CROWN POINT SUBDIVISION

A COMPARISON OF CONVENTIONAL VERSUS CONSERVATION SUBDIVISION DESIGN

DEVELOPER: PAUL LUCIANO BUILDERS
LAND PLANNING & DESIGN: DAVID LAIRD ASSOCIATES
FUNDING PROVIDED BY: PA SEA GRANT
WHAT CHARACTERISTICS CAN BE FOUND IN CONVENTIONAL SUBDIVISION DESIGN?
WHAT CHARACTERISTICS CAN BE FOUND IN CONSERVATION DESIGN?
CHARACTERISTICS OF CONVENTIONAL SUBDIVISION DESIGN

- ACHIEVE MAXIMUM DENSITY
- LIMITED PRESERVATION OF OPEN SPACE
- MAJORITY OF SITE DISTURBED DURING CONSTRUCTION
- MAY RESULT IN NEGATIVE IMPACTS ON THE ENVIRONMENT
  - INCREASED STORMWATER RUNOFF
  - REDUCED GROUND WATER RECHARGE
  - LITTLE EFFORT MADE TO PRESERVE WOODLANDS AND EXISTING VEGETATION
  - MINIMAL BUFFERS PROVIDED FOR ENVIRONMENTALLY SENSITIVE AREAS
CHARACTERISTICS OF CONSERVATION DESIGN:

- CONSERVATION OF OPEN SPACES, GREENWAYS AND NATURAL RESOURCES
- MINIMIZE SITE DISTURBANCE
- MAXIMIZE ACCESS TO AND VIEWS OF OPEN SPACE AREAS
- ACHIEVES THE DEVELOPERS OBJECTIVES
AERIAL VIEW OF CROWN POINT

DAVID LAIRD ASSOCIATES
complete surveying & land development services
CROWN POINT
CONVENTIONAL SUBDIVISION
DESIGN

- 63.4 ACRES TOTAL SITE AREA
- 6.1 AC. - ROAD RIGHT OF WAY
- 0.94 AC - FUTURE R/W(PER TRANSPORTATION PLAN)
- 3.7 AC. - STORMWATER MANAGEMENT AREA
- 2.4 AC. – WETLANDS
- 7.8 AC OF 100 YEAR FLOOD PLAIN
- 3.0 AC. – STEEP SLOPES
- 39.46 AC OF DEVELOPABLE LAND
- ALLOWABLE DENSITY IS 2.5 UNITS PER AC (39.46 X 2.5 = 99 UNITS PERMITTED)
- 64 UNITS PROPOSED
- PROPOSED DENSITY 1.5 UNITS/AC
CROWN POINT
CONSERVATION SUBDIVISION DESIGN

- 63.4 TOTAL SITE AREA
- 3.3 AC - ROADS & SIDEWALKS
- 0.94 AC - FUTURE R/W (PER TRANSPORTATION PLAN)
- 2.1 AC - STORMWATER MANAGEMENT AREA
- 2.4 AC. OF WETLANDS
- 7.8 AC OF 100 YEAR FLOOD PLAIN
- 3.0 AC. OF STEEP SLOPE
- 43.86 AC OF DEVELOPABLE LAND
- ALLOWABLE DENSITY IS 2.5 UNITS PER AC (43.86 X 2.5 = 110 UNITS PERMITTED)
- 110 UNITS PROPOSED
- 38.54 AC OF COMMON OPEN SPACE - 61%
ARCHITECTURAL RENDERING OF PROPOSED CONSERVATION DESIGN
WHAT IS THE PROCESS FOR DESIGNING A CONSERVATION SUBDIVISION?
CONSERVATION DESIGN
A FOUR-STEP PROCESS

- **STEP ONE:** IDENTIFY LAND TO BE PROTECTED/CONSERVED

- **STEP TWO:** IDENTIFY BUILDABLE AREAS TO MAXIMIZE THEIR VIEW OF OPEN SPACE

- **STEP THREE:** PROVIDE CRITICAL VEHICULAR AND PEDESTRIAN ACCESS CORRIDORS

- **STEP FOUR:** LAYOUT PROPOSED PARCEL BOUNDARIES
PRIMARY CONSERVATION AREAS

- WETLANDS
- STEEP SLOPES
- 100 YR FLOOD PLAIN
PROVIDE CRITICAL VEHICULAR AND PEDESTRIAN ACCESS CORRIDORS
### Break Down of Development Costs & Potential Profit for Conventional Subdivision Design

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Acquisition</td>
<td>$800,000</td>
</tr>
<tr>
<td>Design &amp; Permitting Fees</td>
<td>$200,000</td>
</tr>
<tr>
<td>Storm Sewer</td>
<td>$333,000</td>
</tr>
<tr>
<td>Water Line</td>
<td>$210,000</td>
</tr>
<tr>
<td>Sanitary Sewer</td>
<td>$375,000</td>
</tr>
<tr>
<td>Roadway</td>
<td>$520,000</td>
</tr>
<tr>
<td>Earthwork &amp; Grading</td>
<td>$250,000</td>
</tr>
<tr>
<td><strong>Total Development Cost</strong></td>
<td><strong>$2,688,000</strong></td>
</tr>
</tbody>
</table>
TOTAL DEVELOPMENT COSTS = $2,688,000
TOTAL # OF UNITS = 64
DEVELOPER TOTAL PER UNIT COST = $42,000
AVERAGE PRICE PER UNIT (LAND) = $65,000
ESTIMATED PROFIT ON BASED ON 64 LOTS (64x$23,000) = $1,472,000
ESTIMATED PROFIT ON CONSTRUCTION OF 64 HOMES ($300,000 x 12% PROFIT MARGIN : $36,000 x 64) = $2,304,000
TOTAL PROFIT LOT PROFIT + HOUSE CONSTRUCTION PROFIT $1,472,000 + $2,304,000 = $3,776,000
BREAK DOWN OF DEVELOPMENT COSTS & POTENTIAL PROFIT FOR CONSERVATION SUBDIVISION DESIGN

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Acquisition</td>
<td>$800,000</td>
</tr>
<tr>
<td>Design &amp; Permitting Fees</td>
<td>$200,000</td>
</tr>
<tr>
<td>Storm Sewer</td>
<td>$225,000</td>
</tr>
<tr>
<td>Water Line</td>
<td>$225,000</td>
</tr>
<tr>
<td>Sanitary Sewer</td>
<td>$460,000</td>
</tr>
<tr>
<td>Roadway</td>
<td>$400,000</td>
</tr>
<tr>
<td>Earthwork &amp; Grading</td>
<td>$110,000</td>
</tr>
<tr>
<td><strong>Total Development Cost</strong></td>
<td><strong>$2,420,000</strong></td>
</tr>
</tbody>
</table>
BREAK DOWN OF DEVELOPMENT COSTS & POTENTIAL PROFIT FOR CONSERVATION SUBDIVISION DESIGN

- TOTAL DEVELOPMENT COST = $2,420,000
- TOTAL # OF UNITS = 110
- DEVELOPER TOTAL PER UNIT COST = $22,000
- AVERAGE PRICE PER UNIT (LAND) = $40,000
- ESTIMATED LAND PROFIT (110 UNITS) = $1,980,000
  (110 x $18,000)
- ESTIMATED PROFIT ON CONSTRUCTION OF 110 HOMES = $2,640,000
  $200,000 x 12% PROFIT MARGIN: $24,000 x 110
- TOTAL PROFIT = $4,620,000
  LOT PROFIT + HOUSE CONSTRUCTION PROFIT
  $1,980,000 + $2,640,000
ADDITIONAL PROFIT

$4,620,000  -  CONVENTIONAL
-3,776,000  -  CONSERVATION
$  844,000
WHO BENEFITS FROM CONSERVATION DESIGN?
BENEFITS TO THE MUNICIPALITY

- NO ROAD MAINTENANCE
- NO ROAD PLOWING
- MORE UNITS TO TAX
- OPPORTUNITY TO BE ONE OF MANY MUNICIPALITIES LEADING THE CHARGE IN CONSERVATION LAND PLANNING
BENEFITS TO THE POTENTIAL HOME OWNER

- ACCESS TO COMMON OPEN SPACE & RECREATION AREAS
- GREATER ANTICIPATED APPRECIATION OF HOME
- MAINTENANCE FREE LIVING (ASSOCIATION)
BENEFITS TO THE BUILDER/DEVELOPER

- GREATER # OF UNITS = MORE PROFIT
- LESS EARTH WORK AND CLEARING COST
- MORE MARKETABLE DEVELOPMENT
- POTENTIAL TAX WRITE-OFF FOR OPEN SPACE DONATION
BENEFITS TO THE ENVIRONMENT

- LARGE AREA OF EXISTING VEGETATION TO REMAIN AND ACT AS NATURAL FILTER
- IMPROVEMENTS IN STORM WATER RUNOFF QUALITY
- DEVELOPMENT AREA CONCENTRATED=LESS SURFACE WATER DISTURBANCE
- REDUCTION OF POINT SOURCE DISCHARGES
- PROMOTES GROUND WATER RECHARGE & INFILTRATION
- LIMITED IMPACT ON EXISTING HIGH QUALITY WATERSHED
- PRESERVES NATURAL HABITAT
- MAINTAIN GREENWAYS