td>Redwood</td>
</tr>
<tr>
<td>Ulmus Americana</td>
<td>American Elm</td>
</tr>
</tbody>
</table>
**APPROVED TREES**

All trees planted within the Public Right of Way, and in publicly maintained districts, shall be planted in accordance with the City of Morgan Hill Street Tree Master Plan. All trees shall be installed in accordance with the applicable drawings of this section. Copies of the Street Tree Master Plan may be obtained from the City of Morgan Hill Community Development Department.

**LOW GROWING SHRUBS AND GROUND COVERS**

<table>
<thead>
<tr>
<th>Botanical Name</th>
<th>Common Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arctostaphylos 'Emerald Carpet'</td>
<td>Manzanita 'Emerald Carpet'</td>
</tr>
<tr>
<td>Convolvulus sp.</td>
<td>Bush Morning Glory</td>
</tr>
<tr>
<td>Coprosma Repens</td>
<td>Mirror Plan</td>
</tr>
<tr>
<td>Cotoneaster Dammeri</td>
<td>Bearberry Cotoneaster</td>
</tr>
<tr>
<td>Erigeron Karvinskianus</td>
<td>Santa Barbara Daisy</td>
</tr>
<tr>
<td>Fragaria Chiloensis</td>
<td>Ornamental Strawberry</td>
</tr>
<tr>
<td>Gazania sp.</td>
<td>Gazania</td>
</tr>
<tr>
<td>Hedera Helix 'Needlepoin't</td>
<td>Needlepoint Ivy</td>
</tr>
<tr>
<td>Hemerocallis sp.</td>
<td>Daylily (evergreen varieties)</td>
</tr>
<tr>
<td>Hypericum Calycinum</td>
<td>Ivy Geranium</td>
</tr>
<tr>
<td>Juniperus Procumbens 'Nana'</td>
<td>Dwarf Japanese Graden Juniper</td>
</tr>
<tr>
<td>Juniperus Prostratus</td>
<td>Prostrate Juniper</td>
</tr>
<tr>
<td>Lantana sp.</td>
<td>Trailing Lantana</td>
</tr>
<tr>
<td>Pelargonium Peltatum</td>
<td>Ivy Geranium</td>
</tr>
<tr>
<td>Rosa sp.</td>
<td>Rose (groundcover varieties only)</td>
</tr>
<tr>
<td>Rosmarinus Prostratus</td>
<td>Trailing Rosemary</td>
</tr>
<tr>
<td>Vinca Minor</td>
<td>Dwarf Periwinkle</td>
</tr>
</tbody>
</table>

All shrubs which grow to a natural height of more than 18” shall be trimmed to a height of 18” or be removed at the contractor and/or owners expense.

This list is not intended to be complete, nor is it to be final. Final selections of species shall be made by the City of Morgan Hill Public Works Superintendent, upon considering location, mature size of tree and general habitat of growth.

Trees and Ground Covers not listed, as well as deviations in maximum spacing, must be approved by the Public Works Superintendent.
NOTES:
1. AREA AROUND BASE CAN EITHER BE PLANTED, HARD SURFACE OR A COMBINATION.
2. TOP OF BASE:
   1/2" ABOVE GRADE FOR LAWN.
   1" ABOVE GRADE FOR GROUND COVER AND SHRUBS.
3. IRRITROL MC + (SIZE AS REQUIRED) CONTROLLER NOT SHOWN.
4. SEE "ELECTRICAL SECTION" FOR POWER SOURCE CONNECTIONS.
NOTES:
1. IRRITROL MC+ (SIZE AS REQUIRED) CONTROLLER NOT SHOWN.
2. SEE "ELECTRICAL SECTION" FOR POWER SOURCE CONNECTIONS.
NOTES:
1. SIZE OF FOOTING IS A SUGGESTION ONLY, CHECK WITH MANUFACTURER AND/OR PROJECT SOILS REPORT.
2. FINISH IS NON-TOXIC HEAT RESISTANT BLACK ENAMEL.
3. MODEL SHOWN IS "KAY PARK #SB16" (SB16G FOR GALVANIZED PEDESTAL) SUBMITTAL AND APPROVAL REQUIRED FOR ALL EQUALS.
NOTES:

1. MINIMUM THICKNESS OF ALL AREAS TO BE 5”.
2. MINIMUM WEIGHT TO BE 1450 LBS.
3. COLORING AGENTS ARE TO BE PURE MINERAL OXIDES AND SHALL BE MIXED INTEGRALLY WITH CEMENT.
4. CONCRETE MIX DESIGN TO INCLUDE EIGHT AND ONE HALF (8.5) SACKS PORTLAND CEMENT PER YARD
   WITH MAXIMUM ROCK SIZE OF 3/4” REINFORCED WITH #4 AND #5 REBAR GRID. CURED CONCRETE
   SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 7,000 P.S.I.
5. ALL FORMED SURFACES AND EDGES SHALL BE FULLY ROUNDED AND SMOOTH FINISHED. FINISH OF ALL
   SURFACES TO HAVE A CONCRETE GRAFFITI–RESISTANT SEALER APPLIED.
6. BRACKET INSTALLED TO ACCEPT PLASTIC BAG INSERT.
7. MODEL SHOWN: "OUTDOOR CREATIONS MODEL #503". SUBMITTAL AND APPROVAL REQUIRED FOR ALL
   EQUALS.
8. SPECIFICATIONS FOR LOGO AVAILABLE UPON REQUEST FROM THE CITY OF MORGAN HILL DEPARTMENT OF
   PUBLIC WORKS AT 408–776–7333.
NOTES:
1. MINIMUM THICKNESS OF ALL AREAS TO BE 4".
2. MINIMUM WEIGHT TO BE 2000 LBS.
3. BENCH IS CAST IN ONE INTEGRAL PIECE. NO ASSEMBLY REQUIRED.
4. COLORING AGENTS ARE TO BE PURE MINERAL OXIDES AND SHALL BE MIXED INTEGRALLY WITH CEMENT. COLOR TO BE DAVIS COLORS SEQUOIA SAND. FINISH TO BE SMOOTH.
5. CONCRETE MIX DESIGN TO INCLUDE EIGHT AND ONE HALF (8.5) SACKS PORTLAND CEMENT PER YARD WITH MAXIMUM ROCK SIZE OF 3/4" REINFORCED WITH #4 AND #5 REBAR GRID. CURED CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 7,000 P.S.I.
6. ALL FORMED SURFACES AND EDGES SHALL BE FULLY ROUNDED AND SMOOTH FINISHED. FINISH OF ALL SURFACES TO HAVE A CONCRETE GRAFFITI-RESISTANT SEALER APPLIED.
7. MODEL SHOWN: "OUTDOOR CREATIONS #408". SUBMITTAL AND APPROVAL REQUIRED FOR ALL EQUALS.
8. SPECIFICATIONS FOR LOGO AVAILABLE UPON REQUEST FROM THE CITY OF MORGAN HILL DEPARTMENT OF PUBLIC WORKS—MAINTENANCE DIVISION AT 408-776-7333.
NOTES:
1. MINIMUM THICKNESS OF ALL AREAS TO BE 4”.
2. MINIMUM WEIGHT TO BE 2450 LBS.
3. PICNIC TABLE TOP, BENCHES, BENCH AND TABLE SUPPORTS CAST IN ONE INTEGRAL PIECE. NO ASSEMBLY REQUIRED.
4. COLORING AGENTS ARE TO BE PURE MINERAL OXIDES AND SHALL BE MIXED INTEGRALLY WITH CEMENT.
5. CONCRETE MIX DESIGN TO INCLUDE EIGHT AND ONE HALF (8.5) SACKS PORTLAND CEMENT PER YARD WITH MAXIMUM ROCK SIZE OF 3/4” REINFORCED WITH #4 AND #5 REBAR GRID. CURED CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 7,000 P.S.I.:
6. ALL FORMED SURFACES AND EDGES SHALL BE FULLY ROUNDED AND SMOOTH FINISHED. FINISH OF ALL SURFACES TO HAVE A CONCRETE GRAFFITI-RESISTANT SEALER APPLIED.
7. WOOD GRAIN AND ROCK TEXTURE MOLDED INTO CONCRETE SURFACE.
8. MODEL SHOWN: "OUTDOOR CREATIONS #104FSS (FOREST SERIES). SUBMITTAL AND APPROVAL REQUIRED FOR ALL EQUALS.
NOTE:
1. DRILL & EPOXY DOWEL INTO EX. P.C.C. & GREASE OTHER HALF BEFORE POURING.

SECTION A-A

#4 REBAR DOWEL 24" O.C.

6" MIN.

1/2" FELT SEPARATOR

EX. P.C.C. WALK

4" CLASS II AGG. BASE

90% COMPACTED SUBGRADE

EX. AGG. BASE

4"

6"